

04/20/2010

Regulatory Analysis Form

(Completed by Promulgating Agency)



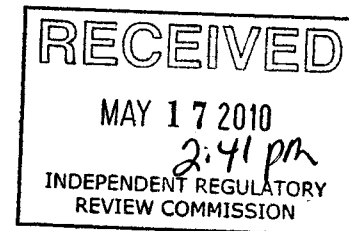
SECTION I: PROFILE

(1) Agency:

Department of Environmental Protection

(2) Agency Number:

Identification Number: #7-440



IRRC Number: 2783

(3) Short Title:

Chapter 102 – Erosion and Sediment Control and Stormwater Management

(4) PA Code Cite:

25 Pa. Code Chapter 102

(5) Agency Contacts (List Telephone Number, Address, Fax Number and Email Address):

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Randal (Duke) Adams, 772-3277; fax: 783-8926; ranadams@state.pa.us; RCSOB 16th Fl., Harrisburg, PA 17105

(6) Primary Contact for Public Comments (List Telephone Number, Address, Fax Number and Email Address) – Complete if different from #5:

EQB

P.O. Box 8477

Harrisburg, PA 17105-8477

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(All Comments will appear on IRRC'S website)

(7) Type of Rulemaking (check applicable box):

- ☐ Proposed Regulation
☒ Final Regulation

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- ☐ Final Omitted Regulation
- ☐ Emergency Certification Regulation;
- ☐ Certification by the Governor
- ☐ Certification by the Attorney General

(8) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

The existing erosion and sediment (E&S) control regulations found at Title 25, Chapter 102 describe the requirements for controlling accelerated erosion and preventing sediment pollution from various earth disturbance activities. Since 1972, earth disturbance activities related to agricultural plowing and tilling, as well as, non-agricultural earth disturbance activities have been regulated under this Chapter by requiring persons to develop, implement, and maintain best management practices (BMPs) to minimize accelerated erosion and sedimentation.

The proposed amendments: enhance requirements related to agriculture; clarify existing requirements for accelerated E&S control; incorporate updated federal requirements; update permit fees; codify post-construction and stormwater management (PCSM) requirements; add requirements related to riparian buffers and riparian forest buffers; and provide for development of general permits to support the needs of different activities regulated and different geographic regions within the Commonwealth.

(9) Include a schedule for review of the regulation including:

A. The date by which the agency received public comments: November 30, 2009.

B. The date or dates on which public meetings or hearings were held:

September 29, 2009
DEP-SCRO
909 Elmerton Avenue
Harrisburg, PA 17110

October 1, 2009
Cranberry Township Municipal Bldg.
2525 Rochester Road
Cranberry Township, PA 16066

October 5, 2009
Salisbury Township Municipal
Bldg
2900 South Pike Avenue
Allentown, PA 18103

C. The expected date of promulgation of the proposed regulation as a final-form regulation: October 2010

D. The expected effective date of the final-form regulation: Upon final publication in *PA Bulletin*.

E. The date by which compliance with the final-form regulation will be required: Ninety (90) days after final publication in *PA Bulletin*.

F. The date by which required permits, licenses or other approvals must be obtained: Ninety (90) days after final publication in *PA Bulletin*.

(10) Provide the schedule for continual review of the regulation.

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This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

SECTION II: STATEMENT OF NEED

(11) State the statutory authority for the regulation. Include specific statutory citation.

The proposed rulemaking is being made under the authority of Sections 5 and 402 of the Clean Streams Law (35 P.S. §§691.5 and 691.402); Section 1920-A of the Administrative Code of 1929 (71 P.S. §§510-20); and Section 11 of the Conservation District Law (3 P.S. §859(2)).

(12) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines for action.

Yes, in part. The proposed rulemaking includes updated provisions to meet federal Clean Water Act requirements (33 U.S.C.A § 1342) related to the federal Phase II requirements for NPDES Stormwater Construction Permits for stormwater discharges associated with construction activities found at 40 CFR Part 122. The 1999 "Phase II" federal rulemaking for NPDES Stormwater Discharges Associated with Construction Activities became effective in 2002. These federal rules added smaller construction activities to the regulatory program by specifically including construction activities disturbing between 1 and 5 acres in the category of activities requiring NPDES Stormwater Construction Permit coverage. The existing requirements of Chapter 102 only include the category of larger construction activities that were included in the NPDES Phase I rulemaking effective in 1989. In order to maintain delegation of the federal NPDES program, Pennsylvania must amend the Chapter 102 regulations to incorporate the Phase II rulemaking.

This rulemaking is in part a response to Environmental Hearing Board (EHB) decisions. In 1999, the EHB ruled that "post construction" stormwater was potential pollution which the Department should evaluate along with the stormwater discharges that occur during construction activities. *Valley Creek Coalition v. DEP*, 1999 EHB 935. This holding has been confirmed in subsequent decisions including *Blue Mountain Preservation Association v. DEP and Alpine Rose Resorts*, 2006 EHB 589 and *Crum Creek Neighbors v. DEP and Pulte Homes of PA, LP*, EHB Docket No. 2007-287-L, October 22, 2009 Adjudication. The PCSM requirements are an established counterpart to the activities already expressly regulated under this Chapter. This rulemaking will provide needed regulatory framework and clarity for the administration of, compliance with and the legal defense of these existing requirements.

(13) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

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Compelling public interest and public benefit – General

The purpose of the rulemaking package is to amend the Department's E&S Control regulations and to update existing fees for activities performed by the Department. Earth disturbance activities change, often significantly, many elements of the natural environment. Earth disturbances, including construction activities, typically include clearing the land of vegetation, excavating earth, and compacting soil, all of which lead to increased stormwater runoff and higher erosion rates (EPA 2008). Construction activities permitted under Chapter 102 currently affect approximately 56,367 acres in Pennsylvania each year. Annual average numbers of permits are as follows: General NPDES Stormwater Construction Permits - 2079; Individual NPDES Stormwater Construction Permits - 412; E & S Permits - 558. The annual average acreage and permit numbers are based on the Department's data for the years 2006 – 2008. E&S Permits are the exception, with the data based on the average number of permits issued from 2006 – 2008 and the addition of permits issued in 2009 related to oil and gas activities.

The final rulemaking ensures consistency with federal NPDES regulatory requirements for stormwater discharges associated with construction activities. The revisions clarify existing requirements, provide for riparian buffer criteria, clarify Chapter 93 antidegradation implementation requirements, revise operation and maintenance (O&M) requirement for PCSM, revise permit fees and permit requirements.

Permit fees have not been increased since 2000 for E&S permits and individual NPDES permits. The general NPDES permit fee was revised in 2009 when the Department reissued the NPDES general permit. In an effort to reduce overall costs associated with the Commonwealth's budget, the Department has developed the permit fee to offset as much of the implementation costs as reasonably possible and not place undue financial burden on the regulated community. This regulatory package offsets a portion of the operating costs of the E&S Control and NPDES Stormwater Construction Programs.

The final rulemaking will directly benefit all Pennsylvania citizens by improving water quality through proper stormwater and E&S management thereby improving water quality, reducing turbidity levels in drinking water supplies, enhancing fisheries resources and associated recreational opportunities, reducing the potential for flooding and damages associated with flooding, and promoting the use of a flexible and protective BMP approach to E&S control and stormwater management. Each of these examples will have multiple benefits of cost savings, environmental improvement, and maintaining a high quality of life.

Additionally, minimizing accelerated erosion and sedimentation and controlling stormwater volume and rate is a key part of the Commonwealth's approach to development and implementation of Watershed Implementation Plans (WIPs). WIPs are necessary to reduce nutrients and sediment from entering the Chesapeake Bay, and an integral part of the Department's efforts of protecting and improving the Delaware Estuary, Lake Erie, and other Commonwealth waters.

Compelling public interest – E&S control during earth disturbance

The Department and EPA have documented increased loadings of pollutants to surface waters from discharges during and after earth disturbance activities. The most prominent and widespread pollutant is

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sediment. The level of sediment is often identified through the measurement of other pollutants in the water body, most notably turbidity, total suspended solids, suspended sediment concentration, or settleable solids (EPA, 2008). Other documented pollutants include metals, nutrients, and polycyclic aromatic hydrocarbons (EPA, 2008). These pollutants can derive from construction equipment and materials or from contamination of a site prior to the start of any earth disturbance activity. Other possible pollutants include pesticides, other toxic organics, and materials that exert biological oxygen demand in surface waters. Earth disturbance and post construction discharges have the potential to mobilize these pollutants when the soil is disturbed and stormwater runoff from a site is increased, making the pollutants available for discharge to surface waters.

Increases in sediment and other pollutant discharges during and after earth disturbance activities have the potential to increase pollutant levels in waters of this Commonwealth which may in turn result in adverse impacts on aquatic ecosystems and on human uses of aquatic resources. Ecological impacts from pollutant discharges include both physical impacts on water bodies and biological impacts on aquatic ecosystems and may be temporary or permanent. Increased sediment and turbidity levels from earth disturbance and post construction stormwater discharges can also impact human uses of water resources, including drinking water supply, recreation, navigation, and fishing, as well as impair proper functioning of stormwater management systems (EPA 2008).

Compelling public interest – PCSM following earth disturbance

Permanent changes to the surface of the land resulting from earth disturbance activities also have the potential to cause pollution. In many watersheds throughout the state, flooding problems from rain events, including small storms, have increased over time due to changes in land use and ineffective stormwater management. This additional flooding is a result of an increased volume of stormwater runoff being discharged throughout the watershed. This increase in stormwater volume is the direct result of more extensive impervious surface areas, combined with substantial tracts of natural landscape being converted to lawns on highly compacted soil or agricultural activities. The problems as a result of these activities are not limited to flooding. Stormwater runoff carries significant quantities of pollutants washed from the impervious and altered land surfaces. The mix of potential pollutants ranges from sediment to varying quantities of nutrients, organic chemicals, petroleum hydrocarbons, and other constituents that cause water quality degradation. Improperly managed stormwater causes water quality degradation, stream channel erosion, reduced groundwater recharge, increased flooding, and loss of aquatic species.

These and other negative impacts can be effectively avoided or minimized through better site design that minimizes the volume of stormwater generated and also the amount of stormwater which requires treatment. This rulemaking codifies existing PCSM requirements needed to prevent pollution from improperly managed stormwater, and requires utilization of stormwater management techniques that achieve stormwater runoff volume reduction, pollutant reduction, groundwater recharge and stormwater runoff rate control for all storms.

Stormwater BMPs, as with any treatment system, requires some operation and maintenance activity to ensure that the removal of pollutants and the reduction of runoff volumes and rates will be optimized. Pennsylvania's aging infrastructure has raised concerns and the awareness for the need for maintenance. In general, stormwater BMP maintenance is an opportunity to ensure that intentional and dutiful management

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of a BMP will be conducted to maintain the desired level of performance for effective and efficient operation. Stormwater BMPs, as with any infrastructure system, have a lifecycle which begins from design through construction and then into operative stages. These later stages are what primarily dictate operation and maintenance (O&M) actions (Kang, 2008). The various BMPs that are available for consideration have required maintenance activities that typically consist of short-term, routine and frequent activities or long-term and less frequent activities. These maintenance activities may also involve minor to significant amounts of personnel, equipment, materials, expense, and other operation considerations to maintain optimal performance. Cost efficiencies for O&M improve with sustainable, natural choices for stormwater BMPs, while highly engineered, structural stormwater BMP choices prove to be less cost-effective. Operation and maintenance costs are a substantial portion of the lifecycle for stormwater BMP costs. For example, annual predicted O&M costs are on the order of 10% of total construction costs for a stormwater BMP that costs \$11,100 (adjusted for inflation), and on the order of 5% for a stormwater BMP that costs \$111,000 (adjusted for inflation). This means that the O&M costs of the stormwater BMP will roughly equal the construction cost (in constant dollars) after 10 years and 20 years, respectively. We can also see that the trend of predicted annual O&M cost, as a percentage of the construction cost, decreases with increasing total construction cost for all BMPs (Kang, 2008). In summary, stormwater BMPs that do not undergo regular maintenance will become ineffectual and no longer offer any protection for Pennsylvania's water resources.

Compelling public interest – Riparian buffers

Riparian buffers, including riparian forest buffers, serve as barriers to prevent most pollutants from getting into aquatic environments, and provide enhanced instream contaminant sequestration and protection against degradation primarily due to increased biological activity. Used as a component of an integrated stormwater management system including nutrient management and E&S control practices, riparian forest buffers can produce a number of beneficial effects on the quality of water resources. Riparian buffers, including riparian forest buffers, can be effective in removing excess nutrients and sediment from surface runoff and shallow groundwater, stabilizing streambanks, and shading streams to optimize light and temperature conditions for aquatic plants and animals. Riparian buffers including riparian forest buffers also ameliorate the effects of some pesticides, and directly provide dissolved and particulate organic food needed to maintain high biological productivity and diversity in the adjoining stream. They also provide habitat for many terrestrial and aquatic species.

Riparian buffers, including riparian forest buffers, are a vital link sustaining both our natural and economic resources. The health and maintenance of our waterways are closely tied with our quality of life and economic growth. Whether you enjoy fishing, boating, water-skiing or hiking along a stream, looking to develop a business, or ensuring safe public drinking water, protecting our water resources is important for the future of these activities. The specific numeric value for many of these benefits that riparian buffers provide may be difficult to quantify in terms of economic impact.

Riparian buffers, including riparian forest, buffers help enhance economic activity by mitigating floodwaters and protecting people's investments from hazards associated with stream flooding and streambank erosion. Buffers provide a critical "right of way" for streams and rivers during out of bank flooding conditions. When buffers contain the entire 100-year floodplain, they are an extremely cost-effective form of flood damage avoidance for both communities and individual property owners. The

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Minnesota Department of Natural Resources estimated a cost savings of \$300 per acre-foot associated with a minimized need for floodwater storage due to the preservation of riparian wetlands that buffer streams and rivers (Center for Watershed Protection, 1998). Further, a national study of 10 programs that diverted development away from flood-prone areas found that land next to protected floodplains had increased in value by an average of \$19,104 (adjusted for inflation) per acre (Burby, 1988).

Riparian buffers including riparian forest buffers enhance sustainable infrastructure by keeping nonpoint source pollution from streams. Streamside buffers enhance overall water quality and will help to reduce treatment costs for our public water supplies. Streamside buffers have been found to be effective in removing sediment, nutrients and bacteria from run-off and effluent (Desbonnet et al., 1994) thus lowering treatment costs to downstream water users. Riparian buffers lower water temperature which increases dissolved oxygen in the water. Higher levels of dissolved oxygen increase a stream's capacity to assimilate organic compounds, such as wastes from wastewater treatment plant.

Installing and maintaining riparian buffers, including riparian forest buffers, lower the cost of storm water treatment. Systems that integrate natural areas, like riparian forests, are less expensive to construct than storm drain systems and provide better environmental results. Costs for structurally engineered stormwater BMPs such as wet and dry basins, stormwater inlets and piping systems range from \$500 - \$10,000 per acre and will continue to increase in construction and maintenance costs. Routine maintenance for the structural BMPs can cost as much to maintain as compared to the implementation cost. (Wiegand et al 1986) The maintenance costs are especially high for structural BMPs when the BMP will need to be replaced, typically in 20 years or less. For example, a stormwater basin has an annual maintenance cost of about \$500 per acre per year. In comparison, maintenance for a natural system such as a riparian forest buffer can be equated to a normal landscaping maintenance cost (Delaware Natural Resources). Therefore it is much more cost effective to manage storm water by including the protection and maintenance of riparian buffers and other natural BMPs in the PCSM plan. The costs of establishing and maintaining a new riparian forest buffer range from \$700 - 4,723 per acre and from \$0 - 2,725 per acre for the enhancement and maintenance of an existing riparian forest buffer. (Department's Draft Riparian Forest Buffer Guidance (Document 394-5600-001, 2009))

When riparian buffers, including riparian forest buffers, are in place and maintained, greenways are created that enhance the sensory and recreational qualities of a waterbody, a community, and an individual's property. The aesthetic values associated with greenways, which include riparian buffers and riparian forested buffers have economic benefits and can contribute to a sense of pride and well being for communities and property owners. These greenways can also have a positive impact on the value of surrounding property nearby. A greenway in Boulder, Colorado was found to have increased property values in the community by \$5.4 million which resulted in \$500,000 of additional tax revenue annually (Fausold and Liliehilm, 1996). Pennypack Park - a managed greenway along Pennypack Creek in Philadelphia - has been credited with a 33% increase in the value of adjacent property. A net increase of more than \$3.3 million in real estate is attributed to the park. (Chesapeake Bay Foundation, 1996). In a national survey, buffers were perceived as having a positive or neutral impact on adjacent property in 32 out of 39 communities (Schueler, 1995).

Riparian buffers including riparian forest buffers enhance economic activity by establishing an environment that protects areas for fishing, hunting and other outdoor recreational activities.

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Pennsylvania is renowned for sport fishing, especially of those species such as trout that require cold waters, which are enhanced by the shading provided by riparian forest buffers. The state's abundant wildlife - so important to hunters and wildlife watchers - relies on streamside buffers for habitat and undisturbed or forested corridors between larger wooded areas. Fishing contributes over \$2 billion to Pennsylvania's economy with close to 1 million anglers (Southwick Associates, 2007). Protecting or enhancing water quality through riparian buffers, including riparian forest buffers, will help to sustain this large economic resource for future generations. Pennsylvania ranks second in the nation in resident retail sales associated with hunting with over \$1.7 billion, and approximately \$200 million in non-resident retail sales associated with hunting. (Southwick Associates, 2007)

The Philadelphia Water Department (PWD) had noted to the Department that few things are more important to surface water supply protection than tree cover and stream stabilization. As a drinking water provider, PWD routinely models the relationship between land cover and water quality. When PWD compares the pollutants found in runoff from forested land versus residential lawns: the turbidity concentration in lawns is 2 times greater than that from forested lands, the nitrogen concentration from lawns is 5 times greater than from forested lands, the *Cryptosporidium* and *Giardia* concentrations in runoff from lawns is 30 times greater than that from forested lands and fecal coliform concentrations are 3,000 times greater from lawns than from forested lands.

Riparian buffers, including riparian forest buffers, provide many benefits and are crucial to the protection and enhancement of water resources in Pennsylvania. They are extremely complex ecosystems that help provide optimum food and habitat for stream communities as well as being useful in mitigating or controlling point and nonpoint source pollution by both keeping the pollutants out and increasing the level of instream pollution processing. They provide significant flood attenuation and storage functions within the watershed as well as protecting streambanks from erosion. Riparian buffers including riparian forest buffers are a priceless natural resource that is intrinsically linked to our economic sustainability and well being as a Commonwealth.

(14) If scientific data, studies, references are used to justify this regulation, please submit material with the regulatory package. Please provide full citation and/or links to internet source.

References for scientific data, studies regarding riparian buffers and riparian forest buffers:

- Abernethy, B. and I. D. Rutherford. 1998. Where along a river's length will vegetation most effectively stabilize stream banks? *Geomorphology*. 23(1):55-75.
- Burby, R. 1988. *Cities Under Water: A Comparative Evaluation of Ten Cities' Efforts to Manage Floodplain Land Use*. Institute of Behavioral Science #6. Boulder, CO. 250 pp.
- Chesapeake Bay Foundation. 1996. *A Dollars and Sense Partnership: Economic Development and Environmental Protection*. Chesapeake Bay Foundation. Annapolis, MD.
- Desbonnet, A., P. Pogue, V. Lee, and N. Wolff. 1994. *Vegetated Buffers in the Coastal Zone: A Summary Review and Bibliography*. Coastal Resources Center, University of Rhode Island.
- Dosskey, M. G., M. J. Helmers, D. E. Eisenhauer, T. G. Franti, and K. D. Hoagland. 2002. Assessment of concentrated flow through riparian buffers. *Journal of Soil and Water Conservation* 57:336-343
- Fausold, C. and R. Liliehl. 1996. *The Economic Value of Open Space: A Review and Synthesis*. Lincoln Institute of Land Policy, Cambridge, MA.

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- Jones, K. L., G. C. Poole, J. L. Meyer, W. Bumback, and E. A. Kramer. 2006. Quantifying expected ecological response to natural resource legislation: a case study of riparian buffers, aquatic habitat, and trout populations. *Ecology and Society* 11:15
- Jordan, T. E., D. L. Correll, and D. E. Weller. 1993. Nutrient interception by a riparian forest receiving inputs from adjacent cropland. *Journal of Environmental Quality* 22:467-473.
- Lowrance, R., R. Todd, J. Fail, O. Hendrickson, Jr., R. Leonard, and L. Asmussen. 1984. Riparian forests as nutrient filters in agricultural watersheds. *BioScience* 34:374-377.
- Lowrance, R., L. et. al., 1997. Water quality functions of riparian forest buffer systems in the Chesapeake Bay Watershed. *Environmental Management* 21:687-712
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- Meyer, J.L. et al., *Where Rivers Are Born: The Scientific Imperative for Defending Small Streams and Wetlands*, Washington, DC, American Rivers, Sierra Club, 2003.
- Newbold, J. Denis, et.al. 2010. Water Quality Functions of a 15-Year-Old Riparian Forest Buffer System. *Journal of the American Water Resources Association (JAWRA)* 1-12. DOI: 10.1111/j.1752-1688.2010.00421.x
- Northwest Regional Planning Commission. 2004. *The Shoreline Stabilization Handbook* <http://nsgd.gso.uri.edu/lcsg/lcsg04001.pdf>
- Palone, R.S. and A.H. Todd (eds.) 1997. *Chesapeake Bay riparian handbook: a guide for establishing and maintaining riparian forest buffers*. USDA Forest Service Northeastern Area State and Private Forestry NA-TP-02-97. Radnor, PA.
www.chesapeakebay.net/pubs/subcommittee/nsc/forest/handbook.htm
- Peterjohn, W. T. and D. L. Correll. 1984. Nutrient dynamics in an agricultural watershed: observations on the role of a riparian forest. *Ecology* 65:1466-1475.
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- Southwick Associates. 2007. *Hunting in America: An Economic Engine and Conservation Powerhouse*. Produced for the Association of Fish and Wildlife Agencies with funding from Multistate Conservation Grant Program.
- Southwick Associates. 2007. *Sportfishing in America: An Economic Engine and Conservation Powerhouse*. Produced for the Association of Fish and Wildlife Agencies with funding from Multistate Conservation Grant Program.
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- Sweeney, B.W. and Blaine, J.G., *Resurrecting the In-Stream Side of Riparian Forests*. *Journal of Contemporary Water Research & Education*, Issue 136, 2007, pp. 17-27.
- Vidon, P. G. F. and A. R. Hill. 2004. Landscape controls on nitrate removal in stream riparian zones. *Water Resources Research* 40.
- Welsch, D.J., *Riparian Forest Buffers, Function and Design for Protection and Enhancement of Water Resources*, U.S.D.A. Forest Service, Northeastern Area, Radnor, PA, NA-PR-07-91, 1991,

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http://www.na.fs.fed.us/spfo/pubs/n_resource/buffer/cover.htm.

- Wenger, S., A Review of the Scientific Literature on Riparian Buffer Width, Extent, and Vegetation, Publication of the Office of Public Service and Outreach, Institute of Ecology, University of Georgia, 1999.

References for scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management:

- Burton, Allen and Robert Pitt, *Stormwater Effects Handbook: A Toolbox for Watershed Managers, Scientists, and Engineers*. CRC Press 2001.
http://rpitt.eng.ua.edu/Publications/BooksandReports/Stormwater%20Effects%20Handbook%20by%20%20Burton%20and%20Pitt%20book/MainEDFS_Book.html
- Center for Watershed Protection, "The Economics of Watershed Protection", *Watershed Protection Techniques* Vol. 2 No. 4: 469-481, and, *The Economics of Stormwater Treatment: An Update*. Technical Note #90, *Watershed Protection Techniques* Vol. 2 No. 4: 395-499.
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- Christopher Kloss and Crystal Calarusse, *Rooftops to Rivers: Green Strategies for Controlling Stormwater and Combined Sewer Overflows* June 2006.
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- Financing Stormwater Management Programs – Choices and Options:
<http://water.nstl.gov.cn/MirrorResources/2537/index.html>
- National Resources Council "Urban Stormwater Management in the United States" (Oct. 2008);
<http://www.epa.gov/npdes/stormwater>
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- Heaney, James P., Robert Pitt and Richard Field. *Innovative Urban Wet-Weather Flow Management Systems*.
http://rpitt.eng.ua.edu/Publications/BooksandReports/Innovative/MainIUWW_Book.html
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- National Resources Defense Council, *Stormwater Strategies: Community Responses to Runoff Pollution* May 1999.
- PADEP *Erosion and Sediment Control Program Manual* (PADEP # 363-2134-008)
<http://www.depweb.state.pa.us/watershedmgmt/cwp/view.asp?a=1437&q=518836&watershedmgmtNav=>
- PADEP, *Pennsylvania Stormwater Best Management Practices Manual* (PADEP # 363-0300-002)
<http://www.depweb.state.pa.us/watershedmgmt/cwp/view.asp?a=1437&q=518836&watershedm>

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gmtNav=

- PADEP *Water Quality Standards Triennial Review*
<http://www.depweb.state.pa.us/watersupply/cwp/view.asp?a=1261&Q=531653&watersupplyNav=>
- Philadelphia Stormwater Management Guidance Manual – Philadelphia Water Department;
<http://www.phillyriverinfo.org/Programs/SubprogramMain.aspx?Id=StormwaterManual>
- The Stormwater Manager's Resource Center, Center for Watershed Protection, Inc.,
<http://www.stormwatercenter.net/>
- United States Environmental Protection Agency, Office of Water, Economic Analysis of Final Effluent Limitation Guidelines and Standards for the Construction and Development Industry, November 23, 2009. <http://www.epa.gov/guide/construction/files/economic.pdf>
- United States Environmental Protection Agency, Phase I and II Rulemaking; (55 FR 47990 and 64 FR 68722 respectively)
- Urban Stormwater Economics: A Comparable Cost Benefit Study of Site Technologies and Strategies for the City of Toronto.
- Villanova Urban Stormwater Partnership; <http://www.villanova.edu/vusp>
- Weigand, C., T. Schueler, W. Chittenden, and D. Jellick. 1986. *Cost of Urban Runoff Quality Controls*. pp. 366-380 In: *Urban Runoff Quality*. Engineering Foundation Conference. ASCE. Henniker, NH, June 23-27, 1986.

References regarding other data:

- CPI Inflation Calculator, US Department of Labor, Bureau of Labor Statistics,
http://www.bls.gov/data/inflation_calculator.htm
- The Inflation Calculator <http://www.westegg.com/inflation>

References regarding Environmental Hearing Board (EHB) Decisions:

- *Valley Creek Coalition v. DEP*, 1999 EHB 935
<http://ehb.courtapps.com/corpus/12%2D15%2D1999.98228.html>
- *Blue Mountain Preservation Association v. DEP and Alpine Rose Resorts*, 2006 EHB 589
<http://ehb.courtapps.com/corpus/50119072005077.pdf>
- *Crum Creek Neighbors v. DEP and Pulte Homes of PA, LP*, EHB Docket No. 2007-287-L, October 22, 2009 Adjudication
<http://ehb.courtapps.com/corpus/50306392007287.pdf>

(15) Describe who and how many will be adversely affected by the regulation. How are they affected?

The revisions are not expected to adversely affect persons proposing or conducting earth disturbance activities since many of the revisions are a codification of current requirements. The clarification of regulatory requirements will benefit persons conducting earth disturbance activities.

The PCSM section is a new addition to the existing regulations, but codifies existing permit requirements and therefore does not create new or additional burdens on the regulated community. Operation and maintenance (O&M) of PCSM facilities is critical to water quality and flood protection. Although this obligation currently exists, the existing regulatory framework does not adequately ensure that this obligation is met. There are costs associated with O&M, but the costs are variable depending on

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the specific PCSM facilities utilized. This rulemaking has added provisions to identify a responsible party and a framework to provide the long-term O&M function.

An increase of permit application fees is being established to ensure that the fees collected begin to cover the cost to administer the program. This will impact those who submit permit applications. However, it must be noted that permit fees have not been increased since 2000. Fiscal analysis clearly identifies the need for additional permit fees to continue administration of Chapter 102 in the Commonwealth. The estimated cost to administer the Chapter 102 program for the first year, fiscal year 2011/2012 is \$7,814,080 and the projected revenue is \$7,573,200.

The average number of permittees over the three year period of 2006, 2007 and 2008 were 412 Individual NPDES Stormwater Construction Permits, 2079 General NPDES Stormwater Construction Permits and 558 E&S Permits each year which includes one year of record for E&S Permits associated with oil & gas activities. It is likely that a number of permittees submitted for more than one of the permits included in the total, however, if each permit is counted separately, the total number of permit applicants could be expected to be approximately 2,463 per year, not including the expected increase from oil & gas activities. If the Department considers E&S permits from oil and gas activities added in, the expected combined total is about 3,000 permits each year issued through the E&S and NPDES Stormwater Construction programs.

(16) List the persons, groups or entities that will be required to comply with the regulation. Approximate the number of people who will be required to comply.

Any person or entity that conducts earth disturbance activities is required to comply with these regulations. Examples of activities that are regulated include residential and commercial development, highway construction and maintenance, utility construction, agricultural activities areas, timber harvesting, and mineral resource development.

The Department processed an average 412 Individual NPDES Stormwater Construction Permits, 2079 General NPDES Stormwater Construction Permits and 558 General E&S Permits annually (2006 – 2008) from entities that are required to comply with permit obligations under Chapter 102.

SECTION III: COST AND IMPACT ANALYSIS

(17) Provide a specific estimate of the costs and/or savings to the **regulated community** associated with compliance, including any legal, accounting or consulting procedures that may be required. Explain how the dollar estimates were derived.

Where possible, the Department has attempted to determine, quantify and calculate the dollar value for the costs, savings and benefits attributable to the rule based on available information on the environmental impacts, social costs, economic impact analysis, and benefit analyses. However, not all of the costs, savings, and benefits can be readily quantified.

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This rulemaking is primarily a codification of existing requirements and therefore costs associated with increased permit fees, as-built drawings, and on-site licensed professionals have been considered as potential new costs. Sustainable, natural BMP options that provide lower costs for the regulated community are encouraged. Ultimately the costs and impacts associated with this rule are decided by the person undertaking the activity and their design professional through the design choices they make. The rule requires that a licensed professional regularly inspect the implementation of critical stages of BMP construction and submit a certification that the BMP is properly constructed. This certification will acknowledge that the BMPs have been properly constructed and are in working order and therefore there will be an improved expectation of optimal performance for the long-term operation. As every project varies in size, scope, and design choice, it is difficult for the Department to calculate what a definitive cost will be to the regulated community. The Department is providing the following estimates for time and costs associated with record drawings (2-16 hours) and licensed professional monitoring of critical stages of construction (0-70 hours). The Department calculated the cost for inspection of critical stages and certification of BMP implementation by simply using an average cost for monitoring and certification of \$80 per hour for routine monitoring by a designee of a licensed professional, and a cost of \$115 per hour for the licensed professional services. Each of these services were multiplied by the average of the estimated number of hours for each of the services provided: 35 hours for oversight and 8 hour for certification. The resulting value of \$2,800 for monitoring and \$920 for certification was then multiplied by the average number of permitted activities (2,463 per year) which was derived from program data. The result for average estimated cost for the regulated community is \$9,162,360. Again, the costs incurred by a permittee for these new requirements are in direct relation to the type of design chosen for the project. While this is a cost to the regulated community, it also provides benefits of increased assurance that the BMPs will perform as designed thereby providing the desired level of environmental protection or improvement.

The proposed revisions to the regulation will add approximately \$5,366,360 in additional costs associated with the Chapter 102 Erosion and Sediment Control and NPDES Stormwater Construction Programs (the difference between \$692,200 (\$164,800 NPDES IP plus \$527,400 NPDES GP) in existing fees to \$6,058,560 in proposed new fees (\$494,400 base NPDES Stormwater Construction IP fee plus \$1,0547,800 NPDES GP plus \$4,509,400 disturbance fee) to the private sector annually. The new fees for the Chapter 102 Erosion and Sediment Control Program will close the cost deficit for the administration of the program. Fee schedules have not been updated since 2000 when there was no per acre of earth disturbance fee for NPDES Stormwater Construction Permits and fees were \$250 for a General Permit, and an Individual Permit was \$500. In an effort to reduce the deficit between funds generated and expenditures required to manage the program, this final rulemaking sets permit fees as follows: a base administration fee for General Permits of \$500 per permit or an Individual Permit fee of \$1500 per permit, plus a per acre earth disturbance fee of \$100 for all permit applications. The fees were developed based on the number of permits issued and number of acres disturbed per permit over the last three years. In addition, implementation costs were calculated based upon projected administration, review, and implementation time for the program. A more detailed analysis can be found in the Fee Report Form. It should be noted that even though these increases will affect the regulated community, they still will not cover the total Department expenditures required to implement the program.

Land development activities change natural features of the land and alter stormwater runoff characteristics. The resulting alterations of stormwater volume, rate and water quality which can cause

Regulatory Analysis Form

stream bank scour, stream destabilization, sedimentation, loss of groundwater recharge, loss of base flow, localized flooding, habitat modification and water quality and quantity impairment, which constitute pollution as that term is defined in the Pennsylvania Clean Streams Law, 35 P.S. Section 6911. Riparian buffers, particularly riparian forest buffers play a vital role in mitigating the effects of stormwater runoff from land development activities. The Department proposes to revise the buffer section to expand buffers in all special protection watersheds and to restore water quality in impaired waters. The final rule includes mandatory riparian buffers for activities permitted under Chapter 102 when the project is located along Exceptional Value or High Quality waters. Specifically, protection of existing riparian buffers along Exceptional Value and High Quality waters where the waters are attaining their designated uses and riparian forest buffers where Exceptional Value or High Quality waters are impaired. The mandatory obligation to maintain and protect a 150 foot riparian buffer will be required when the project site contains, is along or within, 150 feet of a river, stream, creek, lake, pond or reservoir, and located in:

- An EV watershed meeting its designated use at the time of application, or
- A HQ watershed meeting its designated use at the time of application.

In addition, a mandatory obligation to establish and protect a new riparian forest buffer when the project site contains, is along or within, 150 feet of a river, stream, creek, lake, pond or reservoir, where no riparian forest buffer currently exists and is located in:

- An EV watershed that is listed as impaired at the time of the application; or
- An HQ watershed that is listed as impaired at the time of application.

Exceptional Value and High Quality waters are afforded the greatest degree of protection under the Department's existing regulations at Chapter 93 (Water Quality Standards). Based on the scientific data, riparian buffers are one of the most effective stormwater management BMPs for protecting aquatic resources.

Potential Riparian Forest Buffer Costs:

The potential costs related to the riparian forest buffer requirements in the rulemaking have been calculated by considering how much it could cost to establish a new buffer where no buffer exists as well as enhancing or maintaining an existing buffer. Recognizing that a number of possibilities need to be considered when quantifying total costs that may be experienced when establishing riparian forest buffers throughout the Commonwealth, dollars per acre of riparian forest acre established can range from \$385 to \$4,723 per acre. The minimum estimate is based on the cost of planting 110 (12 – 18 inch) hardwood trees spaced 20 feet apart at \$3.50 per tree as a minimum to establish a riparian forest buffer. The maximum potential cost is based on planting 435 (12 – 18 inch) hardwood trees ten feet apart at \$3.50 per tree as well as removal of invasive species (\$200 per acre), reinforcement planting (\$175 per acre), seedling protection (\$2,175 per acre), competition control such as herbicides and mowing (\$650 per acre) altogether could cost as much as \$4,723 per acre. However, it is most likely that actual establishment of riparian forest buffers will be less than the maximum estimate due to the variety of conditions in the field. It is also possible that riparian forest buffers already exist where projects may fall within the requirements of this part of the rulemaking. The cost would be \$0 per acre where this is the case. The Department has estimated potential cost to establish riparian forest buffers on a per acre basis.

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However, it is nearly impossible to determine the number and size of projects that will occur within Impaired HQ and EV watersheds requiring establishment of riparian forest buffers, therefore no estimates of total acres are included.

Potential Riparian Forest Buffer Savings:

The potential savings that will result from the development of riparian forest buffers are likely to be experienced through the increase of property values resulting from riparian forest buffers being installed in the Commonwealth along Impaired EV and HQ streams as a result of this rulemaking. Establishing a riparian forest buffer is expected to increase property values at least \$19,104 per acre (adjusted for inflation). This estimate is based on the 1988 Burby study which examined 10 programs throughout the U.S. that diverted development away from flood-prone areas, and is cited in Section 14 of this document.

Although the mandatory riparian forest buffer requirement for permitted projects located in exceptional value and high quality watersheds is new, this requirement should not necessarily result in substantial new or increased costs to the regulated community.

Riparian forest buffers may result in a savings when compared to structurally engineered non-discharge BMPs. Additionally, the installation of riparian forest buffers has been shown to increase property values by 5% to 25%, increase and protect water quality and decrease the necessity and cost of restoring impaired waters. (See Section 13)

According to EPA estimates, available data regarding Post Construction Stormwater can be found in national studies developed by the EPA and others; however, it would not be accurate to infer potential costs and savings for the Commonwealth based on National Studies due to the extreme variability of conditions, size of projects and state requirements. According to EPA estimates in the *Federal Register/Vol. 64, No. 235/Wednesday, December 8, 1999/Rules and Regulations*, estimated post construction **costs** were \$56,122,317 to \$227,040,284 (adjusted for inflation) nationwide annually. This estimate was based on an average costs for PCSM BMPs on project sites of one, three, five and seven acres. Annual **benefits** of the PCSM requirements by EPA in the *Federal Register/Vol. 64, No. 235/Wednesday, December 8, 1999/Rules and Regulations*, indicate a potential annual benefit of the Phase II Storm Water Rule to be approximately \$131,000,000 to \$410,200,000 nationally, after Erosion and Sediment Control benefits were removed from the EPA total benefit estimate.

(18) Provide a specific estimate of the costs and/or savings to **local governments** associated with compliance, including any legal, accounting or consulting procedures that may be required. Explain how the dollar estimates were derived.

This proposed rulemaking is a codification of existing requirements and therefore only minimal costs associated with increased permit fees are anticipated for local government.

The proposed revisions to the regulation will add approximately \$804,954 in additional costs associated with the Chapter 102 Erosion and Sediment Control Program (the difference between \$103,830 (\$24,720

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NPDES IP plus \$79,110 NPDES GP) in existing fees to \$908,784 in proposed new fees (\$74,160 base NPDES Stormwater Construction IP fee plus \$158,220 NPDES GP plus \$676,400 disturbance fee) to local governments annually. Other than the economic benefits noted in Section 13, the increase in fees will not provide any direct savings to the local governments. The Department does not anticipate that conservation districts delegated the administration of the program will experience any decrease in revenue based from fees under this rulemaking. In addition, conservation districts could supplement these revenues with their own review fees. The Conservation District Fund Allocation Program (CDFAP) also provides revenue to conservation districts to partially cover the cost of technical positions to implement the program.

Local governments may realize reduced water treatment costs (as a result of reduced sediment and in-stream pollutant loadings); reduced infrastructure maintenance costs (due to reduced stormwater volumes); and reduced costs associated with flooding potential (due to stormwater management practices that reduce flood potential); however, specific cost savings to be realized as a result of this rulemaking are difficult to establish with any certainty and are therefore not identified in this analysis.

Additionally, local governments with state Stormwater Management Act (Act 167) or NPDES MS4 regulatory obligations may rely on the regulatory structure provided by this proposed rulemaking. This rulemaking reflects a continuing commitment to integrate regulatory requirements with other stormwater management obligations including requirements pursuant to Act 167-Stormwater Management Act and the NPDES Municipal Separate Storm Sewer Systems (MS4) program. Local governments with state Act 167 or NPDES MS4 regulatory obligations may rely on the regulatory structure for baseline requirements provided by this rulemaking. This reliance on existing state stormwater programs can represent a significant cost savings to local governments in the form of baseline requirements for erosion and sediment control, post construction stormwater and riparian buffer implementation.

(19) Provide a specific estimate of the costs and/or savings to **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures that may be required. Explain how the dollar estimates were derived.

Where possible, the Department has attempted to determine, quantify and calculate the dollar value for the costs, savings and benefits attributable to the rule based on available information on the environmental impacts, social costs, economic impact analysis, and benefit analyses. However, not all of the costs, savings, and benefits can be readily quantified.

The proposed revisions to the regulations could potentially add approximately \$605,856* in additional costs to state government agencies that are likely to obtain permits from the Department to conduct earth disturbance activities. These state agencies include the Department of Transportation (PennDOT), the Department of General Services, the Department of Corrections, the Department of Conservation and Natural Resources and the State System of Higher Education. It should be noted however, that historically, the Department has not charged permit fees to respective Commonwealth state agencies to obtain earth disturbance permits. Nevertheless, with continued budgetary constraints placed upon the Department, the Department in the future will continue to explore ways to cover the administrative costs of its programs, including the possibility of assessing permit fees to state agencies that must obtain earth disturbance permits from the Department.

Regulatory Analysis Form

The proposed rulemaking ensures protection and maintenance of environmental quality and should reduce costs to the state and local governments as a result of savings from reduced sediment loadings, reduced in-stream pollutant concentrations, and reduced pollution associated with changes to stream flow volume, and velocity. The rulemaking will also result in savings from BMPs that reduce flooding potential and associated flood damage.

Human uses of the affected resource values are those values where there is a direct dependence on the water resource and dependence on water quality. The value of changes in sediment discharges is determined by its impact on water quality. Water quality, in turn, influences human uses of the affected resources, leading to changes in use values. It may also lead to changes in ecosystem functions that generate nonuse values. Water quality is often characterized based on its suitability for recreational activities such as fishing, or its ability to support specified uses such as a public drinking water supply (EPA 2008).

Potential Riparian Forest Buffer Costs:

It has been estimated that the cost of developing a riparian forest buffer ranges from \$385 to \$4,723 per acre. There are many variables that must be considered when trying to calculate the cost of developing a riparian forest buffer. Existing conditions, such as existing vegetation has a significant impact on cost. A stream that is forested at the beginning of a project will need much less work to be developed into an acceptable forest buffer under this rulemaking as opposed to a stream that has no existing buffer at the time of the earth disturbance project. For the purpose of determining the potential cost of developing riparian forest buffers, the highest potential cost per acre was used.

Potential Riparian Forest Buffer Savings:

The potential savings that will result from the development of riparian forest buffers are likely to be experience through the increase of property values resulting from riparian forest buffers being installed in the Commonwealth along Impaired EV and HQ streams as a result of this rulemaking. Establishing a riparian forest buffer is expected to increase property values as much as \$19,104 per acre (adjusted for inflation). This estimate is based on the 1988 Burby study which examined 10 programs throughout the U.S. that diverted development away from flood-prone areas.

*Note: This number is estimated based upon past permit activity by Commonwealth agencies and projecting associated costs, which are expected to be similar, in the next five fiscal years, under the scenario where the Department assesses permit fees on other respective state agencies.

(20) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

¹ PCSM Estimates not provided in this table.

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	Current FY Year	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
<u>SAVINGS:</u>						
Chapter 102 Erosion and Sediment Control Program Permit Fees						
Regulated Community	\$0	\$0	\$0	\$0	\$0	\$0
Local Government	\$0	\$0	\$0	\$0	\$0	\$0
State Government	\$0	\$7,573,200	\$7,573,200	\$7,573,200	\$7,573,200	\$7,573,200
Total Savings	\$0	\$7,573,200	\$7,573,200	\$7,573,200	\$7,573,200	\$7,573,200
<u>COSTS:</u>						
Chapter 102 Erosion and Sediment Control Program Permit Fees						
Regulated Community	\$692,200	\$6,058,560	\$6,058,560	\$6,058,560	\$6,058,560	\$6,058,560
Local Government	\$103,830	\$908,784	\$908,784	\$908,784	\$908,784	\$908,784
State Government	\$0	\$605,856	\$605,856	\$605,856	\$605,856	\$605,856
Total Costs	\$706,030	\$7,573,200	\$7,573,200	\$7,573,200	\$7,573,200	\$7,573,200
(20a.) Provide the past three year expenditure history for programs affected by the regulation.						
<u>Program</u>	FY -3	FY -2	FY -1	Current FY		
Environmental Program Management (#161-10382)	\$36,868,000	\$39,685,000	\$37,664,000	\$32,694,000		
Environmental Protection Operations (#160-10381)	\$89,847,000	\$98,574,000	\$98,544,000	\$85,069,000		
(21) Explain how the benefits of the regulation outweigh any cost and adverse effects.						
The effects of accelerated sedimentation and improperly managed stormwater in streams have been well documented, causing increased costs associated with more frequent flooding, diminished water quality						

Regulatory Analysis Form

and, biological and physical impacts to the waters in Pennsylvania. Biological impacts include loss of habitat for fish and aquatic macroinvertebrates (the primary food source for fish and other aquatic organisms). Physical impacts require dredging of accumulated sediment to maintain water storage volume in reservoirs and to maintain transportation in navigational routes. Additionally, the costs associated with treatment of drinking water are increased. In 2009, EPA's Economic Analysis of the Final Construction & Development Effluent Limitation Guidelines identified stormwater management resulted in benefits for the following:

- **Water Quality.** Reducing sediment levels in waterways has the general effect of improving water quality, as suspended sediment is one of the determinants of water quality. Increased water quality increases both the use and non-use value of waterbodies. EPA quantified the increased use value using willingness-to-pay estimates based on a meta-analysis of existing willingness-to-pay studies for improved water quality.
- **Drinking Water Treatment.** Drinking water must be treated for sediment in turbidity, among other things, and treatment costs are related to the sediment and turbidity levels of the influent water. Reducing sediment and subsequently the turbidity that must be treated by drinking water treatment plants reduces the amount of chemicals needed for treatment, and also the amount of sludge generated from this treatment that must be disposed;
- **Water Storage.** Water storage facilities, commonly called reservoirs, may also be dredged in order to regain capacity lost to sediment build-up. Reduced sediment settling in reservoirs is also expected to reduce the frequency and cost of dredging in reservoirs that are dredged; and,
- **Navigation.** Navigable waterways are often dredged to maintain their navigable depth and width. Reduced sediment settling in navigable channels is expected to reduce the frequency and therefore cost of dredging in these channels, as frequency and cost are related to the amount of sediment accumulated over time and therefore needed to be dredged;

The provisions (102.14) mandating use of a riparian buffer for projects located along HQ and EV watersheds is consistent with the federal requirements in the final rulemaking for Effluent Limitations Guidelines and Standards for the Construction. This final rule includes provisions for providing and maintaining natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible. As a result, the inclusion of riparian buffer requirements and criteria for riparian buffers will provide a benefit for the regulated community in complying with this recent rulemaking.

Annual instream damage from sediments costs between \$8.2 billion and \$33.4 billion (adjusted for inflation). [Clark, Haverkamp, and Chapmen, 1985] [Waddell, 1986]*. In addition, offstream damages associated with the erosion of roads, drainage ditches and other structures, and the loss of viable, productive topsoil are difficult to quantify. Using these estimates for instream and off stream damages nationwide, it is estimated that between \$64 million and \$260 million in environmental damage occurs to Pennsylvania's land and water resources annually from sediment pollution. The benefits of protecting water quality and the environment from accelerated erosion and sedimentation far outweighs the cost of administering the program and costs to the private sector for implementation.

*Edwin H. Clark II, Jennifer A. Haverkamp; and William Chapmen, Eroding Soils: The Off- Farm Impacts (Washington, DC: The Conservation Foundation, 1985), and Thomas Waddell, The Off-Site

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Costs of Soil Erosion (Proceedings of a symposium held in May 1985 (Washington D.C.: The Conservation Foundation, 1986).

(22) Describe the communications with and input from the public and any advisory council/group in the development and drafting of the regulation. List the specific persons and/or groups who were involved.

In developing this proposed rulemaking the Department undertook extensive outreach efforts to meet with stakeholders including: conservation districts, builders, agriculture, other industry groups, environmental groups, legislators and advisory committees.

Outreach efforts by DEP Secretary Hanger or members of Executive Staff on key proposed revisions to Chapter 102 included meetings with the following groups during 2008-2009:

- Department of Community and Economic Development
- Governor's Action Team
- Interested legislators; *Met with staff from Rep. Hutchinson, Rep. George, Sen. Musto & Sen. M.J. White*
- Pennsylvania Association of Conservation Districts (PACD)
- PA Builder's Association and building industry representatives
- PA Campaign for Clean Water (Coalition of environmental groups including: Chesapeake Bay Foundation, Clean Water Action, Delaware River Keepers, Sierra Club, Trout Unlimited PA Chapter, Penn Future)
- PA Chamber of Business and Industry
- Pennsylvania Oil and Gas Association, Independent Oil and Gas Association, and oil & gas industry representatives
- State Conservation Commission
- Chesapeake Bay Foundation
- Professional Geologists
- Professional Engineers

Outreach efforts by DEP staff on Chapter 102 revisions, permit-by-rule and riparian forest buffers included meetings with the following groups during 2007-2009:

- Chesapeake Bay Foundation
- PA Chamber of Commerce
 - *Add language to allow General Permit development [102.5(m)]*
 - *Adding new buildings to existing sites (waiver)*
 - *Justification for fees*
- Conservation district directors, managers, and staff
- Department of Conservation & Natural Resources
- Pennsylvania Association of Conservation Districts
 - *Permit by Rule*
- PA Builders Association
 - *Redevelopment of the exemption waiver [102.14(d)(2)(v)]*
 - *Intermittent stream definition*

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- *Allow other BMPs that have the same effect as buffers*
- PA Campaign for Clean Water (Coalition of environmental groups including: Chesapeake Bay Foundation, Clean Water Action, Delaware River Keepers, Sierra Club, Trout Unlimited PA Chapter, Penn Future)
 - *[102.14(d)] variance language*
 - *Permit by Rule*
- PennAg Industries, PA Farm Bureau and agricultural representatives
- PennDOT
 - *Road maintenance*
- Professional Geologists
- Professional Engineers
 - *Variance language*
- State Conservation Commission
- USDA, Natural Resources Conservation Service
- IIRC

Advisory Committee Meetings:

- Citizen's Advisory Council:
 - March 17, 2009 (permit-by-rule)
 - April 21, 2009
- Agricultural Advisory Board (AAB) :
 - February 21, 2007 Overview of proposed revisions
 - October 10, 2007 Overview of proposed revisions
 - December 19, 2007 Discussion of proposed draft language for agricultural activities
 - April 15, 2009 Consideration of Proposed Chapter 102 rulemaking
- Water Resources Advisory Committee (WRAC):
 - January 10, 2007 Overview of proposed revisions
 - January 9, 2008 Overview of proposed revisions
 - July 22, 2008 Overview of riparian forest buffers
 - February 25, 2009 Overview of proposed permit-by-rule
 - April 8, 2009 Consideration of Proposed Chapter 102 rulemaking
 - April 23, 2009 Special Meeting – continuation of proposed Chapter 102
 - April 29, 2009 Second Special Meeting – continuation of proposed Chapter 102 (No quorum of WRAC)

Outreach efforts by members of Executive Staff on key revisions for the Chapter 102 final form rulemaking included meetings with the following groups during 2009-2010:

- Department of Community and Economic Development
- Interested legislators; *Met with staff from Rep. Hutchinson, Rep. George, Sen. Musto & Sen. M.J. White*
- Pennsylvania Association of Conservation Districts (PACD)

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- PA Builder's Association and building industry representatives
- PA Campaign for Clean Water (Coalition of environmental groups including: Chesapeake Bay Foundation, Clean Water Action, Delaware River Keepers, Sierra Club, Trout Unlimited PA Chapter, Penn Future)
- PA Chamber of Business and Industry
- Pennsylvania Oil and Gas Association and oil & gas industry representatives
- State Conservation Commission
- Chesapeake Bay Foundation
- Forestry Industry
- Professional Geologists
- Professional Engineers

Outreach efforts by DEP staff on Chapter 102 revisions, PCSM operation and maintenance, and riparian forest buffers included meetings with the following groups during 2009-2010:

- Interested legislators; *Met with staff from Rep. Hutchinson, Rep. George, Sen. Musto & Sen. M.J. White*
- Department of Conservation & Natural Resources
- Forestry Industry
- PA Farm Bureau and agricultural representatives
- PennDOT
- Academia
- State Conservation Commission
- Waste Industry
- Railroad Industry
- IRRC
- Agricultural Advisory Board (AAB) :
 - February 17, 2010 Overview of proposed final rulemaking
- Water Resources Advisory Committee (WRAC):
 - February 19, 2010 Overview of proposed final rulemaking
 - March 17, 2010 Special Meeting – Consideration of Chapter 102 final rulemaking

(23) Include a description of any alternative regulatory provisions that have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

The Department considered a complete rewrite of the Chapter with extensive revisions, reorganization and restructuring. After input from many stakeholders and WRAC, the Department determined a more limited rulemaking based upon the existing regulatory framework was more appropriate.

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulations.

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Yes. Agricultural activities are not regulated by the federal NPDES regulations, but are regulated under the Pennsylvania Clean Streams Law (35 P.S. § 691.1 et. seq.). The Chapter 102 provisions (102.4) related to agricultural activities are necessary to implement the requirements of state law.

(25) How does this regulation compare with those of other states? How will this affect Pennsylvania's ability to compete with other states?

Forty-six states have delegated NPDES authority from EPA to administer and implement the program in their state. This authority includes issuing general and individual permits, compliance and enforcement actions. The stormwater programs in the remaining five states, Washington DC, tribal lands, and the territories of the US are administered and implemented by EPA regional offices. Except for concentrated animal feeding operations (CAFOs), agricultural runoff is not subject to meeting the NPDES permit requirements. In addition to the NPDES requirements, other states have enacted their own erosion and sediment control and stormwater laws and regulations which often: expand coverage beyond the federal requirements, vary in how they are administered, and differ on what the baseline requirements are for planning, implementation and permitting.

The existing E&S and NPDES Stormwater Construction Permit fees have not been changed since 2000 and are not even close to offsetting the costs to implement the program. Once the permitting operating costs were calculated, the permitting fees were developed to offset as much of the conservation districts' and Department's cost for implementing the NPDES Stormwater Construction Program. Permitting data was pulled from eFACTS and annual reports from delegated county conservations districts and DEP Regional Offices. Data and related calculations are included for reference and as a starting point for estimating what revenue new fees may provide.

In order to revise the outdated E&S Control and NPDES Stormwater Construction Permit fees, other state fees and permit processes were compared in addition to the goal of offsetting permitting operating costs. Since E&S control and PCSM requirements, water quality regulations, permit processes, and permit fees vary widely across the United States it is very difficult to draw an accurate comparison. In general, the Department's rulemaking is comparable to other states given the wide variety of the type of activities that are regulated and the associated fees.

The following are a few examples of state fees and processes that were initially selected based on the proximity to the Commonwealth. Additionally, other Commonwealths, states with municipalities and other larger states were considered. Delaware requires utility construction that is linear in nature to submit an application and pay a permit review and inspection fee of \$80 per disturbed acre (March 2005). The construction general permit fee in Ohio (March 2008) and California (April 2008) is a base fee plus a per disturbed acre fee-California charges this fee annually. In Virginia, applicants for construction sites must pay a flat fee of \$2,400. In addition, local governments require permits for land disturbing activities (May 2006). New Jersey's (July 2006) construction activity and mining general permit fee is a one-time fee, but additional fees, which may range from several hundred dollars to several thousand dollars, may be charged by their local soil conservation districts. Maryland (April 2006), Tennessee (February 2006), and West Virginia (November 2004) all have permit fees based on project size.

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(26) Will the regulation affect any other regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

The proposed rulemaking is not expected to affect existing or proposed regulations of this Department or any other state agency.

(27) Submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

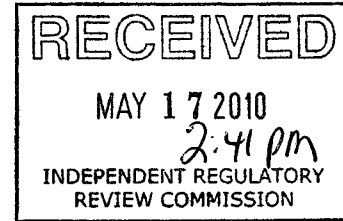
The majority of the revisions to this proposed rulemaking are codifications of existing requirements; therefore only minor changes to forms, fact sheets, and technical guidance are anticipated.

(28) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

Special provisions have been written into the regulation to address the particular needs of those involved in agricultural activities (102.4). Special provisions have also been written into the regulation to address the particular needs of certain industry, activity or individuals involved in PCSM (102.8) and involved in the establishment of riparian forest buffers (102.14).

**FACE SHEET
FOR FILING DOCUMENTS
WITH THE LEGISLATIVE REFERENCE
BUREAU**

(Pursuant to Commonwealth Documents Law)



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Attorney General

By: _____
(Deputy Attorney General)

DATE OF APPROVAL _____

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**DEPARTMENT OF ENVIRONMENTAL
PROTECTION
ENVIRONMENTAL QUALITY BOARD**

(AGENCY)

DOCUMENT/FISCAL NOTE NO. 7-440

DATE OF ADOPTION MAY 17, 2010

BY

John Hanger

TITLE **JOHN HANGER
CHAIRMAN**

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

Copy below is hereby approved as to form and legality
Executive or Independent Agencies

BY

Andrew C. Clark

DATE OF APPROVAL

MAY 17 2010

(Deputy General Counsel)

(~~Chief Counsel - Independent Agency~~)
(Strike inapplicable title)

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or objection within 30 days after submission.

NOTICE OF FINAL RULEMAKING

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL QUALITY BOARD**

EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT

25 Pa. Code, Chapter 102

Notice of Final Rulemaking
Department of Environmental Protection
Environmental Quality Board
(25 Pa. Code, Chapter 102)
(Erosion and Sediment Control and Stormwater Management)

Order

The Environmental Quality Board (Board) by this order amends 25 Pa. Code, Chapter 102 (relating to Erosion and Sediment Control and Stormwater Management). The amendments incorporate the federal Clean Water Act "Phase II" National Pollutant Discharge Elimination System (NPDES) permit requirements for stormwater discharges associated with construction activities, codify post construction stormwater management (PCSM) requirements, including long-term operation and maintenance requirements of PCSM best management practices (BMPs), include specific antidegradation implementation provisions, update agricultural planning and implementation requirements, update erosion and sediment (E&S) control requirements, and establish riparian buffer and riparian forest buffer provisions.

The significant revisions to the final form rulemaking in response to comments include: the removal of the proposed permit-by-rule, which was opposed as drafted by most commentators, including the U.S. Environmental Protection Agency; the addition of exemptions and waivers from the mandatory riparian buffer requirements, as requested by various sectors of the regulated community; and the addition of grandfathering provision for NPDES permit renewals related to post construction stormwater management, as requested by the builders.

This order was adopted by the Board at its meeting of May 17, 2010.

A. Effective Date

These amendments will go into effect ninety (90) days after publication in the *Pennsylvania Bulletin* as final rulemaking.

B. Contact Persons

For further information contact Kenneth F. Murin, Chief, Division of Waterways, Wetlands, and Stormwater Management, P. O. Box 8775, Rachel Carson State Office Building, Harrisburg, PA 17105-8775, (717) 787-6827, or Margaret O. Murphy, Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). This final-form rulemaking is available electronically through the DEP Web site (<http://www.depweb.state.pa.us>).

C. Statutory Authority

The final-form rulemaking is being made under the authority of Sections 5 and 402 of the Clean Streams Law (35 P. S. §§ 691.5 and 691.402), which authorize the Department of Environmental Protection (Department) and the Board to formulate, adopt and promulgate rules and regulations that are necessary to implement the provisions of the act; Section 1917-A of The Administrative Code of 1929, 71 P.S. § 510-17, which authorizes the Department to prevent the occurrence of a nuisance and requires the Department to protect the people of the Commonwealth from unsanitary conditions and other nuisances, including any condition declared to be a nuisance by any law administered by the Department; Section 1920-A of the Administrative Code of 1929 (71 P.S. § 510-20), which authorizes the Board to promulgate rules and regulations that may be determined by the Board to be for the proper performance of the work of the Department; and Section 11 of the Conservation District Law (3 P.S. §859(2)). Specifically, under these authorities, the Department and the Board are authorized to adopt regulations that will protect, maintain, reclaim and restore waters of this Commonwealth. Under these authorities, this Chapter regulates accelerated erosion, sedimentation and stormwater runoff related to earth disturbance activities. Specifically, accelerated erosion and sedimentation must be minimized during earth disturbance activities and the associated change in the volume, rate and quality of post construction stormwater runoff must be controlled in order to prevent pollution and protect, maintain, reclaim and restore waters of this Commonwealth.

D. Background and Purpose of the Amendments

The purpose of this final-form rulemaking is to amend the existing E&S control regulations found at Title 25, Chapter 102. Since 1972, earth disturbance activities related to agricultural plowing and tilling, as well as, non-agricultural earth disturbance activities have been regulated under this Chapter by requiring persons to develop, implement, and maintain BMPs. These regulations were last amended in 2000. The major amendments incorporate the federal Clean Water Act "Phase II" NPDES permit requirements for stormwater discharges associated with construction activities, codify post construction stormwater management (PCSM) requirements, including long-term operation and maintenance requirements of PCSM best management practices (BMPs), include specific antidegradation implementation provisions, update agricultural planning and implementation requirements, update erosion and sediment (E&S) control requirements, and establish riparian buffer and riparian forest buffer provisions. Additional revisions were made to clarify requirements and address identified gaps in regulatory authority important to protecting the waters of this Commonwealth.

Public and advisory committee participation played a substantial role in shaping the final form of this rulemaking. During the 90-day public comment period, the Board heard from over 1,300 commentators. This includes citizens (86%), environmental groups, non-governmental groups & academia (3%), industry (8%), government (federal, state agencies municipalities and conservation districts) (3%), state legislators (31 legislators from the House & Senate) and the Independent Regulatory Review Commission (IRRC).

After review of the comments, the Department met with the legislative committees, numerous stakeholder representatives, Pennsylvania Department of Transportation (PennDOT), Pennsylvania Department of Conservation and Natural Resources (DCNR), and various technical experts. The Department met with the Agricultural Advisory Board (AAB) on February 17, 2010 to summarize the revisions being considered for final rulemaking. The Department also met with the Water Resources Advisory Committee (WRAC) on February 19, 2010, and again on March 17, 2010, to present the draft final-form rulemaking. After extensive discussion, WRAC voted to approve the final-form rulemaking subject to Department clarifying several provisions of the rulemaking.

In response to comments, the input from advisories committees and IRRC, the changes to the final-form rulemaking include revisions to: 1) definitions, 2) agriculture, 3) permit fees, 4) PCSM operation and maintenance (O&M); 5) antidegradation implementation, 6) riparian buffer requirements; and 7) permit-by-rule. Specifically, in § 102.1, several definitions were revised or eliminated; the agricultural provisions in § 102.4(a) were revised and clarified; the permit fee was restructured to include a administrative fee and a fee based on acreage was added to the permit fee section (§ 102.6); the PCSM provisions (§ 102.8) related to long-term operation and maintenance were consolidated into one subsection (§ 102.8(m)) and clarified; the riparian forest buffer section (§ 102.14) was reorganized and refined, an exception subsection was added (§ 102.14(d)), an antidegradation presumption and offset and trading subsection (§ 102.14(e)) were added; and the permit-by-rule section (§ 102.15) was eliminated.

E. Summary of Comments and Responses on the Proposed Rulemaking and Changes to the Proposed Rulemaking

In response to recommendations from commentators, several changes were made in the final-form rulemaking. A summary of the comments received and the changes made are listed by section and described below.

SECTION 102.1. DEFINITIONS:

The following new definitions were added to § 102.1 in the proposed rulemaking and retained in the final-form rulemaking:

“Act 167,” “Agricultural operation,” “Along,” “Intermittent stream,” “Normal pool elevation,” “Oil and gas activities,” “Perennial stream,” “Pollutant,” “Post Construction Stormwater,” “PCSM,” “Stormwater,” “Surface waters” and “Top of streambank.”

The definition of “Riparian Buffer” was not included in the proposed rulemaking, but added to the final-form rulemaking.

The following existing definitions in § 102.1 were revised in the proposed rulemaking and retained in the final-form rulemaking:

“Agricultural plowing or tilling activity,” “BMPs,” “County Conservation District,” “Conservation Plan,” “Earth Disturbance Activity,” “Erosion and Sediment Control Permit” was changed to “E&S Permit,” “Erosion and Sediment Control Plan” was changed to “E&S Plan,” “municipality,” “NOI Notice of Intent,” “NPDES National Pollutant Discharge Elimination

System,” “NPDES Permit for Stormwater Discharges Associated With Construction Activities,” “Operator,” “Person,” “Project site,” “Road Maintenance Activities,” “Sediment” and “Stabilization.”

The following existing definitions were added or modified in proposed rulemaking and were further revised in the final-form rulemaking:

“Antidegradation best available combination of technologies (ABACT),” “Animal Heavy Use Area,” “Nondischarge alternative,” “Notice of Termination,” “PCSM Plan,” “PPC Plan,” “Riparian Forest Buffer,” and “Soil loss tolerance (T).”

The following existing definitions in § 102.1 were deleted in the proposed rulemaking and in the final-form rulemaking: “Collector,” “Dewatering zone” and “Diversion.”

IRRC questioned the need, reasonableness, and clarity of the following definitions: Agricultural plowing and tilling activity; animal heavy use area; BMPs; diversion; E&S plan; intermittent stream; licensed professionals; nondischarge alternative; perennial stream; point source; PPC plan; riparian forest buffer; road maintenance activities; and surface waters.

The rationale for changes to definitions, as included in the final form rulemaking is elaborated below.

The definition of ABACT was modified: 1) to include the terms “environmentally sound and cost effective” as used in 25 Pa. Code, Chapter 93, and 2) to more clearly state the comparison of pre to post earth disturbance activities related to differences in the stormwater runoff rate, volume and quality. The changes were made based on comments received during the public comment period. The effect of the changes provides more clarity to the antidegradation requirements that apply under this chapter.

The definition of agricultural plowing or tilling activity was modified to clarify that the term “no-till cropping methods” is the practice of planting crops with minimal mechanical tillage. The changes were made based on comments received during the public comment period. The effect of the change is to provide clarity on no-till cropping methods.

The definition of animal heavy use area was modified to clarify that the term does not include entrances, pathways and walkways where animals are housed. The changes were made based on comments received during the public comment period. The effect of the change is to provide clarity on animal heavy use areas.

The definition of forest stewardship plan is no longer used in the rulemaking due to public comments and has been deleted from Annex A.

The definition of intermittent stream was added to the proposed rulemaking and is consistent with the definition currently used in Chapter 92. The PA Homebuilders were concerned that drainage ditches or swales which transport water during storm events may be interpreted as intermittent streams. It is not the intent of the Department to treat these storm conveyances as

intermittent streams. The definition as written applies to those channels with substrate associated with flowing water. The word "substrate" used in the definition means the area of the stream base on which an aquatic organism lives and is a commonly used term. The language in the proposed rulemaking was retained in the final-form rulemaking.

The definition of K factor is no longer used in the rulemaking and has been deleted from Annex A.

A definition of long-term operation and maintenance has been added in response to comments. The inclusion of this term and definition is necessary because it clarifies that long-term operation is the routine inspection, maintenance, repair or replacement of a BMP to ensure proper function for the duration of time that the BMP is needed.

The definition of National Pollutant Discharge Elimination System (NPDES) Permit for Stormwater Discharges Associated with Construction Activities has been modified based on public comments. The amount of disturbed acreage has been changed to one (1) acre or more of earth disturbance activities in order to be consistent with federal requirements and the permit requirement section of this Chapter.

The definition of nondischarge alternative has been modified to more clearly state the comparison of pre to post earth disturbance activities related to differences in the stormwater runoff rate, volume and quality, and to be consistent with the ABACT definition. The changes were made in response to public comments. The effect of the changes provides more clarity to the antidegradation requirements that apply under this chapter.

The definition of road maintenance activities has been modified in response to comments to include references to railroad right of way maintenance activities and in response to comments requesting clarity regarding what actions and procedures constitute road maintenance activities.

The definition of riparian buffer has been added and the term is defined as a BMP that includes an area of permanent vegetation along surface waters. The Board added the definition of riparian buffer as it relates to amendments made to Section 102.14 which now provides an alternative to riparian forest buffer implementation in response to public comments.

The definition of riparian forest buffer has been modified to state that it is a type of riparian buffer. This change is in response to amendments made to Section 102.14 which now provides an additional alternative to riparian forest buffer implementation in response to public comments.

SECTION 102.2 SCOPE AND PURPOSE:

The proposed rulemaking expanded this section to reflect the inclusion of PCSM requirements. The language in the proposed rulemaking was retained in the final-form rulemaking. IRRC suggested revisions to this section to clarify the scope of PCSM where the project is restored to preconstruction conditions. Section 102.2 in the final-form rulemaking was not revised, however

Section 102.8 related to PCSM was revised in the final-form rulemaking to provide the clarity that IRRC and other commentators suggested.

SECTION 102.4. GENERAL:

§ 102.4(a) Earth disturbance activities related to agricultural activities

In the proposed rulemaking, this section was modified to require written E&S Plans for animal heavy use areas that disturb 5000 square feet (464.5 meters) or more of land, in addition to agricultural plowing or tilling activities of that same size. The final-form rulemaking was modified to clarify that agricultural plowing or tilling activities and animal heavy use areas should be examined as two separate activities in calculating the threshold for the E&S Plan requirement under § 102.4, rather than combining them to determine whether they disturb 5000 square feet (464.5 meters) or more of land. The Board received comments requesting clarification. IRRC asked the Board to explain the need to regulate animal heavy use areas and the reasonableness of this requirement. The final-form rulemaking was modified to clarify that written E&S Plans are required for both agricultural plowing and tilling activities and animal heavy use areas.

The Board included these provisions to address sediment discharges from animal heavy use areas which are not currently regulated by other existing Department regulations. It is important to retain the “animal heavy use area” provisions in order to protect waters of the Commonwealth from continued sediment pollution from these activities. These provisions will also assist the Commonwealth in achieving Chesapeake Bay goals related to sediment reductions through the requirements imposed in § 102.4.

The Department’s 2010 Pennsylvania Integrated Water Quality Monitoring and Assessment Report lists agriculture as the second leading cause of impairment of Pennsylvania’s streams. Agricultural animal heavy use areas are a significant source of this sediment and can negatively affect downstream uses. The agricultural E&S Plan is the most appropriate mechanism to address the control of accelerated erosion from these areas.

Comments were received from the Pennsylvania Farm Bureau concerning possible duplicative provisions in Chapter 102 relating to animal heavy use areas and Chapter 83 relating to animal concentration areas. The Board believes that this final-form Chapter 102 rulemaking is complimentary rather than duplicative to the current Chapter 83 nutrient management regulations in that reducing accelerated erosion (sediment) from animal heavy use areas under this Chapter will also help to reduce nutrients attached to that sediment which is the focus of the Chapter 83 regulations. Also, the Chapter 83 and Chapter 102 regulations are implemented by the same local agency conservation districts (CDs).

In subsection § 102.4(a)(4), language was added to the proposed rulemaking to include cost-effective and reasonable BMPs in the E&S Plan to minimize accelerated erosion and sedimentation from agricultural plowing or tilling or animal heavy use areas. Also, language was added to the proposed rulemaking to state that the E&S Plan must limit soil loss from accelerated

erosion to the soil loss tolerance (T) over the planned crop rotation. The Board received comments that supported implementing BMPs that minimize accelerated erosion and sedimentation for agricultural plowing or tilling activities or animal heavy use areas. The language in the proposed rulemaking was retained in the final-form rulemaking.

The proposed rulemaking also stated in § 102.4(a)(4)(i) that additional BMPs are required when located within 100 feet of a river or perennial or intermittent stream on fields with less than 25% cover. Several commentators requested clarification on the type of cover. Therefore, in response to comments, the type of crop cover for fields with less than 25% cover was clarified in the final-form rulemaking as “plant cover or crop residue” cover.

The proposed rulemaking stated in § 102.4(a)(5) that the E&S plan must show the location of surface waters, field and property boundaries, structures, animal heavy use areas, roads and crossroads and BMPs and soil maps. The final rulemaking was revised to clarify that the E&S Plan must address “surface waters of this Commonwealth.” “Waters of this Commonwealth” had been proposed to be deleted; however the Board received comments that supported using this wording. The existing reference to “waters of this Commonwealth” was retained in the final-form rulemaking as modified by the addition of the word “surface” so that it is clear that the E&S Plan must identify all surface waters of this Commonwealth rather than the more narrow list provided in the definition of surface waters. Also, in subsections §§ 102.4(a)(6) and (7) in the proposed rulemaking, an implementation schedule was added as well as the ability to utilize a conservation plan that identifies BMPs that minimize accelerated erosion and sedimentation in the place of an E&S Plan. This language was retained in the final-form rulemaking.

§102.4(b) Earth Disturbance Activities other than agricultural plowing or tilling or animal heavy use areas

Minor revisions to Section 102.4(b)(3) were made from the proposed rulemaking to the final-form rulemaking. The Board received comments stating that many E & S plans are submitted to the Department and conservation districts that are administratively incomplete and that time and expense are wasted while permit review staff wait for additional information. The final-form rulemaking has been revised to add language relating the training and experience of the person preparing the plan to the size and scope of the project being designed.

The proposed rulemaking in § 102.4(b)(4) included general guidelines for the planning and implementation of E&S control measures. IRRC and several commentators expressed concern about the “protect, maintain, reclaim and restore” language and recommended amending § 102.4(b)(4)(v). In response to comments, the Board has removed this subsection from the final-form rulemaking. Amending this section does not relieve a person’s responsibility to utilize BMPs that will “protect, maintain, reclaim and restore” as this provision is also found in the existing definition of “BMP” in §102.1, §102.2(b) and §102.11(a)(1).

In § 102.4(b)(5)(x), the Board revised the requirement from the current regulation to the proposed in response to industry concerns of the term “measurable rainfall.” The revision was made to replace “measurable rainfall event” with “stormwater event.” IRRC and other

commentators stated that “measurable rainfall” is more easily understood and requested an explanation for the amendment. The Board utilized the term “stormwater event” because it provides clarity for situations where there is minimal precipitation or rainfall that does not result in runoff. The key word in the definition of “stormwater” is runoff. The intent of the Board is to capture any event that generates runoff. The term “measurable rainfall” failed to include situations where there was no immediate or recent precipitation, but warmer temperatures caused melting of snow which results in a runoff condition.

Identification of potential thermal impacts that may be created or result from earth disturbance activity was added to § 102.4(b)(5)(xiii) in the proposed rulemaking. IRRC recommended that the regulation clearly state what type of evaluation of thermal impacts would be acceptable. Commentators requested additional guidance regarding this evaluation. In response to comments, this subsection has been revised and clarified in the final-form rulemaking. The Department will also provide additional guidance through outreach, trainings and the Erosion and Sediment Control Manual Document Number 363-2134-008. Because each site is different, the design professional needs to have some flexibility to develop an appropriate response to thermal impact concerns. In addition to identifying the potential for thermal impacts, appropriate BMPs should be designed to avoid, minimize, or mitigate those impacts.

A requirement for the E&S Plan to be consistent with a PCSM Plan was added to §102.4(b)(5)(xiv) in the proposed rulemaking. The language in the proposed rulemaking was retained in the final-form rulemaking. The intent of this requirement is for the BMPs implemented as part of the E&S Plan during the temporary construction phase to easily transition with minimal disturbance into the BMPs that will be part of the PCSM Plan. Likewise, the E&S Plan should reflect consideration of the PCSM Plan. For example, areas to be utilized for infiltration should be protected from compaction during construction, which should be noted in the E&S Plan.

A provision for identifying existing and proposed riparian forest buffers in the E&S Plan was added to §102.4(b)(5)(xv) in the proposed rulemaking. The Board has made minor modifications in response to comments.

Section 102.4(b)(6) of the proposed rulemaking included antidegradation implementation provisions. This rulemaking specifically incorporates antidegradation implementation requirements as a result of several EHB cases. The antidegradation provisions are found primarily in revised Sections 102.4(b)(6) and 102.8(h), and in the definitions of “ABACT” and “nondischarge alternatives” in Section 102.1.

By way of background regarding inclusion of antidegradation implementation requirements, the federal Clean Water Act requires states to develop and implement “antidegradation” requirements, which in Pennsylvania are found in 25 Pa. Code Chapter 93. In the Environmental Hearing Board (EHB) decisions in *Zlomsowitch v. DEP*, 2004 EHB 756, *Blue Mountain Preservation Association v. DEP and Alpine Rose Resorts*, 2006 EHB 589, and *Crum Creek Neighbors v. DEP and Pulte Homes of PA, LP*, EHB Docket No. 2007-287-L, October 22, 2009 Adjudication, the EHB overturned the Department’s current implementation of antidegradation

requirements in the NPDES permits issued under this chapter. The cases confirm that Chapter 102 did not currently provide an adequate regulatory framework for the compliance with Chapter 93.

Under the current regulations, the Department and regulated community have unsuccessfully tried to reconcile the Chapter 102 regulatory program with antidegradation implementation requirements and specifically the alternatives analysis process found in Section 93.4c(b). Section 93.4c(b) utilizes language and approaches based upon NPDES programs that regulate continuous flow such as traditional industrial discharges flowing out of pipes, whereas the discharges regulated under Chapter 102 involve wet weather driven, primarily overland diffuse runoff that is controlled with BMPs rather than numeric effluent limitations. Further, the Section 93.4c(b) stated preference for “nondischarge” alternatives is confusing and when applied literally in the stormwater context is problematic. A literal read of this section could require no discharge from a site which would in fact be inimical to the health of waters of this Commonwealth. Simply put, there are existing stormwater discharges that occur at sites before any earth disturbance activity occurs that are the basis of the hydrologic cycle on which stream baseflow and quality is dependent. To protect and maintain waters of this Commonwealth, this pre-existing stormwater discharge must be maintained. The cornerstone of antidegradation then in this program is the preservation of that existing stormwater regime. The Department has therefore included specific antidegradation implementation provisions in the proposed rulemaking to provide the missing regulatory framework that is needed for appropriate evaluation of compliance with the antidegradation requirements for this program.

A number of members of the regulated community specifically requested that the Board clarify the antidegradation implementation provisions in the final-form rulemaking to more definitively link the antidegradation implementation requirements included in this rule with Chapter 93 and to provide a framework that can be relied upon to demonstrate compliance with antidegradation requirements therein. The revisions in the final-form rulemaking to these sections have provided this additional clarification.

An important aspect of the antidegradation provisions included in this rulemaking and related to Section 102.4(b)(6) are the definitions of ABACT and nondischarge alternative. These terms were defined in response to suggestions of the members of WRAC during the development of the regulation prior to proposal. These terms are defined specifically for the purposes of this Chapter and articulate the performance standards to be used for purposes of the comparison of pre-construction stormwater discharges to post construction stormwater discharges. Importantly, the nondischarge alternative in this program does not equal no discharge, but rather, equals no net change from preconstruction discharge volume, rate and water quality, and recognizes the need to preserve the pre-existing stormwater discharges in order to protect and maintain waters of this Commonwealth. The 2-year/24-hour storm event is the storm event to be utilized to demonstrate antidegradation compliance. Please see the discussion relating to this storm event in 102.8 below.

The new federal effluent limitation guidelines (ELG) also references the 2-year/24-hour event as the design storm. In addition, the key components of EPA's ELG are non-numeric effluent

limitations in the form of BMPs that require persons engaged in construction activities to minimize discharges of pollutants in stormwater discharges using appropriate E&S controls and stormwater control measures that reflect best engineering practices.

A requirement was added in § 102.4(b)(8) in the proposed rulemaking that stated that the E&S Plan, inspection reports and monitoring reports should be available for review at the project site. IRRC asked for an explanation of why records are needed onsite and to consider allowing electronic records offsite. The language in the proposed rulemaking was retained in the final-form rulemaking. Further clarification has been provided in the comment and response document that inspection reports and monitoring records may be maintained electronically as long as a copy can be produced when requested by the Department or the conservation district. Records are needed onsite to implement federal requirements of routine monitoring and reporting. Also, the Department must be able to determine that the permittee is in compliance.

SECTION 102.5. PERMIT REQUIREMENTS:

§ 102.5(a) The proposed rulemaking included language in subsection (1) requiring an NPDES Permit for Stormwater Discharges Associated with Construction Activities for certain earth disturbance activities between one acre and five acres with a point source discharge to a surface water of this Commonwealth. Subsection (2) of the proposed rulemaking included language that retained the requirement for an NPDES Permit for Stormwater Discharges Associated with Construction Activities for certain earth disturbance activities five acres or greater. EPA Region 3 required, and several commentators requested, that this subsection be revised to require an NPDES permit for any earth disturbance activity that disturbs one acre or greater, regardless of whether the activity resulted in a point source discharge to a surface water.

In subsection 102.5(a)(3) of the proposed rulemaking, the Board added language related to compliance with the antidegradation requirements in Chapter 93 for projects that require NPDES permit coverage where the earth disturbance activity is proposed to be located in a special protection watershed. In response to public comments and comments from IRRC regarding confusion by the building industry over whether a permit is required and if so what type of permit is required, the Board revised the final rulemaking by identifying that the specified earth disturbance activities disturbing one acre or greater require an NPDES Permit for Stormwater Discharges Associated with Construction Activities, and clarifying that the antidegradation requirements relating to NPDES Permits for Stormwater Discharges Associated with Construction Activities are established in Sections 102.4(b)(6) and 102.8(h). IRRC also questioned why the exemptions at the beginning of paragraphs (a)(1) and (2) and subsection (d) in the proposed rule do not include the oil and gas related earth disturbance activities. In the comment and response document, the Department noted that oil and gas activities are exempt from NPDES permitting requirements but still must meet state water quality requirements. Section 102.5(c) states that "A person proposing oil and gas activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project shall obtain an E&S Permit under this chapter prior to commencing the earth disturbance activity."

In Section 102.5(b) of the proposed rulemaking, the Board maintained existing language except for a minor editorial revision. The Board received comments recommending that the permit acreage threshold be reduced to five acres for timber harvesting and road maintenance activities, and other comments requesting that the Board retain the existing threshold of 25 acres for the same activities. The Board evaluated the comments and determined that the proposed language including the acreage threshold for requiring a permit would be retained.

Section 102.5(c) of the proposed rulemaking maintained existing language but restructured the location of this requirement to 102.5(g). The proposed language for subsection (c) established the E&S permit requirement for persons proposing an earth disturbance activity related to oil and gas development that involves five acres or greater of earth disturbance activity. This regulatory requirement is a codification of existing practices and permit requirements in response to the federal Energy Act of 2005 and the subsequent federal rule promulgated by EPA exempting oil and gas activities from NPDES permits for Stormwater Discharges Associated with Construction Activities. The Board has retained the proposed language in the final rulemaking.

Section 102.5(d) of the proposed rulemaking clarified that earth disturbance activities, other than earth disturbances related to agricultural plowing and tilling, animal heavy use areas, timber harvesting, or road maintenance activities, and activities requiring permit coverage under previous Sections of 102.5(a) through (c), would require an E&S Permit when there is an earth disturbances of five acres or more. The Board has retained the proposed language in the final rulemaking.

Section 102.5(e) of the proposed rulemaking added new language for this new subsection requiring a preconstruction meeting for activities authorized by a permit under this chapter, unless it is determined by the Department or conservation district that a preconstruction meeting is not necessary and the permittee is notified in writing. The proposed rule also identified specific entities that are required to attend the meeting. Comments from IRRC and other commentators on this subsection recommended clarifications related to the entities required, time period for the notice, whether Department or conservation district staff attendance is mandatory, and whether this requirement may overload DEP staff and delay projects. The Board clarified the final-form rulemaking by adding language that attendance at the preconstruction meeting is required by specific entities that have a role in the design or implementation of the E&S or PCSM Plans. Additional clarification was provided by requiring the permittee to invite the Department or conservation district to attend the preconstruction meeting and requiring at least seven days notice of the preconstruction meeting to all invited attendees. The proposed language was retained requiring the Department or conservation district to provide written notice to the permittee that a preconstruction meeting will not be required.

Section 102.5(f) of the proposed rulemaking added new language for this new subsection providing that a person conducting earth disturbance activities that requires a permit under this Chapter shall ensure implementation and long-term operation and maintenance of a PCSM Plan. The majority of comments received regarding this subsection requested clarification on the responsibility of the permittee for long-term operation and maintenance. IRRC also questioned who specifically is "a person proposing earth disturbance activity." The Board believes that

Section 102.1 clearly states the definitions of “person” and “earth disturbance activity.” In addition, the permittee designates who is responsible for the PCSM BMPs under Sections 102.7 and 102.8(f)(11) “Identification of the persons responsible for long-term operation and maintenance of the PCSM BMPs.” IRRC also commented that this provision is vague and potentially unreasonable and cost prohibitive. The Board has revised the final rulemaking by deleting the reference to the long term operation and maintenance requirement in this subsection. Additional clarifying language related to these issues has been consolidated in section 102.8(m) of the revised final rulemaking.

Section 102.5(g) of the proposed rulemaking maintained existing language formerly found in subsection 102.5(c) which was moved to 102.5(g). The majority of comments received regarding this subsection requested clarification on the applicability in relationship with other permits under Chapter 92, and the authorizations needed. The Board has not revised this subsection in the final rulemaking. A comprehensive list of Department permits can be provided in guidance. The requirements in this rulemaking are intended to reference both Chapters 92 and 102 when these requirements are included in other Department regulations and permit requirements that are reviewed during the other Department permit application process. As a result, these other Department permits provide sufficient authorization, so a separate authorization under permits identified in this Chapter would be duplicative.

Section 102.5(h) of the proposed rulemaking added a new subsection specifying that when a person other than the permittee is an operator, that other operator is required to become a co-permittee under this Chapter. A few commentators made some minor requests for clarification regarding application of this requirement. No revisions have been made in the final-form rulemaking as a result of the comments, but clarification has been provided in the comment and response document.

Section 102.5(i) of the proposed rulemaking added a new subsection providing that a separate NPDES Permit for Stormwater Discharges Associated with Construction Activities is not required for activities covered by a Clean Water Act §404 dredge and fill permit. IRRC and other commentators supported this provision but requested further clarification on the applicability in context of various scenarios that may occur. EPA Region 3 also requested clarification. As a result the Department has provided clarifying responses to the comments in the comment and response document included as part of this rulemaking. When an activity is authorized under Chapter 404 of the Clean Water Act for example, that activity does not require a separate E&S or NPDES permit for the activity covered by the 404 permit so long as the project is a single and complete project, includes an E&S Plan meeting the requirements of this Chapter and the earth disturbance work does not exceed the footprint of the activities authorized by the 404 permit. In addition, the E&S plan would also be approved as part of the 401 water quality certification. Any other activities would need E&S or NPDES permit coverage. No revisions to this subsection in the final-form rulemaking were necessary.

Section 102.5(j) of the proposed rulemaking maintained existing language formerly located in subsection 102.5(d) of the current rule. The Board received a few comments questioning the

permit exemption for agricultural plowing and tilling activities or animal heavy use areas. The Board retained this language in the final-form rulemaking.

Section 102.5(k) of the proposed rulemaking maintained existing language formerly found in subsection 102.5(e) of the current rule. No revision was made to the final rulemaking.

Section 102.5(l) of the final-form rulemaking established a new section identifying requirements for Preparedness, Prevention, and Contingency (PPC) Plan, moved from subsection 102.6(a)(3) of the proposed rulemaking. The Board received comments from IRRC and the public that the PPC Plan requirement was more appropriate to have in this section (as a requirement of the permit) rather than Section 102.6, permit application and fees section.

Section 102.5(m) of this rulemaking was not included in the proposed rule, but was added in response to recommendations of commentators. This subsection authorizes the Department to issue general permits for activities not subject to NPDES requirements and sets forth the process for issuance under this Chapter.

SECTION 102.6 PERMIT APPLICATION AND FEES:

Section 102.6(a) of the proposed rulemaking added new language for this subsection identifying the appropriate permit references, PCSM references, change in subsection (2) to the program name from the Pennsylvania Natural Diversity Inventory (PNDI) to Pennsylvania Natural Heritage Program (PHNP), and the addition of a new subsection (3) referencing requirements to Preparedness, Prevention, and Contingency (PPC) Plans. IRRC and members of the public commented that the Board should explain why this amendment included the reference to (PHNP) and why the PHNP is the best resource for this information, and questioning whether the inclusion of the PPC Plan requirement is not appropriate as an application requirement. The inclusion of the PNDI, now PHNP, is an existing requirement to which the Board only proposed minor modifications including updating the program name. The Department utilizes PHNP because it is a comprehensive database of resource information that both the public and resource agencies can access for threatened and endangered species and critical habitat for those species. It is the only known database of this type for use in Pennsylvania and is the one recognized by the resource agencies. This is particularly useful for the regulated community in that they can identify potential species or habitat conflicts that must be minimized or avoided prior to final plan development and permit application. There were no revisions to subsection 102.6(a) in the final-form rulemaking, and minor revisions were made to the remainder of the subsection in response to comments. 102.6(a)(1) in the final-form rulemaking was revised to remove the reference to the permit-by-rule registration of coverage (ROC), to reflect removal of that section of the regulations in the final form. A minor grammatical revision was made to 102.6(a)(2). In response to comments regarding 102.6(a)(3), the proposed rule was revised in the final rulemaking by moving the location of this requirement to Permit Requirements in Section 102.5(l).

In Section 102.6(b) of the proposed rule, new language was added that identified specific permit fees for the various general and individual permits required under this Chapter. Also, language

was added that would require the Department to review the adequacy of the fees established at least once every three years and report their findings to the Board. Additionally, a reference to the authority of conservation districts under the Conservation District Law to charge additional fees was added in this subsection. Some of the public comments received by the Board supported the fee increases, where other commentators and IRRC indicated that the fees were excessive and recommended that an explanation should be provided on how the fees were calculated, and that a tiered approach based on the size of the earth disturbance be established.

In response to the comments received, the Board revised the proposed permit fees in the final-form rulemaking to establish an administrative filing or "base" fee dependent on the type of permit needed (\$500 for a general permit and \$1,500 for an individual permit) and a tiered fee approach based on acreage (\$100 for each disturbed acre). The acreage fee is to be added to the base fee for any projects of one acre or greater of earth disturbance activity that requires permit coverage. This approach would allow smaller projects to pay a lower fee than larger projects, which can also correspond to the complexity and time investment needed to review the permit application. This fee structure is based upon a cost analysis using estimated program costs for the Department and conservation districts to implement the program, based upon a review of past permits issued between 2006 and 2008. Revisions to Chapter 92 in 1999 and Chapter 102 in 2000 included modifications to permit fees, but these were administrative filing fees and did not cover cost of program operations. The proposed and final-form rulemaking were the first effort by the Department to cover the Chapter 102 program costs through permit fees. The Department has completed an evaluation of program costs and estimated revenue as part of this rulemaking package.

In Section 102.6(b)(2) of the proposed rulemaking, language was added that would require the Department to review the adequacy of the fees established at least once every three years and report the findings to the Board. Comments received on the draft Section 102.6(b)(2) questioned what criteria would be used for the evaluation of the fees and requested clarification how the Department will use the criteria to determine the adequacy of the fees. No revisions were made to the final rulemaking, however clarification is provided in the comment and response document developed for this rulemaking.

Section 102.6(b)(2) was also revised in response to comments from conservation districts to clarify that the fees in this section are all "administrative" fees. How the fees will be dispersed between the Department and conservation districts will be outlined in guidance or through the delegation agreements.

In Section 102.6(b)(3) of the proposed rule, new language was added that identified that conservation districts may charge additional fees in accordance with the Conservation District Law. A few public comments were received that requested clarification from the Board on whether the fees are in addition to the fees established in 102.(b)(1). The Board confirms that the fees are additional to the fees of the referenced section. The amount of these conservation district fees may vary between conservation districts and is based upon the additional costs to the district to implement the program requirements above and beyond the fee established by the Board. Conservation district authority to charge additional fees under the Conservation District Law is

referenced to support this requirement. No revision has been made to the final rulemaking however the Board has provided clarification in the comment and response document.

Section 102.6(b)(4) was added to the final-form rulemaking in response to recommendations of commentators. This subsection provides a fee exemption for federal or state agencies, or independent state commissions that must enter into agreements with the Department and where the agreement identifies that the agency will provide funding to the Department for program support.

Section 102.6(c)(2) of the proposed rule added new language identifying the expectations for a complete application or NOI, and what actions the Department or conservation district would take regarding incomplete submissions. IRRC recommended that a timeframe be included for the Department to determine that an application is complete. IRRC also recommend that the regulation should specify what happens if the Department does not meet that timeframe. Additionally, in the proposed rulemaking, paragraph 102.6(c)(2) only authorized the Department to make the completeness determination. In their comments, IRRC asked whether this function may also be performed by a conservation district. The Board has amended this section to clarify that conservation districts do perform this function as well. The Board does not agree that specific timeframes for completeness determinations by the Department or conservation district need to be added to this subsection. In the comment and response document, the Department refers to the money-back guarantee policy and the policy with conservation districts as part of a delegation agreement. Both of these documents establish timeframes for various items during the application review process including administrative completeness, technical and decision reviews. The Board added 102.6(c) to address an ongoing problem with applicants not responding to requests for additional information and extending the time it takes to make a timely decision on the application. This lack of response has led to applications being open or under review for extensive periods of time. Adding this requirement to the regulation authorizes the Department or conservation district to close a permit application after 60 days of non-response by the applicant. The Board understands that there may be some instances where an applicant may need additional time to provide the requested information. In response, the rulemaking allows for a request of extension. The Board has clarified in the final-form rulemaking that the conservation districts are also authorized to perform this function.

Section 102.6(c)(3) of the proposed rule included new language identifying that the fees associated with returned or withdrawn applications would not be refunded. In response to public comment, the Board revised the final-form rulemaking to clarify that this requirement refers to a withdrawn application determination under 102.6(c)(2)

SECTION 102.7. PERMIT TERMINATION:

The proposed rulemaking added new language requiring the identification of the person responsible for operation and maintenance of the PCSM BMPs and PCSM Plans, and clarified the obligation of the permittee to operate and maintain the PCSM BMPs and PCSM Plan until the Notice of Termination is acknowledged. Commentators requested clarification with regard to the permittees and co-permittees responsibility for long-term operation and maintenance of

PCSM BMPs. In addition, IRRC and several commentators recommended that a time limit be added for the Department or conservation district to respond to the submission of a Notice of Termination. In response to these comments, in the final-form rulemaking, the Board has revised this section to clarify that upon permanent site stabilization and installation of BMPs in accordance with E&S and PCSM plan requirements, the permittee or co-permittee must submit a notice of termination that identifies the person who has agreed to be responsible for the long-term operation and maintenance, and has added a time limit of 30-days for the Department or conservation district to conduct a final inspection and approve or deny the request for termination of the permit.

SECTION 102.8. POST CONSTRUCTION STORMWATER MANAGEMENT:

One of the major substantive additions to this Chapter in the proposed rulemaking was the inclusion of post construction stormwater discharge requirements that are detailed in Section 102.8. The proposed rulemaking established the requirements for PCSM planning utilizing a structure that parallels the E&S planning requirements found in Section 102.4(b). The provisions in the proposed rulemaking are a codification and refinement of the existing PCSM requirements that the Department has implemented since 2002.

Based upon public comments received, this section has been revised and clarified in the final-form rulemaking. In the final-form rulemaking, the Board added headers for each subsection and clarified requirements for roadways or rail lines, and PCSM implementation for special protection waters. Additionally, in the final-form rulemaking, the Board also consolidated the long term operation and maintenance requirements into one subsection.

The inclusion of the PCSM requirements in this rulemaking codifies the PCSM requirements which the Department has been implementing since 2002 to address EHB decisions discussed below and to facilitate implementation of the federal stormwater construction and Municipal Separate Storm Sewer System (MS4) NPDES requirements related to PCSM.

Since 2002, the Department has required applicants for NPDES Permits for Discharges Associated with Construction Activities to address post construction stormwater discharges, and in addition to E&S Plans, to develop and implement a PCSM plan. Since 2002, a PCSM Plan must include information to demonstrate compliance with the antidegradation requirements in Chapter 93, including a comparison of preconstruction stormwater runoff to post construction stormwater runoff of the 2-year/24-hour storm event, and a description of the PCSM BMPs that will be utilized to prevent pollution. *See Comprehensive Stormwater Management Policy* (DEP No. 392-0300-002). In 2006, the Department finalized the *Pennsylvania Stormwater BMP Manual*, (DEP No. 363-0300-002), which provided technical guidance and standardized methodologies. The provisions in 102.8 codify the existing specifications and performance standards that have been relied on and proven in the development of PCSM Plans in Pennsylvania since that time. These standards satisfy state law that has evolved through decisions of the EHB and also facilitate compliance with the related federal NPDES Municipal Separate Storm Sewer System (MS4) programs.

This inclusion of PCSM requirements, is in part a response to EHB decisions. In 1999, the EHB ruled that "post construction" stormwater was potential pollution which the Department should evaluate along with the stormwater discharges that occur during construction activities. *Valley Creek Coalition v. DEP*, 1999 EHB 935. This holding has been confirmed in subsequent decisions including *Blue Mountain Preservation Association v. DEP and Alpine Rose Resorts*, 2006 EHB 589 and *Crum Creek Neighbors v. DEP and Pulte Homes of PA, LP*, EHB Docket No. 2007-287-L, October 22, 2009 Adjudication. Today, PCSM requirements are an established counterpart to the activities already expressly regulated under this Chapter. The amendments related to PCSM will provide needed regulatory framework and clarity for the administration of, compliance with and the legal evaluation of the PCSM requirements.

Section 102.8(a) in the proposed rulemaking established who is required to develop, implement, operate and maintain a written PCSM Plan. IRRC and other commentators expressed concern that the wording was too broad. The Board did not amend this section in the final-form rulemaking but did amend Section 102.8(n). This revision provides that for minor projects where there is little or no change in the runoff characteristics from the site, the PCSM plan can be brief, only be a sentence or two, and still meet the requirements of § 102.8(a). Also, the term "NPDES" has been removed from the final-form rulemaking to allow inclusion of a PCSM Plan for permits other than NPDES.

A number of commentators, notably the builders and the House legislative committee members, requested that the final-form rulemaking include a grandfathering provision for NPDES permit renewals. The builders are particularly concerned about having to revise the PCSM plans for permitted projects that require renewal. In response to these comments, section 102.8(a) has been amended in the final regulation to provide that: "a person conducting earth disturbance activities pursuant to a permit issued before the effective date of this chapter and renewed prior to January 1, 2013, shall implement, operate and maintain the PCSM requirements in accordance with the terms and conditions of the existing permit. After January 1, 2013, the renewal of any permit issued before the effective date of this chapter, shall comply with the requirements of this section."

General requirements for planning and design of PCSM were included in § 102.8(b)(1)-(8) of the proposed rulemaking. Commentators and IRRC expressed concern about the vagueness of terms "minimize" and "maximize" as they relate to planning and design. The final-form rulemaking retained the language from the proposed rulemaking, and additional minor edits were made for clarification. These terms have been historically utilized in 25 Pa. Code Chapter 102 to guide the design of projects that vary in size, scope and other details. The Board utilized these words to provide flexibility to the applicant when designing the BMPs for their projects.

IRRC and several commentators expressed concern about the "protect, maintain, reclaim and restore" language and recommended amending § 102.8(b)(9). In response to comments, the Board has removed this subsection from the final-form rulemaking. Amending this section does not negate a person's responsibility to utilize BMPs that will "protect, maintain, reclaim and restore" as this provision is also found in the existing definition of "BMP" in §102.1, §102.2(b) and §102.11(a)(1).

The proposed rulemaking included subsections 102.8(c) and (d) to ensure consistency with the E&S Plan, and to specify that the PCSM plan shall be a separate plan unless otherwise approved by the Department. The language in the proposed rulemaking was retained in the final-form rulemaking. The intent of this requirement is for the BMPs implemented as part of the E&S Plan during the temporary construction phase to easily transition with minimal disturbance into the BMPs that will be part of the PCSM Plan. Likewise, the E&S Plan should reflect consideration of the PCSM Plan. For example, areas to be utilized for post construction infiltration should be protected from compaction during construction, which should be noted in the E&S Plan.

In the proposed rulemaking, subsection 102.8(e) listed the requirements of the individual tasked with preparing the PCSM Plan. IRRC commented that this section imposed no definable level of expertise and that the Board should delete the subsection or replace it with specific credentials. The language in § 102.8(e) is similar to the E & S portion of the regulation in § 102.4(b)(3) and has been in use for many years. More specific credentials may exclude designers who are not licensed by the Commonwealth and potentially increase development costs. The language was retained in the final-form rulemaking, but the Board did include additional language to qualify that the level of expertise needed is relative to the size and scope of the project being designed.

Section 102.8(f) listed PCSM plan requirements in the proposed rulemaking. IRRC and several commentators expressed concern about “other supporting documentation” language, and requested that the Board provide more detail. That language has been removed from the final-form rulemaking and minor edits were made to provide clarity.

IRRC and commentators requested additional clarity and guidance on the requirements in subsections § 102.8(f)(1)-(10). Many of the requirements found in these subsections are currently required including the listing of soil types/limitations and plan calculations. The PCSM plan must identify the BMPs used and the appropriate calculations that demonstrate that the BMPs will perform under those conditions. The language from the proposed rulemaking was retained in the final-form rulemaking with minor edits made for clarification.

In the proposed rulemaking, section 102.8(g)(1) and (2) listed the stormwater analysis required in the PCSM Plan. IRRC, PennDOT and several commentators expressed concern with the costs for this analysis and asked the Board to consider amendments to decrease costs and assist in compliance. The Board revised these sections in the final-form rulemaking in response to comments. Allowance for an alternative approach to PCSM methodologies was added in the final-form rulemaking for use when there are public health and safety limitations or existing site conditions. Specifically, in the final-form rulemaking, additional language has been added in subsections 102.8(g)(2)(iii) and (iv) and 102.8(g)(3)(iii) to allow other approaches that may be more protective or that will maintain and protect existing water quality. Also, references to pipelines or other utilities that restore or reclaim a site back to natural conditions have been added to the final-form rulemaking. Subsections 102.8(g)(2)(ii) and (iii) have been revised in the final-form rulemaking to provide more clarity and to provide more flexibility. The intent in these subsections is to require stormwater controls on property that was previously developed with little or no stormwater management. Also in response to comments, § 102.8(g)(2)(i) (ii) and (iii)

were modified in the final-form rulemaking to exclude repair or reconstruction of roadways or rail lines, and to consider public health, safety and environmental limitations.

Regardless of the type of earth disturbance activity that occurs, the impervious surfaces, the changes in vegetation, and the soil compaction associated with that activity will result in increases in runoff volume and rate. When the site is cleared of existing vegetation, graded, and re-compacted, it produces an increase in stormwater volume and rate. If the original vegetation were replaced with natural vegetation, the stormwater runoff characteristics would be considered to be equivalent to the original natural vegetation. The volume control, water quality, and rate requirements focus on providing stream channel protection and protection from the frequent rainfalls that comprise a major portion of stormwater runoff events in any part of this Commonwealth. On the basis of these factors, the 2-year/24-hour storm event has been chosen as the stormwater management design storm for volume control.

A volume control requirement is essential to mitigate the consequences of increased stormwater runoff. To accomplish this, the volume reduction BMP must:

1. Protect stream channel morphology;
2. Maintain groundwater recharge;
3. Prevent downstream increases in flooding; and
4. Replicate the natural hydrology on site before development to the greatest extent possible.

The volume control and water quality requirements included in the proposed rulemaking and retained in the final-form rulemaking are necessary to maintain and protect natural hydrology including velocity, current, cross-section, runoff volume, infiltration volume, and aquifer recharge volume. These requirements will sustain stream base flow and prevent increased frequency of damaging bank full flows. The requirements will also help prevent increases in peak runoff rates for larger events (2-year through 100-year) on both a site-by-site and watershed basis. A volume control requirement is protective of water quality and also provides the benefits listed below.

Protect Stream Channel Morphology: Increased volume of stormwater runoff results in an increase in the frequency of bank full or near bank full flow conditions in stream channels. The increased presence of high flow conditions in riparian sections has a detrimental effect on stream shaping, including stream channel and overall stream morphology. Stream bank erosion is greatly accelerated. As banks are eroded and undercut and as stream channels are gouged and straightened; meanders, pools, riffles, and other essential elements of habitat are lost or greatly diminished. Increases in impervious surfaces can cause the natural bankfull stream flows to occur more often. The rulemaking includes a combination of volume reduction, water quality, and peak rate controls to reduce the bankfull flow occurrences.

Maintain Groundwater Recharge: Over 80 percent of the annual precipitation infiltrates into the soil mantle in Pennsylvania's watersheds under natural conditions. More than half of this is taken up by vegetation and transpired. Part of this infiltrated water moves down gradient to emerge as springs and seeps, feeding local wetlands and surface streams. The rest enters deep groundwater

aquifers that supply drinking water wells. Without groundwater recharge, surface stream flows and supplies of groundwater for wells will diminish or disappear during drought periods. Certain land areas recharge more groundwater than others; therefore, protecting the critical recharge areas is important in maintaining the water cycle's balance.

Prevent Downstream Increases in Runoff Volume and Flooding: Although site-based rate control measures may help protect the area immediately downstream from a development site, the increased volume of stormwater runoff and the prolonged duration of runoff from multiple development sites can increase peak flow rates and duration of flooding from stormwater runoff caused by relatively small rain events. Replicating pre-development stormwater runoff volumes for small storms, up to and including the 2-year/24-hour storm event, will substantially reduce the problem of frequent flooding that plague many communities. Although control of runoff volumes from small storms almost always helps to reduce flooding during large storms, additional measures are necessary to provide adequate relief from the serious flooding that occurs during such events.

Replicate the Surface Water Hydrology On-site Before Development: The objective for stormwater management is to develop a program that replicates the natural hydrologic conditions of watersheds to the maximum extent practicable. However, the very process of clearing the existing vegetation from the site removes the single largest component of the natural hydrologic regime, evapotranspiration (ET). Unless the ET component is replaced, the runoff increase will be substantial. Several BMPs such as riparian buffers, riparian forest buffers, tree planting, infiltration, vegetated roof systems and rain gardens, are critical to adequate stormwater management because they serve to replace a portion of the ET and other functions.

The scientific basis for using a 2-year/24-hour storm event is as follows:

- The 2-year/24-hour event provides stream channel protection and water quality protection for the relatively frequent runoff events across the state;
- Volume reduction BMPs based on this standard will provide a storage capacity to help reduce the increase in peak flow rates for larger runoff events;
- In a natural stream system in Mid-Atlantic States, the bank full stream flow occurs with a period of approximately 1.5 years. If the stormwater runoff volume from storms less than the 2-year/24-hour event are not increased, the fluvial impacts on streams will be reduced;
- The 2-year/24-hour storm is well defined and data are readily accessible for use in stormwater management calculations.

Research has demonstrated that bank-full stream flow typically occurs between the 1-year and the 2-year storm event (approximately the 1.5-year storm). Use of the 2-year/24-hour storm for purposes of comparing the pre to post stormwater runoff provides a margin of safety with flows in an out of bank condition. The 2-year/24-hour storm can also be determined from data that is readily available. The final-form rulemaking retained the 2-year/24-hour storm as the storm event to be used for the pre to post comparison. The 2-year/24-hour storm is the event that should be utilized in order to meet antidegradation requirements (see definitions for nondischarge alternative & ABACT). In addition, the new federal ELG also supports the 2-year/24-hour event as the design storm. Additional discussion is provided in the comment and response document.

On the other hand, it is considered unreasonable to design any PCSM BMP for volume or water quality for storm events greater than a 2-year/24-hour event. The stormwater runoff volume from the 100-year rainfall naturally is so large and insignificantly different when compared to developed areas that it is impractical to require management for volume or water quality. During such extreme events, the runoff simply overwhelms the natural systems as well as human-made conveyance elements of pipes and stream channels. This however does not mean that these large storm events do not need to be managed. These large events need to be evaluated for peak rate control and implementation of flood control and retention BMPs.

Peak rate control for large storms, up to the 100-year event, is essential to protect against immediate downstream erosion and flooding. Most designs achieve peak rate control through the use of detention structures. Peak rate control can also be integrated into volume control BMPs in ways that eliminate the need for additional peak rate control detention systems.

Section 102.8(h) of the proposed rulemaking, which provides for the antidegradation implementation process for permit applications for projects in Special Protection Waters, is related to provisions found in section 102.4(b)(6) and also relies on the definitions of "ABACT" and "nondischarge alternatives" in Section 102.1.

The proposed rulemaking in Section 102.8(i) listed requirements for a complaint or site inspection and Section 102.8(j) listed requirements for PCSM reporting and recordkeeping. IRRC commented that 102.8(i) was redundant with 102.8(j) and recommended deleting the subsection. Subsection (i) and subsection (j) cover two different situations. Subsection (i) requires that upon inspection the PCSM plan may need to be submitted for review and approval. This is to ensure the activity is not causing stream degradation. Subsection (j) requires that the PCSM plan and reports or records be available for review and inspection by the Department or conservation districts regardless of the existence of a complaint. The language from the proposed rulemaking was retained in the final-form rulemaking, headers for each subsection were added to the final-form rulemaking.

Requirements for a licensed professional or designee to be present onsite during critical stages of construction were included in Section 102.8(k) and (l) of the proposed rulemaking. IRRC and several commentators expressed concern about the cost of this requirement. The Board revised this subsection in the final-form rulemaking to provide clarity regarding what constitutes a critical stage of implementation. Subsection (k) lists several items considered critical stages, and the licensed professional may determine whether additional activities are also critical such that the licensed professional should be onsite. The Board also amended this subsection to clarify that a conservation district as well as the Department can identify a critical stage of construction. This duty may only be performed by a conservation district with delegated authority for the PCSM portion of the program.

The Board made clarifying revisions to these subsections in the final-form rulemaking to reflect the intent of the provision to ensure that the plan is implemented properly, and the Department be able to confirm proper implementation. IRRC requested clarification regarding when

certification of the PCSM plan and record drawings are required. Certification and record drawings are required for all permitted projects, depicting what was actually constructed onsite.

§ 102.8(m) of the proposed rulemaking included a brief paragraph regarding the responsibility for long term operation and maintenance (O&M). Several commentators requested better organization and clarification to the O&M requirements. In response to comments, Section 102.8(m) has been revised in the final-form rulemaking to consolidate the requirements for O&M.

IRRC commented that the Board should explain the need to regulate PCSM activity to such a degree as to require deed amendments and covenants and how this is a viable way to protect the environment given the inherent presumption that all landowners can afford to maintain and rectify any failure of a BMP for perpetuity. Subsection (m) requires the applicant to designate a responsible party for operation and maintenance. Under existing provisions in the Clean Streams Law, absent such a designation, the landowner could have sole responsibility if the permittee disappears or ceases to exist. The operation and maintenance requirement is for the PCSM BMPs that are installed as part of the PCSM management plan. In order for these BMPs to function efficiently, they must be maintained in perpetuity or until the land use changes. This maintenance responsibility would remain if the property transfers, therefore justifying the need for a covenant that runs with the land.

In response to comments, the Board clarified the requirements in subsection 102.8(n) related to regulated activities that require a site restoration or reclamation plan. Where a site is fully restored or reclaimed, or the permitted activity involves earth disturbance of less than one acre, the obligation of long term PCSM operation and management may not be necessary. The revisions to the final-form rulemaking were included for this reason. The obligation for long term O&M has been met if the site is restored and there are no permanent structures or impervious surfaces.

SECTION 102.11. GENERAL REQUIREMENTS:

This section was revised in the proposed rulemaking to include several new provisions related to the PCSM and riparian forest buffer BMP and design standards.

Section 102.11(a)(2) was added to the proposed rulemaking to provide reference to the Pennsylvania Stormwater Best Management Practices Manual (Document No. 363-0300-002) for assistance in complying with Section 102.8 PCSM Requirements and other references to PCSM.

Section 102.11(a)(3) was added to the proposed rulemaking to provide reference to the Riparian Forest Buffer Guidance (Document No. 394-5600-001) for assistance in complying with Section 102.14 Riparian Buffer Requirements.

Section 102.11(a)(4) was added in the final-form rulemaking to provide reference to the Guidelines for the Development and Implementation of Environmental Emergency Response

Plans (Document No. 400-2200-001) in response to public comments requesting clarification and a reference to guidelines and requirements related to PPC plans.

Section 102.11(c) was added to the final-form rulemaking to incorporate by reference the federal ELG and standards related to NPDES permits for construction activities recently passed by EPA. IRRC requested that specific language be used to cite this incorporation and the language in the final-form rulemaking reflects their comments.

Section 102.11(d) was added to the final-form rulemaking to provide that the effective date of this final rulemaking is 90 days after the publication of this final rulemaking in the *Pa Bulletin*.

SECTION 102.14. RIPARIAN BUFFER REQUIREMENTS:

As a threshold matter, IRRC questioned why riparian forest buffers were included in this regulation. Staff of the Department have evaluated extensive research and investigations regarding riparian buffers. This information is included in this section, as well as Section F “Benefits, Costs and Compliance.”

Land development activities change natural features and alter stormwater runoff characteristics. The resulting alterations of stormwater runoff volume, rate and water quality can cause stream bank scour, stream destabilization, sedimentation, reductions in groundwater recharge and base flow, localized flooding, habitat modification and water quality and quantity impairment, which constitute pollution as that term is defined in the Pennsylvania Clean Streams Law, 35 P.S. Section 691.1. Riparian buffers play a vital role in mitigating the effects of stormwater runoff from land development activities.

Riparian buffers are useful in mitigating or controlling point and nonpoint source pollution by both keeping the pollutants out of the waterbody and increasing the level of instream pollution processing. Used as a component of an integrated management system including nutrient management along with E&S control practices, riparian buffers can produce a number of beneficial effects on the quality of water resources. Riparian buffers can be effective in removing excess nutrients and sediment from surface runoff and shallow groundwater, stabilizing streambanks, and shading streams and rivers to optimize light and temperature conditions for aquatic plants and animals. Riparian buffers provide significant flood attenuation and storage functions within the watershed. They prevent pollution both during and after earth disturbance activities, and provide natural, long-term sustainability for aquatic resource protection and water quality enhancement.

A riparian forest buffer is a specialized type of riparian buffer. Scientific literature supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can do all of the following: Capture and hold stormwater runoff from the majority of Pennsylvania storms in a given year; Infiltrate most of that water and/or transport it as shallow flow through the forest buffer soils where contaminate uptake and processing occurs; release excess storm flow evenly further processing dissolved and particulate substances associated with it; sequester carbon at

significant levels; improve the health of the stream and increase its capacity to process organic matter and nutrients generated on the site or upstream of the site.

The PCSM provisions, to a large extent, are a codification of the existing program in Pennsylvania mandated by federal requirements as well as adverse case law. In administering this program, the Department has observed that the riparian forest buffers are one of the most cost effective stormwater management BMPs. Therefore, pursuant to the Department's authority under Section 402 of the Clean Streams Law, DEP has determined that riparian forest buffers are necessary to protect exceptional value and high quality waters of this Commonwealth from land development activities.

In addition to Department observation, numerous studies demonstrate that riparian forest buffers are particularly effective in mitigating adverse impacts, due to their proximity immediately adjacent to the surface water and their function as a physical buffer to that surface water. Specifically, riparian forest buffers protect surface waters from the effects of runoff by providing filtration of pollutants, bank stability, groundwater recharge, rate attenuation and volume reduction. Riparian forest buffers reduce soil loss and sedimentation/nutrient and other pollution from adjacent upslope flow. (Dosskey et al. 2002). Riparian forest buffers also remove, transform, and store nutrients, sediments, and other pollutants from sheet flow and shallow sub-surface flow and have the potential to remove substantial quantities of excess nutrients through root-zone uptake. (Desbonnet et al, 1994, Lowrance et al 1997, Mayer et al, 2007, and Newbold et al, 2010). Nitrates can be significantly elevated when adjacent land uses are urban/suburban. Further, the buffer's tree canopy shades and cools water temperature, which is especially critical to support high quality species/cold water species – a function not as effectively provided by any other BMP. (Jones, 2006).

Other neighboring states have also recognized the value of riparian buffers. For example New Jersey requires buffers along all trout streams and special protection waters; Virginia requires riparian buffers to implement the Chesapeake Bay Preservation Act; and Maryland has buffer regulations to protect tidal waters, tidal wetlands and streams tributary to the Chesapeake Bay. Riparian forest buffers provide other economic benefits and intrinsic value to land.

There are many existing provisions in the regulations found in Title 25 that limit the extent of activities that can occur along streams and wetlands as a means of protecting water quality. A number of these types of controls are in the form of "setbacks". Although riparian forest buffers also have additional BMP functions, riparian forest buffers are like other regulatory setbacks in that they are a project or facility siting limitation that is included in the regulations as an environmental control. This type of environmental control mechanism is found in numerous other environmental regulations, including but not limited to: Surface and Underground Coal Mining: General, 25 PA Code § 86.102(12), [mining prohibited within 100 feet of a perennial or intermittent stream]; Noncoal mining, 25 PA Code § 77.504, [mining prohibited within 100 feet of a perennial or intermittent stream]; Water Resources: General Provisions, 25 Pa. Code §§ 91.36, 92.5a(e)(1)(i), [stream setbacks and or buffers required for land application of animal manure]; Nutrient Management, 25 Pa. Code § 83.351(a)(1)(v),

[surface water and wetland setbacks for manure storage facilities]; Municipal Waste Landfills, 25 Pa. Code § 273.202 [100 foot surface water and 300 foot exceptional value wetland setbacks for municipal waste landfills]; Municipal Waste: Land application of sewage sludge, 25 Pa. Code § 275.202 [land application of sewage sludge prohibited within 100 feet of a perennial or intermittent stream or exceptional value wetland]; Municipal Waste: Construction/demolition waste landfills, 25 Pa. Code § 277.202, [flood plain and wetland setbacks]; Municipal Waste: Resource recovery facilities, 25 Pa. Code § 283.202 [flood plain and wetland setbacks]; Oil and Gas Wells, 25 Pa. Code § 78.63 [100 foot setbacks for land application of residual waste from oil and gas well development]; and Hazardous Waste Management: Siting, 25 Pa. Code § 269a.29, [hazardous waste treatment and disposal facilities may not be sited in watersheds of exceptional value waters].

This is a new section that was added in the proposed rulemaking with the intent of establishing criteria for riparian buffers and establishing mandatory provisions for the use of riparian buffers as a stormwater BMP. Extensive public comments were received on this proposed section. The Board made a number of substantive revisions to this section in response to comments in the final-form rulemaking, including the addition of subsections related to exceptions, and a presumption of antidegradation compliance, and provisions related to trading or offsetting credits. In addition, the final-form rulemaking also clarifies the requirements for composition and width of mandatory riparian forest buffers and management plans, and guidance on voluntarily establishing riparian forest buffers.

Section 102.14(a) in the proposed rulemaking listed requirements for incorporating riparian forest buffers. The proposed rulemaking included requirements for mandatory 150 foot wide riparian forest buffers on Exceptional Value (EV) waters and a minimum of 100 foot wide riparian forest buffer on all other waterbodies in § 102.14(a). IRRC and several commentators commented that the wording was vague. Members of the public commented that the requirement for mandatory buffers should be expanded to all waters of this Commonwealth with riparian forest buffers of at least 100 feet on both sides of every stream in our state, with 150 feet on small headwater streams and 300 feet on EV and HQ streams. In contrast, the Board also received comments from IRRC and other commentators that the requirement for mandatory buffers is burdensome and that the section on buffers is confusing. In response to comments from IRRC and other commentators, the Board amended subsection 102.14 to require that a project requiring a permit and located in an EV or HQ watershed which is attaining its designated use, shall not conduct earth disturbance activities within 150 feet of a perennial or intermittent river, stream, creek, lake, pond, or reservoir, and must protect any existing riparian buffer. Additionally, if the project site requires a permit and is located in an EV or HQ watershed failing to attain one or more of its designated uses the person proposing the project must not conduct earth disturbance activities within 150 feet of a perennial or intermittent river, stream, creek, lake, pond, or reservoir, and protect an existing riparian forest buffer, convert an existing riparian buffer to a forest riparian buffer, or establish a new riparian forest buffer.

The Department notes that only 26,215 miles (roughly 30%) of Commonwealth stream miles are classified as special protection (EV or HQ). Further, only 714 (0.8%) of all stream miles

are presently classified as special protection and designated as "impaired". Pursuant to the final-form rulemaking revisions, for the vast majority of projects – because they will not be located adjacent to impaired special protection waters – riparian forest buffers will not be mandatory, but rather will be an optional BMP that the applicant may choose to manage their post construction stormwater. In addition, the Board recognizes that there may be circumstances under which a riparian buffer may not be feasible. The final-form rulemaking allows for the consideration of alternative BMPs to be considered in accordance with Section 102.14(d)(2)(vi) in such circumstances.

Section 102.14(b) of the proposed rulemaking listed the composition requirements of a riparian forest buffer, and a "zoned" approach to composition was included. Scientific literature supports a "zoned" approach to the composition of newly established riparian forest buffers. Zone 1, being directly adjacent to the waterbody and consisting primarily of native trees, is most critical to the ecological health of the waterbody by providing bank stability, thermal moderation, aquatic and terrestrial habitat, and an energy source to maintain a stable ecological community. Zone 2, consisting of native trees and shrubs, provides opportunity for significant sequestration and trapping of overland and subsurface pollutants as well as maximizing habitat potential for a variety of aquatic and terrestrial species. The Board received comments that requested timber management be allowed within the zones. The language from the proposed rulemaking allowing for timber management has been retained in the final-form rulemaking.

The proposed rulemaking included requirements for mandatory 150 foot wide riparian forest buffers on EV waters and a minimum of 100 foot wide riparian forest buffers on all other waters in § 102.14(d) regarding average minimum widths. The minimum width of 100 feet and the type of vegetation, primarily native trees and shrubs, has been firmly established by scientific studies as providing substantial ecological benefit. Additional riparian forest buffer width in special protection and impaired waters provides added protection and maximizes the benefits to existing water quality. This subsection in the final-form rulemaking has been revised and moved to 102.14(b)(2). Also, in the final-form rulemaking, the width of Zone 1 or, at a minimum, the first 50 feet of a riparian forest buffer, directly adjacent to the waterbody should remain essentially "untouched". The width of Zone 2 has been enlarged to 100 feet in the final rulemaking. Therefore the area where timber harvesting is permitted (with a riparian forest buffer management plan and 60% of the canopy cover is maintained) has been expanded. Some limited management of forest resources is allowed in Zone 2. Activities within the riparian forest buffer are limited so as to maintain its integrity and functions.

The proposed rulemaking contained requirements for enhancing existing buffers to establish a riparian forest buffer that included additional plantings and removal or control of noxious and invasive species in Section 102.14(a). The Board received comments from IRRC and members of the public requesting clarification on the requirements for enhancement. The final-form rulemaking has been revised and clarified. Section 102.14(a) lists the requirements for when a mandatory buffer is required. Specific requirements regarding converting a buffer are clarified in Section 102.14(b) of the final-form rulemaking regarding criteria, composition, zones and management requirements.

In the proposed rulemaking, noxious weeds and invasive species were required to be removed or controlled to the extent possible in existing and established riparian forest buffers in Section 102.14(a)(4). IRRC and members of the public commented that the section should be amended to clarify these provisions. Minor edits were made and this section was moved to 102.14(b)(1)(i) in the final-form rulemaking to provide clarity. Invasive plants have characteristics that make them extremely threatening to the survival of a new riparian forest buffer. Noxious weeds are not necessarily invasive plants; they are plants that have proved to be a significant threat to agriculture, human health or the environment, thereby earning the designation of noxious weed from the Pennsylvania Department of Agriculture.

Invasive plants and noxious weeds need to be controlled because they pose a threat due to their ability to spread aggressively, reproduce prolifically and are very difficult to control once established. Invasive plants can overrun native vegetation and prevent the long term sustainability of native riparian vegetation. Non-native species can degrade the habitat for wildlife and diminish the pollution prevention capacity of a vegetated riparian forest buffer significantly. Controlling noxious weeds and invasive plants as soon as the plants are noticed (preferably before they bloom and the seeds are released) can be more cost effective than waiting one or more years when the invasive plants and noxious weeds are already established. The Department anticipates issuing further guidance on the control of noxious weeds and invasive species concurrently with the final-form rulemaking.

In the proposed rulemaking, there was a requirement for riparian forest buffers to be established along both sides of the stream in Section 102.14(d)(1)-(3). IRRC and members of the public commented that this would require permittees to purchase adjacent property. The terms “both sides” have been removed from the final-form rulemaking. Section 102.14(b)(2)(iii) of the final-form rulemaking clarifies that a riparian buffer would be required on both sides of the stream if the stream transects a project site controlled by the applicant and would not be required on adjacent property.

Section 102.14(e)(2) of the proposed rulemaking included a requirement for newly established and existing riparian forest buffers to be managed for at least five years. IRRC and members of the public commented that specific standards should be set for management of riparian forest buffers. In the final-form rulemaking, the management of a riparian forest buffer is described in Section 102.14(b)(3). The language states that riparian forest buffers shall be managed for a period of five years, during which time the following are used: a planting plan that identifies the number, density and species of native trees and shrubs that are appropriate to the geographic location and will achieve 60% uniform canopy cover; measures to ensure protection from competing plants and animals including noxious weeds and invasive species; an inspection schedule with measures identified and implemented to ensure proper functioning of the riparian forest buffer. The five year period begins when planting is complete and ends when 60% uniform canopy cover is achieved which should be within 5 years of establishment. The riparian forest management plan should continue to be implemented until 60% uniform canopy cover is achieved. Sixty percent uniform canopy cover is achieved when an area of ground shaded by a vertical projection of the leafy crown of

predominantly native shrubs and trees reaches 60% throughout the riparian forest buffer. A sample Riparian Forest Buffer management plan, agreement and techniques to determine the 60% canopy cover can be found in the Department's Riparian Forest Buffer Guidance (Document No. 394-5600-001). After five years, the riparian forest buffer will be managed as needed according to the riparian forest buffer management plan. Active management is absolutely critical during the first five years of establishing a new riparian forest buffer or enhancing an existing buffer to meet riparian forest buffer standards. Management would be focused on ensuring survivability of the young trees and shrubs. Once the new trees and shrubs are established by the end of the five year period, management activities become less active and focus more on long term operation and maintenance needs as described in the riparian forest buffer management plan. Active management of an existing riparian forest buffer is not required, however subsection 102.14(f)(3)(i) allows activities or practices to maintain the riparian buffer.

In Section 102.14(a)(8) of the proposed rulemaking, applicants were required to submit a plan for riparian forest buffer management that would describe how management requirements would be met. IRRC commented that the regulation should set forth what an acceptable plan must include. In the final-form rulemaking, the requirements for a riparian forest buffer management plan have been added in Section 102.14(b)(4).

Subsection 102.14(a) of the proposed rulemaking listed mandatory requirements for riparian buffers. IRRC commented that while riparian forest buffers may present a very good solution from an environmental perspective, these buffers clearly raise many issues of cost, reasonableness and practicality as proposed. The Board received comments that requested flexibility and asked to delete the mandatory obligation. In addition, the Board received comments that supported a mandatory riparian buffer program, as well as comments that supported mandatory 100 foot stream buffers program on all streams. In response to comments, the final-form rulemaking has been revised. Requirements for management of stormwater into riparian buffers, protection of wetlands located in the riparian buffer and standards for measurement of riparian buffers have been placed into one section (§ 102.14(c)) for clarity. Stormwater must discharge into the buffer with a sheet or shallow concentrated flow. This type of discharge will protect the integrity of the buffer and will maximize the opportunity for the discharge to eventually enter into the groundwater.

Wetlands within the buffer should be protected and maintained consistent with Chapter 105. It is not the intention of the Department to replace any existing functioning wetlands with riparian forest buffers.

IRRC and members of the public commented that there may be circumstances under which a riparian buffer may not be feasible. In the final-form rulemaking, the Board includes exemptions and waivers in Section 102.14(d) titled "Exceptions."

The proposed rulemaking did not include a presumption for antidegradation in the riparian forest buffer section. The Board received comments that requested flexibility in the final rule by relying on riparian forest buffers as a preferred BMP option for meeting the nondischarge or ABACT requirements in a Special Protection watershed. In response to comments, the

final-form rulemaking includes an “Antidegradation Presumption” in Section 102.14(e)(1). This subsection provides a presumption of compliance with antidegradation requirements when a permittee includes a riparian forest buffer meeting the requirements of Section 102.14.

The Board received comments that requested an offsetting option. The final-form rulemaking has been revised in Section 102.14(e)(2), to allow a permittee who includes a riparian forest buffer meeting the requirements of Section 102.14 to be eligible for trading or offsetting credits.

The proposed rulemaking did not list specific requirements for crossings through riparian forest buffers. Comments were received that requested clarity regarding crossings through riparian buffers. The final-form rulemaking has been revised to clarify that, in accordance with Section 102.14(f)(2)(ii), crossings over riparian buffers are activities that are allowed when authorized by the Department.

The proposed rulemaking included requirements for the permanent protection of riparian forest buffers. IRRC and members of the public expressed concern about this requirement. In the final-form rulemaking, the requirement is maintained and applies to all riparian buffers. Riparian buffers utilized to manage stormwater provide many physical, chemical and biological protection to the receiving water as well as benefits to the aquatic ecosystem and should be protected in perpetuity. Similar to §102.8(m), riparian buffers are BMPs that require long-term protection and maintenance to ensure their continued functioning as part of PCSM. The Board has added clarification to this section to provide examples of a variety of mechanisms (deed restriction, conservation easement, local ordinance or permit conditions) to ensure the long term functioning and integrity of the riparian buffer.

Section 102.14(g) of the proposed rulemaking listed a requirement for the permittee to complete a data form provided by the Department as part of the PCSM plan. Members of the public expressed doubt that these forms would be utilized. This section has been moved to 102.14(h) in the final-form rulemaking, and minor edits for clarifications were made. This reporting has been required by the Department for years when buffers are established through a Growing Greener grant from the Department. Reporting can be completed on-line through the DEP website (www.depweb.state.pa.us key word “Stream Releaf”).

SECTION 102.15. PERMIT-BY-RULE FOR LOW IMPACT PROJECTS WITH RIPARIAN FOREST BUFFERS:

The final-form rulemaking does not include the permit-by-rule that was included in the proposed rulemaking in this section. In response to recommendations from commentators, this section in its entirety has been removed from the final-form rulemaking.

SECTION 102.22. SITE STABILIZATION:

In the proposed rulemaking Section 102.22 was re-titled “site stabilization” to reflect the addition of temporary stabilization standards in § 102.22(b) that if earth disturbance will cease for a

period of three or more days that the site shall be seeded, mulched or otherwise protected. During the public comment period several commentators and IRRC commented that the requirement of three days for temporary stabilization could be impractical and costly and could be problematic because of holiday weekends. In response to these comments the Board revised the final draft of the regulations so that the amount of days of cessation of earth disturbance activities that would require temporary site stabilization was changed from three (3) to four (4) days. This change will address the concerns regarding three day holiday weekends.

SECTION 102.31. APPLICABILITY:

There were no revisions proposed in Section 102.31 from the current regulations.

SECTION 102.32. COMPLIANCE AND ENFORCEMENT PROVISIONS:

In the proposed rulemaking the Board revised this section to add subsection (c) which states that a person aggrieved by an action of the conservation district may request an informal hearing with the department; and (d) which allows the department or conservation district to collect and recover from the responsible party the costs and expenses involved in taking an enforcement action. Several commentators requested additional details regarding the informal hearing process and how it would work. The department revised the regulations between the proposed and final-form rulemaking to replace the word "may" with "shall" and added language that "the department will schedule the informal hearing and make a final determination within 30 days of the request."

SECTION 102.41. ADMINISTRATION BY CONSERVATION DISTRICTS:

The only revision made from the existing regulation was to delete the word "county" from "county conservation districts" in order to be consistent with the rest of the regulation. There were no changes between the proposed and final-form rulemaking for this section.

SECTIONS 102.42. NOTIFICATION FOR APPLICATIONS OF PERMITS:

In Section 102.42 the only revision made to the proposed rulemaking was to delete five acres and insert one acre. This revision was proposed to be consistent with the change in §102.5. There were no other changes proposed between the proposed and final-form rulemaking for this section.

SECTION 102.43. WITHHOLDING PERMITS:

In Section 102.43 in the proposed rulemaking the Board inserted the phrase at the start of the first sentence "With the exception of local stormwater approvals or authorizations a". This was added to clarify that a municipality or county may approve and issue stormwater approvals or authorizations but may not issue building permits or final approvals until the appropriate Department permit coverage is obtained. A commentator submitted comments that the use of the word "final" in this section may be problematic as municipalities may issue preliminary

approvals. The Board agreed that removing the word “final” would clarify that municipalities must not issue any authorization that would allow for earth disturbance activity to occur prior to the necessary Chapter 102 permit approval. Therefore the word “final” was removed between the proposed and final-form rulemaking for this section.

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- *Blue Mountain Preservation Association v. DEP and Alpine Rose Resorts*, 2006 EHB 589
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F. Benefits, Costs and Compliance

The final-form rulemaking provides benefits to the health and safety of the citizens of the Commonwealth. The provisions will improve water quality and mitigate flooding potential by controlling increases in sediment and other pollutant discharges during and after earth disturbance activities. Controlling such discharges through this rulemaking will limit the risk for increased pollutant levels to waters of this Commonwealth, and protect against adverse impacts on aquatic ecosystems. To ensure protection against adverse impacts from stormwater runoff, the rulemaking includes provisions for long-term operation and maintenance of PCSM facilities. In support of the federal NPDES Stormwater Construction rulemakings, EPA cited benefits including: the benefits to navigational operations regarding the reduced sediment loads requiring dredging; the benefits of water storage in reservoirs with regained water capacity from reduced sediment build-up, and the benefits to drinking water treatment with reduced costs for treatment of sediment in turbidity.

The revisions will also provide benefits through the restructuring and clarification of planning and permit application requirements, as well as the codification of the existing PCSM requirements. This rulemaking reflects a continuing commitment to integrate regulatory obligations for stormwater management including requirements pursuant to Act 167, the NPDES Municipal Separate Storm Sewer Systems (MS4) program and permitting of earth disturbance activities. Local governments with state Act 167 or NPDES MS4 regulatory obligations may rely on the regulatory structure provided by this rulemaking. This reliance on existing state stormwater programs represents a significant cost savings to local governments.

Benefits of Permit Fee Structure § 102.6

The citizens of the Commonwealth, the regulated community, and state and local governments will benefit from the recommended changes in this rulemaking because surface waters will be protected, maintained and improved through requirements that minimize accelerated erosion and sedimentation and strengthen PCSM.

The Commonwealth will benefit from increased permit fees that are based on the estimated cost of administering the program. Revisions to Chapter 92 in 1999 and Chapter 102 in 2000 included modifications to permit fees, but these were administrative filing fees and did not cover cost of program operations. This proposed rulemaking is the first effort by the Department to cover the Chapter 102 program costs through permit fees.

Benefactor	Benefit	Annual Approx Value	Source
DEP	Revenue to operate the 102 program	\$7,573,200	Permits and other associated review fees

Finally, these regulatory revisions are beneficial because they continue to support the delegation of the E&S control and stormwater management programs to local county conservation districts. Conservation districts and the Department have had a successful and effective partnership that allows the Commonwealth to meet the federal requirements of the NPDES program. Additionally, the Delegation to the local government provides more accessibility to the community and regulated parties and ensures local involvement in oversight of the program.

Benefits of Post Construction Stormwater Management § 102.8

Economic Impacts of PCSM Design and Implementation

The costs associated with contemporary stormwater strategies cannot be judged without the context of benefits, particularly the benefits of low impact development, better site design and environmental site design approaches, collectively referred to as LID. It is more cost-effective to prevent the pollutants from entering the stormwater or into waters of this Commonwealth than it is to remove the pollutants once they are in the system or in the waters.

A partial list of the additional benefits for developers, communities and municipalities:

- Downstream economic benefits (reduced flooding damages, reduced treatment costs, increased property values, etc.).
- Reduced needs for infrastructure.
- Higher property values (increased sales, higher sale/resale prices, shorter on-market time).
- Increased tax revenue.
- Increased tourism and recreation.
- Reduced performance bonding for infrastructure (local/municipal requirements).

A comparative cost-benefit study of different technologies used in the management of urban stormwater consistently raised examples of how LID methods save money in both construction and long-term operation and maintenance, from the broad metropolitan scale down to the site level, and further down to a comparison of specific stormwater technologies (Urban Stormwater Economics, Appendix D.)

The summary of conclusions include:

- At the site level, significant cost savings can be achieved from cluster development, including costs for clearing and grading, stormwater and transportation infrastructure, and utilities.
- Installation costs can be between \$4,400 and \$8,850 cheaper per acre for natural, native landscaping than for turf grass approaches.
- Better site design can reduce paving costs.
- While conventional paving materials are less expensive than conservation alternatives, porous materials can help total development costs go down, sometimes as much as 30%, by reducing stormwater conveyance and detention needs.
- Swale conveyance and naturalized BMPs are less costly than pipe systems, as much as 80%.
- Costs of stormwater retention or detention cannot be examined in isolation, but must instead be analyzed in combination with conveyance costs (pipe, inlets, curb), at which point low impact methods have a cost advantage, by eliminating these facilities. The cost saving is two-fold. One from the cost of design and implementation and second from the reduction of impervious surface that these conveyances cause.
- Infiltration strategies and water conservation measures, in combination with landscape planning methods, usually require less space, when fully accounted for, than traditional end-of-pipe infrastructure.
- Public infrastructure costs are higher when a development is built within the context of urban sprawl, as compared to compact growth patterns that conserve land.

In addition to preserving agricultural land, open space is now expected to serve important ecological roles by providing natural habitat, reducing runoff volumes, limiting landscaping and lawn maintenance, and providing natural cooling. These ecological benefits in turn translate into higher levels of residential satisfaction. (Urban Stormwater Economics, Appendix D).

A study by EPA of 17 case studies of developments across the country that used LID practices (infiltration, evapotranspiration and reuse of rainwater) found that these practices could save money for developers, property owners and communities. Most of the cost reductions were in the 25 to 35 percent range. In addition, there are many amenities and associated economic benefits that go beyond actual cost saving, such as, enhanced property values, improved habitat, aesthetic amenities and improved quality of life. In all cases, LID provided other benefits that were not monetized and factored into the project bottom line. These benefits include improved aesthetics, expanded recreational opportunities, increased property values due to the desirability of the lots and their proximity to open space, increased total number of units developed, increased marketing potential, and faster sales. The case studies also provided environmental benefits such as reduced runoff volumes and pollutant loadings to downstream waters, and reduced incidences of combined sewer overflows.

Failure to enact these changes to the proposed rulemaking will allow increases in stormwater runoff to occur. Increases in stormwater causes degradation of lakes, streams and wetlands and reduces property values, raises our public water utility bills and reduces tourism and related business income. These negative impacts will cause an increase in costs for local municipalities and this Commonwealth. Comments from the Philadelphia Water Department indicated that the proposed changes will improve water quality and reduce illnesses from drinking water and reduce their treatment costs.

Preventing contamination of raw drinking water supplies is more efficient than trying to identify and remove that contamination from the water stream at the treatment plant. By dedicating funds to restore and protect source water areas, communities are saving tremendous amounts of money over the long term. The following survey in Table 1 regarding water treatment and chemical costs based on percent of watershed that is forested indicates that operating treatment costs decreases as forest cover in a source area increases (Urban Stormwater Economics, Appendix D). For every 10 percent increase in forest cover in the source area (up to 60 percent forest cover), treatment and chemical costs decreased approximately 20 percent. Approximately 50 to 55 percent of the variation in operating treatment costs can be explained by the percent of forest cover in the source area. Not enough data were obtained on suppliers that had more than 65 percent forest cover in their watersheds to draw conclusions; however, the researchers believe that treatment costs level off when forest cover is between 70 and 100 percent. The remaining 45 to 50 percent variation in treatment costs that cannot be explained by the percent forest cover in the watershed is likely due to varying treatment practices, economies of scale, the location and intensity of development and/or row crops in the watershed, and the prevalence of agricultural, urban, and forestry best management practices.

Table 1. Water treatment and chemical costs based on percent of watershed that is forested.

% of Watershed Forested	Treatment and Chemical Costs per million gallons	% Change in Costs	Average Treatment Costs (at 22 mgd)	
			Per Day	Per Year
10%	\$115	19%	\$2,530	\$923,450
20%	\$93	20%	\$2,046	\$746,790
30%	\$73	21%	\$1,606	\$586,190
40%	\$58	21%	\$1,276	\$465,740
50%	\$46	21%	\$1,012	\$369,380
60%	\$37	19%	\$814	\$297,110

Economic Impacts of PCSM Operation and Maintenance

- Delaware Natural Resources identified that routine stormwater maintenance range from \$100-500 per acre of drainage area (low to highly intensive maintenance).

- Maintenance cost savings range between \$3,950 and \$4,583 per acre per year over ten years for native landscaping approaches over turf grass approaches (Urban Stormwater Economics, Appendix D).
- A study by North Carolina State University estimated annual maintenance costs for a 10 acre project:
 - * Ponds: \$4,000 +
 - * Wetland treatment: \$750
 - * Bioretention: \$600
 - * Other natural systems equated to normal landscaping maintenance costs

Benefits of Riparian Buffers § 102.14

Economic Benefits of Riparian Forest Buffers

Savings to the Commonwealth, its political subdivisions, and the private sector will be realized because of the value of the many services that riparian buffers provide such as:

- Stormwater treatment: Stormwater treatment systems that integrate natural areas, like riparian forest buffers, are less expensive to construct than storm drain systems and provide better environmental results. Costs of engineered stormwater best management practices range from \$500 - \$10,000 per acre and will cost that much again in 20 - 30 years when the structures need to be replaced. It is much more cost effective to manage storm water by including the preservation and maintenance of riparian forests in the stormwater management plan. The cost of preserving or replanting riparian forest buffers ranges from \$0 – \$4,723 per acre) and can be relatively cost free once established. (Department's Draft Riparian Forest Buffer Guidance [Document 394-5600-001, 2009]).
- Maintenance of optimal water quality: This would include protection of water quality for activities such as boating, swimming, and wildlife viewing. Riparian forest buffers also protect areas for fishing, hunting and other outdoor recreational activities. Trout require the cold waters enhanced by the shading provided by forest buffers.(Jones et. al. 2006) Fishing contributes over \$2 billion to Pennsylvania's economy with close to 1 million anglers (Southwick, 2007).
- Flood control: Riparian buffers moderate floodwaters and are a tool to protect human land use and investments from localized and flashy events and hazards associated with stream dynamics and shore erosion. Riparian buffers protect investments from hazards associated with stream flooding and erosion by providing a critical "right of way" for streams and rivers during large floods and storms. When riparian forest buffers contain the entire 100-year floodplain, they are extremely cost-effective in flood damage prevention for both communities and individual property owners (Burby, 1988).
- Passive recreational activities: Riparian buffers provide natural surroundings for relaxation, observation of wildlife, photography, hunting, fishing, and other activities important to the people of Pennsylvania. Pervious paths that are cut through riparian areas and can be used for hiking, bicycling, jogging, bird watching, and leisurely walks.
- Intrinsic and aesthetic values: Mature riparian forest buffers composed of predominantly native vegetation enhances the preservation of natural functioning ecosystems and

biological diversity. The aesthetic values associated with greenways, which include riparian forest buffers, have economic benefits and can increase property values as well as contribute to a sense of pride and well being for communities and property owners. These greenways can also have a positive impact on the value of surrounding property nearby. Pennypack Park – a managed greenway along Pennypack Creek in Philadelphia - has been credited with a 33% increase in the value of adjacent property (Chesapeake Bay Foundation, 1996).

- Ice damage control: The trees in Zone 1 of a mature riparian forest buffer insulate and warm the waters on the near shoreline/streambank area. This protects human land use and investments from ice damage on the near shoreline/streambank and from affects of ice jamming and subsequent upstream flooding (Abernathy et al. 1998).

Ecological Benefits of Riparian Buffers

Land development activities change natural features of the land and alter stormwater runoff characteristics. The resulting alterations by stormwater runoff on volume, rate and water quality can cause stream bank scour, stream destabilization, sedimentation, reduction of groundwater recharge and loss of base flow, localized flooding, habitat modification and water quality and quantity impairment, which constitute pollution as that term is defined in the Pennsylvania Clean Streams Law, 35 P.S. Section 691.1.

Riparian buffers, which are areas of permanent vegetation along surface waters, play a vital role in mitigating the effects of stormwater runoff from land development activities. They are useful in mitigating or controlling point and nonpoint source pollution by both keeping the pollutants out and increasing the level of instream pollution processing. Used as a component of an integrated management system including nutrient management along with E&S control practices, riparian buffers can produce a number of beneficial effects on the quality of water resources. Riparian buffers can be effective in removing excess nutrients and sediment from surface runoff and shallow groundwater, stabilizing streambanks, and shading streams and rivers to optimize light and temperature conditions for aquatic plants and animals. Riparian buffers provide significant flood attenuation and storage functions within the watershed. They prevent pollution both during and after earth disturbance activities, and provide natural, long-term sustainability for aquatic resource protection and water quality enhancement.

A riparian forest buffer is a type of riparian buffer that consists of permanent vegetation that is predominantly native trees and shrubs and along surface waters. The riparian forest buffer, when mature will provide a minimum of 60% canopy cover and may have forbs in the understory.

The efficacy of riparian forest buffers in reducing the quantities of nonpoint source pollutants found in stormwater entering streams has been well established by hundreds of reports published in the peer-reviewed scientific literature. (Mayer et. al , 2007 and Wenger et . al., 1999) Scientific literature also supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can provide all of the following benefits:

- **Reduced effects of storm events:** Mature riparian forest buffers that are sufficiently wide can slow the speed and reduce the volume of surface runoff from upland areas. The spongy floor of a riparian forest buffer along a pond, lake, or reservoir slows the affect of direct precipitation and runoff from areas adjacent to the riparian forest buffers. This protects stream channel beds and banks from powerful flash flooding that can scour and erode the channel. It also protects lake shorelines from erosive forces during large storms events and flooding.
- **Infiltration and maintenance of streamflow:** Riparian forest buffers slow overland runoff allowing for infiltration of surface water that helps to maintain base flow in streams and rivers.
- **Filtration and processing of pollutants in runoff:** Runoff containing pollutants such as sediments, nutrients, pathogens, and toxics from rooftops, streets, lawns, farm fields, and parking lots can flow into a riparian forest buffer from the area up grade and be considerably cleaner when it enters the perennial or intermittent stream, lake, pond, or reservoir. (Mayer et al. (2007); Peterjohn and Correll (1984), Lowrance et al. 1984, Jordan et al. (1993), Clement et al. (2003), and Vidon and Hill (2004). The floor of the riparian forest buffer soaks up the water and makes pollutants contained in it available for processing into less harmful forms. Trees in a riparian forest buffer, their fallen leaves and the plants and animals that live on, in, and under the trees form an ecosystem that is capable of processing pollutants such as sediments, nutrients, and toxics in the water that passes through the riparian forest buffer as sheet flow. The tree roots can also remove pollutants from shallow groundwater flowing beneath the forest floor to the waterbody. The leaves of native trees in the riparian forest buffer that wash into the stream serve as a rich food source for benthic macroinvertebrates which are capable of in-stream pollutant processing (Sweeny et. al., 2007).
- **Streambank and shoreline stabilization:** The canopy of a mature riparian forest buffer collects water and protects the ground below in storm events. The rain water also tracks along the trunk of the large trees before reaching the ground. This reduces the force of the water as it reaches the forest floor. The root network of the riparian forest buffer is tightly intertwined and binds soil particles together increasing the strength of the soil matrix, securing against the forces of both direct precipitation and stormwater runoff from areas surrounding the riparian forest buffer. This enhances streambank and lake shoreline stability, which are important for reducing soil and property loss from the bank or shore, reducing sediment input to the waterbody, and maintaining overall channel stability. Mature trees also protect lakeshores from wave action (Wenger et. al. 1999)
- **Light control and water temperature moderation:** A riparian forest buffer lowers light levels in the streambank or shoreline area of a waterbody that inhibits the growth and production of harmful algae and helps maximize stream width by shading out grasses. The shading that a riparian forest buffer provides helps to lower water temperatures in summer and moderates harsh winter temperatures by trapping back-radiation . Both light control and water temperature moderation maximize dissolved oxygen content in lake and stream waters and increase the amount of in-stream pollutant processing (Sweeney at. Al. 1993).

- Flood attenuation: Riparian forest buffers provide space for channel meanders, stream movement, and floodwaters to spread out horizontally. This dissipates stream energy and protects channel stability and shoreline integrity in receiving waterbodies. The spongy floor of a riparian forest buffer along a pond, lake, or reservoir slows the affect of direct precipitation and runoff from areas adjacent to the riparian forest buffers and protects shorelines during floods.
- Ice damage control: Riparian forest buffers along streams and rivers trap ice slabs during spring breakup, reducing the potential of jamming at downstream constrictions. Jamming can result in backwater and flooding upstream, which can lead to channel instability. Mature riparian forest lakeshore buffer zones are able to absorb the pressures of mid-winter ice push, protecting upland development from ice damage (Northwest Regional Planning Commission, 2004).

Further, a review of scientific literature on the subject emphasizes that many site specific factors influence the efficiency of a riparian forest buffer in providing the benefits outlined above, but there is general agreement that wider buffers are more effective. A minimum width of 150 feet and the type of vegetation, primarily native trees and shrubs, has been firmly established by scientific studies as providing substantial ecological benefit (Mayer et. al , 2007 and Wenger, 1999).

Scientific literature also supports a “zoned” approach to the composition of newly established riparian forest buffers (Palone et al. 1997 and Welsch, 1991). Zone 1, being directly adjacent to the waterbody and consisting primarily of native trees, is most critical to the ecological health of the waterbody by providing bank stability, thermal moderation, aquatic and terrestrial habitat, and an energy source to maintain a stable ecological community. Zone 2, consisting of native trees and shrubs, provides opportunity for significant sequestration and trapping of overland and subsurface pollutants as well as maximizing habitat potential for a variety of aquatic and terrestrial species.

Zone 1 or, at a minimum, the first 50 feet of a riparian forest buffer, directly adjacent to the stream, river lake, pond, reservoir or impoundment should remain essentially “untouched”. Some limited management of forest resources may occur in Zone 2. Activities within the riparian forest buffer must be limited so as to maintain its integrity and functions.

Newly established riparian forest buffers will be managed for a period of at least five years, during which time the following are used: a planting plan that identifies the number, density and species of native trees and shrubs that are appropriate to the geographic location and will achieve 60 % uniform canopy cover; measures to ensure protection from competing plants and animals including noxious weeds and invasive species; an inspection schedule with measures identified and implemented to ensure proper functioning of the riparian forest buffer.

Management involves the maintenance and monitoring of a newly established or existing riparian forest buffer. The most critical period after establishing a riparian forest buffer is the time spent maintaining the trees until their growth gives adequate shade to control weed competition. Ongoing maintenance and monitoring practices are necessary for at least 5 years

to ensure establishment of a thriving riparian forest buffer, especially if smaller seedling plant material has been used. Even where large plants are involved, deer browse, invasion by exotic plant species and competition by forbs will be a continuing problem. Maintenance and monitoring plans should be written for the specific site.

Invasive plants have characteristics that make them extremely threatening to the survival of a new riparian forest buffer. Noxious weeds are not necessarily invasive plants; they are plants that have proved to be a significant threat to agriculture, human health or the environment, thereby earning the designation of noxious weed from the Pennsylvania Department of Agriculture.

Invasive plants and noxious weeds need to be controlled because they pose a threat due to their ability to spread aggressively, reproduce prolifically and are very difficult to control once established. Invasive plants can overrun native vegetation and prevent the long-term sustainability of native riparian vegetation. Non-native species can diminish the pollution prevention capacity of a vegetated riparian forest buffer significantly and also degrade the habitat for wildlife (Sweeney et.al. 1993).

Controlling noxious weeds and invasive plants as soon as the plants are noticed (preferably before they bloom and the seeds are released) can be more cost effective than waiting one or more years when the invasive plants and noxious weeds are already established.

The five year management period begins when planting of a riparian forest buffer is complete and ends when 60% uniform canopy cover is achieved which should be within 5 years of establishment. The riparian forest management plan should continue to be implemented until 60 % uniform canopy cover is achieved. 60% uniform canopy cover is achieved when an area of ground shaded by a vertical projection of the leafy crown of predominantly native shrubs and trees reaches 60% throughout the riparian forest buffer.

A sample riparian forest buffer management plan and methodology for determining percent canopy cover can be found in DEP's Riparian Forest Buffer Guidance (Document No. 394-5600-001).

Compliance Costs

Note: Where possible, the Department has attempted to determine, quantify and calculate the dollar value for the costs, savings and benefits attributable to the rule based on available information on the environmental impacts, social costs, economic impact analysis, and benefit analyses. However, not all of the costs, savings, and benefits can be readily quantified.

Note: In order to estimate the potential cost to the regulated community, local and state governments, the total number of permits processed by the Department over the three year period of 2006 – 2008 was examined and broken into each of the three categories. It was determined that over that three year sample, the regulated community performed 80%, local governments 12% and state government 8% of the permitted earth disturbance activities in the Commonwealth.

These regulatory revisions should not result in significant increased compliance costs for persons proposing or conducting earth disturbance activities. Moderate increased costs may be incurred due to: increased permit application fees for activities requiring permits; PCSM Plan licensed professional oversight and preparation of record drawings; and long-term operation and maintenance of PCSM facilities.

Generally, there will be cost savings as a result of eliminating outdated and unnecessary requirements, while increasing the protection of Pennsylvania's valuable water resources. Additionally, the emphasis in the proposed rulemaking on non-structural "low-impact" stormwater management approaches should result in lower construction costs and long-term operation and management costs.

The regulations will apply to any individuals or entities seeking authorization to perform activities regulated under Chapter 102.

Existing Regulations

It is difficult to assess the ultimate cost of compliance because projects vary greatly in size, scope and purpose. Additionally, land developers have discretion when choosing BMPs to control stormwater both during and after construction. The choices include, fairly high cost traditional BMPs, as well as lower cost "low-impact" BMPs, which are encouraged in this final-form rulemaking. The choice remains with the land developer.

Cost-bearer	Expenditures	Annual Approx Value	Source
Municipalities	Administrative	\$24,720	NPDES IP
		\$79,110	GPs
	Total	\$103,830	
Private	Administrative	\$164,800	NPDES IP
		\$527,400	GPs
	Total	\$692,200	
Commonwealth	Administrative	\$16,480	NPDES IP
		\$52,740	GPs
	Total	\$69,220	
	TOTAL	\$219,375	

The annual approximate value for NPDES Stormwater Construction Permits noted in the above chart is based on a three year (2006 – 2008) average of permit fees collected and reported in eFACTS and by conservation districts.

Proposed Regulations

Cost-bearer	Expenditures	Annual Approx Value	Source
Municipalities	Administrative	\$74,160	NPDES IP
	Administrative	\$158,220	GPs
	Administrative	\$676,400	Disturbance Fee
	Total	\$908,784	
Private	Administrative	\$494,400	NPDES IP
	Administrative	\$1,054,800	GPs
	Administrative	\$4,509,400	Disturbance Fee
	Total	\$6,058,560	
Commonwealth	Administrative	\$49,440	NPDES IP
	Administrative	\$105,480	GPs
	Administrative	\$450,900	Disturbance Fee
	Total	\$605,856	
TOTAL		\$7,573,200	

The additional costs in the proposed revisions to the regulations are for increased permitting fees and the addition of a Disturbance Fee. The annual approximate value noted in the above chart is based on an average of three years (2006 – 2008) of activities performed by the Department and the new fee applied to each activity.

Commonwealth

The proposed revisions to the regulations may add approximately \$605,856 in additional costs but will provide revenue of \$7,573,200 for state government annually associated with the Chapter 102 E&S Control Program. These estimates were calculated utilizing a three year average of activities conducted by the Chapter 102 E&S Control Program and projecting these averages with an associated activity cost due to the proposed regulations.

The proposed rulemaking ensures protection and maintenance of environmental quality and should reduce costs to the state and local governments as a result of savings from reduced sediment loadings, reduced in-stream pollutant concentrations, and reduced pollution associated with changes to stream flow volume, and velocity. The rulemaking will also result in savings from BMPs that reduce flooding potential and associated flood damage.

Municipal

This proposed rulemaking is a codification of existing requirements and therefore only minimal costs associated with increased permit fees are anticipated for local government.

The proposed revisions to the regulation will add approximately \$804,954 in additional costs associated with the Chapter 102 E&S Control Program (the difference between \$103,830 (\$24,720 NPDES IP plus \$79,110 NPDES GP) in existing fees to \$908,784 in proposed new fees (\$74,160 base NPDES Stormwater Construction IP fee plus \$158,220 NPDES GP plus \$676,400 disturbance fee) to local governments annually. The Department does not anticipate that conservation districts delegated the administration of the program will experience any decrease in revenue based from fees under this rulemaking. In addition, conservation districts could supplement these revenues with their own review fees. The Conservation District Fund Allocation Program (CDFAP) also provides revenue to conservation districts to partially cover the cost of technical positions to implement the program.

Local governments may realize reduced water treatment costs (as a result of reduced sediment and in-stream pollutant loadings); reduced infrastructure maintenance costs (due to reduced stormwater volumes); and reduced costs associated with flooding potential (due to stormwater management practices that reduce or eliminate flood potential); however, specific cost savings to be realized as a result of this rulemaking are difficult to establish with any certainty and are therefore not identified in this analysis.

This rulemaking reflects a continuing commitment to integrate regulatory requirements with other stormwater management obligations including requirements pursuant to Act 167-Stormwater Management Act and the NPDES Municipal Separate Storm Sewer Systems (MS4) program. Local governments with state Act 167 or NPDES MS4 regulatory obligations may rely on the regulatory structure for baseline requirements provided by this rulemaking. This reliance on existing state stormwater programs can represent a significant cost savings to local governments in the form of baseline requirements for E&S control, PCSM and riparian buffer implementation.

Private Sector

The cost/benefit to the five largest affected industries with the new Chapter 102 E&S Control regulations cannot be addressed since E&S and NPDES are not reoccurring authorizations, nor are they limited to a certain type of industry or project, and identifying affected corporations is not possible.

This rulemaking is primarily a codification of existing requirements and therefore costs associated with increased permit fees, as-built drawings, and on-site licensed professionals have been considered as potential new costs. Sustainable, natural BMP options that provide lower costs for the regulated community are encouraged. Ultimately the costs and impacts associated with this rule are decided by the person undertaking the activity and their design professional through the design choices they make. The rule requires that a licensed professional regularly inspect the implementation of critical stages of BMP construction and submit a certification that the BMP is properly constructed. This certification will acknowledge that the BMPs have been properly constructed and are in working order and therefore there will be an improved expectation of optimal performance for the long-term operation. As every project varies in size,

scope, and design choice, it is difficult for the Department to calculate what a definitive cost will be to the regulated community. The Department is providing the following estimates for time and costs associated with record drawings (2-16 hours) and licensed professional monitoring of critical stages of construction (0-70 hours). The Department calculated the cost for inspection of critical stages and certification of BMP implementation by simply using an average cost for monitoring and certification of \$80 per hour for routine monitoring by a designee of a licensed professional, and a cost of \$115 per hour for the licensed professional services. Each of these services were multiplied by the average of the estimated number of hours for each of the services provided: 35 hours for oversight and 8 hour for certification. The resulting value of \$2,800 for monitoring and \$920 for certification was then multiplied by the average number of permitted activities (2,463 per year) which was derived from program data. The result for average estimated cost for the regulated community is \$9,162,360. Again, the costs incurred by a permittee for these new requirements are in direct relation to the type of design chosen for the project. While this is a cost to the regulated community, it also provides benefits of increased assurance that the BMPs will perform as designed thereby providing the desired level of environmental protection or improvement.

The proposed revisions to the regulation will add approximately \$5,366,360 in additional costs associated with the Chapter 102 E&S Control and NPDES Stormwater Construction Programs (the difference between \$692,200 (\$164,800 NPDES IP plus \$527,400 NPDES GP) in existing fees to \$6,058,560 in proposed new fees (\$494,400 base NPDES Stormwater Construction IP fee plus \$1,0547,800 NPDES GP plus \$4,509,400 disturbance fee) to the private sector annually. The new fees for the Chapter 102 E&S Control Program will close the cost deficit for the administration of the program. Fee schedules have not been updated since 2000 when there was no per acre of earth disturbance fee for NPDES Stormwater Construction Permits and fees were \$250 per permit for General Permits (GP), and Individual Permit (IP) fees were \$500 per permit. In an effort to reduce the deficit between funds generated and expenditures required to manage the program, this final rulemaking sets permit fees as follows: a base administration fee for General Permits of \$500 per permit or an Individual Permit fee of \$1500 per permit, plus a per acre earth disturbance fee of \$100 for all permit applications. The fees were developed based on the number of permits issued and number of acres disturbed per permit over the last three years. In addition, implementation costs were calculated based upon projected administration, review, and implementation time for the program. A more detailed analysis can be found in the Fee Report Form. It should be noted that even though these increases will affect the regulated community, they still will not cover the total Department expenditures required to implement the program.

Potential Riparian Forest Buffer Costs

Land development activities change natural features of the land and alter stormwater runoff characteristics. The resulting alterations of stormwater volume, rate and water quality which can cause stream bank scour, stream destabilization, sedimentation, loss of groundwater recharge, loss of base flow, localized flooding, habitat modification and water quality and quantity impairment, which constitute pollution as that term is defined in the Pennsylvania Clean Streams Law, 35 P.S. Section 691.1. Riparian buffers, particularly riparian forest buffers play a vital role

in mitigating the effects of stormwater runoff from land development activities. The Department proposes to revise the buffer section to expand buffers in all special protection watersheds and to restore water quality in impaired waters. The final rule includes mandatory riparian buffers for activities permitted under Chapter 102 when the project is located along Exceptional Value or High Quality waters. Specifically, protection of existing riparian buffers along Exceptional Value and High Quality waters where the waters are attaining their designated uses and riparian forest buffers where Exceptional Value or High Quality waters are impaired. The mandatory obligation to maintain and protect a 150 foot riparian buffer will be required when the project site contains, is along or within, 150 feet of a river, stream, creek, lake, pond or reservoir, and located in:

- An EV watershed meeting its designated use at the time of application, or
- A HQ watershed meeting its designated use at the time of application.

In addition, a mandatory obligation to establish and protect a new riparian forest buffer when the project site contains, is along or within, 150 feet of a river, stream, creek, lake, pond or reservoir, where no riparian forest buffer currently exists and is located in:

- An EV watershed that is listed as impaired at the time of the application; or
- An HQ watershed that is listed as impaired at the time of application.

Exceptional Value and High Quality waters are afforded the greatest degree of protection under the Department's existing regulations at Chapter 93 (Water Quality Standards). Based on the scientific data, riparian buffers are one of the most effective stormwater management BMPs for protecting aquatic resources.

The potential costs related to the riparian forest buffer requirements in the rulemaking have been calculated by considering how much it could cost to establish a new buffer where no buffer exists as well as enhancing or maintaining an existing buffer. Recognizing that a number of possibilities need to be considered when quantifying total costs that may be experienced when establishing riparian forest buffers throughout the Commonwealth, dollars per acre of riparian forest acre established can range from \$385 to \$4,723 per acre. The minimum estimate is based on the cost of planting 110 (12 – 18 inch) hardwood trees spaced 20 feet apart at \$3.50 per tree as a minimum to establish a riparian forest buffer. The maximum potential cost is based on planting 435 (12 – 18 inch) hardwood trees ten feet apart at \$3.50 per tree as well as removal of invasive species (\$200 per acre), reinforcement planting (\$175 per acre), seedling protection (\$2,175 per acre), competition control such as herbicides and mowing (\$650 per acre) altogether could cost as much as \$4,723 per acre. However, it is most likely that actual establishment of riparian forest buffers will be less than the maximum estimate due to the variety of conditions in the field. It is also possible that riparian forest buffers already exist where projects may fall within the requirements of this part of the rulemaking. The cost would be \$0 per acre where this is the case. The Department has estimated potential cost to establish riparian forest buffers on a per acre basis. However, it is nearly impossible to determine the number and size of projects that will occur within Impaired HQ and EV watersheds requiring establishment of riparian forest buffers, therefore no estimates of total acres are included.

Potential Riparian Forest Buffer Savings

The potential savings that will result from the development of riparian forest buffers are likely to be experienced through the increase of property values resulting from riparian forest buffers being installed in the Commonwealth along Impaired EV and HQ streams as a result of this rulemaking. Establishing a riparian forest buffer is expected to increase property values at least \$19,104 per acre (adjusted for inflation). This estimate is based on the 1988 Burby study which examined 10 programs throughout the U.S. that diverted development away from flood-prone areas.

Although the mandatory riparian forest buffer requirement for permitted projects located in exceptional value and high quality watersheds is new, this requirement should not necessarily result in substantial new or increased costs to the regulated community.

Riparian forest buffers may result in a savings when compared to structurally engineered non-discharge BMPs. Additionally, the installation of riparian forest buffers has been shown to increase property values by 5% to 25%, increase and protect water quality and decrease the necessity and cost of restoring impaired waters.

According to EPA estimates, available data regarding Post Construction Stormwater can be found in national studies developed by the EPA and others; however, it would not be accurate to infer potential costs and savings for the Commonwealth based on National Studies due to the extreme variability of conditions, size of projects and state requirements. According to EPA estimates in the *Federal Register/Vol. 64, No. 235/Wednesday, December 8, 1999/Rules and Regulations*, estimated post construction **costs** were \$56,122,317 to \$227,040,284 (adjusted for inflation) nationwide annually. This estimate was based on an average costs for PCSM BMPs on project sites of one, three, five and seven acres. Annual **benefits** of the PCSM requirements by EPA in the *Federal Register/Vol. 64, No. 235/Wednesday, December 8, 1999/Rules and Regulations*, indicate a potential annual benefit of the Phase II Storm Water Rule to be approximately \$131,000,000 to \$410,200,000 nationally, after Erosion and Sediment Control benefits were removed from the EPA total benefit estimate.

Assumptions

If the average of the estimated activities performed by the Department exceeds the estimated numbers, the Commonwealth could have a significant benefit to the new regulations because the fees collected will be more than the estimated values. If the average of the estimated activities performed by the Department does not exceed the estimated numbers, the Commonwealth could have a significant loss to the new regulations because the fees collected will not be more than the estimated values.

These regulatory revisions will result in moderate compliance costs for persons proposing or conducting earth disturbance activities. Moderate increased costs may be incurred due to: increased permit application fees for activities requiring permits; PCSM Plan licensed

professional oversight and preparation of record drawings; and long-term operation and maintenance of PCSM facilities.

Generally, there is an anticipated cost savings as a result of the eliminating outdated and unnecessary requirements, while increasing the protection of Pennsylvania's valuable water resources. Additionally, the emphasis in the proposed rulemaking on non-structural "low-impact" stormwater management approaches should result in lower long-term operation and management costs.

Compliance Assistance Plan

The regulated community will be notified of all fee changes by public notice in the *Pennsylvania Bulletin*.

The Department assists the regulated community in complying with these regulations through technical and educational assistance, largely provided in partnership with county conservation districts. These efforts have resulted in local community based initiatives that stimulate awareness and achieve regulatory compliance. Department staff has worked with conservation districts to develop and enhance their professional abilities for effective administration of the program. The development of compliance strategies that focus on negotiation, total quality management, mediation, and professional development, has greatly enhanced the Department's ability to protect this Commonwealth's water resources. County conservation district staff provide an efficient and effective local source of assistance as well as an efficient mechanism for the protection of valuable resources. Evaluations of district performance have shown that district staff can provide a quick response to process, review, and acknowledge permit applications.

By involving advisory committees in the development of these regulations, and pursuing initiatives with the regulated community and various other stakeholders, the Department's outreach efforts have allowed stakeholders to work together with regulators to work towards the goal of protecting water quality and the aquatic environment through E&S and stormwater management efforts. Involvement of the public and the regulated community in the development of these regulations fosters subsequent compliance with standards and practices developed as a result of these efforts, and are an important form of compliance assistance.

The Department assists the regulated community with compliance by its development of technical guidance documents, standard checklists, worksheets and permit review letters to aid persons responsible for earth disturbance activities and their plan designers in developing sound pollution prevention plans. The Department also assists compliance by assuring that Department and district reviews are timely, effective, and consistent. Finally, the regulations incorporate a performance-based approach, which allows persons conducting earth disturbance broad latitude and flexibility in designing BMPs to achieve compliance.

Finally, the effective date of this final rulemaking will be 90 days after the publication in the *Pa Bulletin* so that the Department may provide the necessary training, compliance assistance, guidance, and other information necessary to comply with the final form rule.

Paperwork Requirements

The majority of the revisions to this proposed rulemaking are codifications of existing requirements, therefore only minor changes to forms, fact sheets, and technical guidance are anticipated.

G. Pollution Prevention

Chapter 102 prevents sediment and stormwater pollution to surface waters of this Commonwealth from earth disturbance activities through a tiered regulatory framework built upon BMP requirements. The Chapter covers both agricultural and non-agricultural earth disturbance activities, with distinct regulatory requirements for these two broad categories. Regardless of the category, all earth disturbance activities must utilize BMPs to minimize accelerated erosion and sedimentation for the duration of earth disturbance activities. Additionally, some earth disturbance activities require preparation of a written E&S Plan. Finally, earth disturbance activities exceeding specified acreage thresholds may trigger the requirement to obtain permit coverage, which in turn includes the obligation to prepare and implement a written PCSM Plan.

The rulemaking will improve protection from earth disturbance activities not only through the inclusion of PCSM requirements, but also through the addition of the riparian forest buffer provisions, which are one of the most effective and sustainable BMPs for protecting, maintaining, reclaiming and restoring surface waters of this Commonwealth.

Effective pollution prevention also requires robust inspection, oversight, and enforcement authority, which are retained and enhanced in this rulemaking. The proposed rulemaking adds requirements such as: mandatory pre-construction meetings; licensed professional documentation requirements; and a program audit provision to verify the environmental protection and effectiveness of the permit-by-rule.

H. Sunset Review

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

I. Regulatory Review

Under Section 5(a) of the Regulatory Review Act (71 P.S. §745.5(a)), on August 19, 2009, the Department submitted a copy of the proposed rulemaking, published at 39 *Pa.B.* 5131, and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC),

and to the Chairpersons of the Senate and House Environmental Resources and Energy Committees for review and comment.

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided copies of the comments received during the public comment period, as well as other documents when requested. In preparing the final-form rulemaking, the Department considered the comments received from IRRC, the Committees, and the public.

Under section 5.1(j.2) of the Regulatory Review Act, on _____, 2010, this final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on _____, 2010, and approved the final-form rulemaking.

J. Findings of the Board

The Board finds that:

- (1) Public notice of proposed rulemaking was given under Sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder at 1 Pennsylvania Code §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law, and all comments were considered.
- (3) These regulations do not enlarge the purpose of the proposal published at 39 *Pa.B.* 5131 Pennsylvania Bulletin (Saturday, August 29, 2009).
- (4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

K. Order of the Board

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department of Environmental Protection, 25 Pennsylvania Code, Chapter 102, are amended to read as set forth in Annex A.
- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.
- (c) The Chairperson of the Board shall submit this order and Annex A to the Independent Regulatory Review Commission and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.

(d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.

(e) This order shall take effect immediately.

BY:

JOHN HANGER
Chairperson
Environmental Quality Board

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE II. WATER RESOURCES

CHAPTER 102. EROSION AND SEDIMENT CONTROL AND
STORMWATER MANAGEMENT

GENERAL PROVISIONS

§ 102.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

ABACT--Antidegradation best available combination of technologies—
ENVIRONMENTALLY SOUND AND COST EFFECTIVE TREATMENT
[Treatment], land disposal, pollution prevention and stormwater reuse BMPs that
[will] individually or collectively manage the difference in the net change **IN [from**
preexisting] stormwater volume, rate, and quality for storm events up to and
including the 2-year/24-hour storm **WHEN COMPARED TO THE**
STORMWATER RATE, VOLUME [that is not fully managed by nondischarge
alternative BMPs] and **QUALITY PRIOR TO THE EARTH DISTURBANCE**
ACTIVITIES TO [that will] maintain and protect the existing quality of the
receiving surface **[water] WATERS OF THIS COMMONWEALTH.**

* * * * *

Act 167--The Storm Water Management Act (32P. S. §§ 680.1--680.17)

*Agricultural operation--The management and use of farming resources for [the]
production of crops, livestock, or poultry, or for equine activity.*

Agricultural plowing or tilling activity--

(i) Earth disturbance activity involving the preparation and maintenance of soil for the production of agricultural crops.

(ii) The term includes no-till cropping methods WHICH ARE THE PRACTICE OF PLANTING CROPS WITH MINIMAL MECHANICAL TILLAGE.

*Along--*Touching or contiguous; to be in contact with; to abut upon.

*Animal heavy use area--*Barnyard, feedlot, loafing area, exercise lot, or other similar area on an agricultural operation where ~~[because of]~~ DUE TO the concentration of animals it is not possible to establish and maintain vegetative cover of a density capable of minimizing accelerated erosion and sedimentation by usual planting methods. THIS TERM DOES NOT INCLUDE ENTRANCES, PATHWAYS AND WALKWAYS BETWEEN AREAS WHERE ANIMALS ARE HOUSED OR KEPT IN CONCENTRATION.

*BMPs--Best management practices--*Activities, facilities, measures, **planning** or procedures used to minimize accelerated erosion and sedimentation **and manage stormwater** to protect, maintain, reclaim, and restore the quality of waters and the existing and designated uses of waters within this Commonwealth **before, during, and after earth disturbance activities.**

* * * * *

~~[Collector--A channel, dike or other conveyance, constructed downslope of an earth disturbance activity for the purpose of collecting stormwater runoff from [an existing or proposed disturbed] that area and conveying it to facilities for sediment retention or removal.]~~

[County conservation] *Conservation district--*A conservation district, as defined in section 3(c) of the Conservation District Law (3 P. S. § 851(c)), which has the authority under a delegation agreement executed with the Department to administer and enforce all or a portion of the erosion **[and]**, sediment **[control]**, and **stormwater management** program in this Commonwealth.

*Conservation Plan--*A plan that identifies conservation practices and includes site specific BMPs **[which minimize the potential for accelerated erosion and sediment from]** for agricultural plowing or tilling activities **and animal heavy use areas.**

[(i) BMPs for agricultural plowing or tilling activities, including soil loss tolerance values (T), are identified in the *Pennsylvania Soil and Water Conservation Technical Guide*, United States Department of Agriculture, Natural Resources Conservation Service, 1991.

(ii) The Conservation Plan shall include a schedule for the implementation of the BMPs.

Dewatering zone--The zone within a sediment basin where stormwater runoff is held and released in a controlled manner.]

* * * * *

~~[Diversion--A facility, including a channel, terrace or dike] or a conveyance constructed up-slope of [an earth disturbance activity for the purpose of diverting] the disturbed area to divert clean offsite runoff away from [an existing or proposed disturbed area] the earth disturbance activity.]~~

Earth disturbance activity--A construction or other human activity which disturbs the surface of the land, including [,but not limited to,] land clearing and grubbing, grading, excavations, embankments, land development, agricultural plowing or tilling, **operation of animal heavy use areas**, timber harvesting activities, road maintenance activities, **oil and gas activities**, well drilling, mineral extraction, and the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

* * * * *

E & S Permit--Erosion and Sediment Control Permit--A permit required for earth disturbance activities [**of 25 acres (10 hectares) or more**] where the earth disturbance is associated with timber harvesting [**or**], road maintenance activities, **or oil and gas activities**.

E & S Plan--Erosion and Sediment Control Plan--A site-specific plan [**identifying**] consisting of both drawings and a narrative that identifies BMPs to minimize accelerated erosion and sedimentation **before, during and after earth disturbance activities**. [For agricultural plowing or tilling activities, the Erosion and Sediment Control Plan is that portion of a conservation plan identifying BMPs to minimize accelerated erosion and sedimentation.]

~~[Forest Stewardship Plan--A written plan that provides an overview of a woodland property in the context of a landowner's needs and objectives and serves as a means of communicating technical information in a concise form that is useful to the landowner.]~~

Intermittent stream--A body of water flowing in a channel or bed composed primarily of substrates associated with flowing water, which, during periods of the year, is below the local water table and obtains its flow from both surface runoff and groundwater discharges.

~~[K factor--The soil erosion factor used for determining the level of potential erosion based upon soil characteristics.]~~

Licensed professional--Professional engineers, landscape architects, geologists and land surveyors licensed to practice in this Commonwealth.

LONG TERM OPERATION AND MAINTENANCE--THE ROUTINE INSPECTION, MAINTENANCE, REPAIR OR REPLACEMENT OF A BMP TO ENSURE PROPER FUNCTION FOR THE DURATION OF TIME THAT THE BMP IS NEEDED.

Municipality--[(i)] A county, city, borough, town, township, school district, institution or authority **[created by any one or more of the foregoing]** or another public body **created by or pursuant to state law.** [(ii)] For purposes of this definition, town includes an incorporated town.

NOI--Notice of Intent--A request, on a form provided by the Department **[or county conservation district]**, for coverage under a General NPDES Permit for Stormwater Discharges Associated With Construction Activities OR AN E&S PERMIT.

~~[NOT--]~~*Notice of Termination*--A request, on a form provided by the Department, to terminate coverage under a ~~[permit by rule]~~ General or Individual NPDES Permit for Stormwater Discharges Associated With Construction Activities or other permits under this chapter.

NPDES--National Pollutant Discharge Elimination System--The National system for the issuance of permits under section 402 of the Federal Clean Water Act (33 U.S.C.A. § 1342) including a state or interstate program which has been approved in whole or in part by the EPA, **including the regulations codified in Chapter 92 (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance), and as specified in this chapter.**

NPDES Permit for Stormwater Discharges Associated With Construction Activities--A permit required for the discharge or potential discharge of stormwater **[into waters of this Commonwealth]** INTO WATERS OF THIS COMMONWEALTH from construction activities, including clearing and grubbing, grading and excavation activities involving **[5]**~~;~~

~~(i) Equal to or greater than 1~~ ONE (1) acre ~~[and less than 5 acres]~~ ~~(0.4 [to 2] hectares)~~ OR MORE of earth disturbance ACTIVITY ~~[with a point source discharge to surface waters of this Commonwealth,]~~ or an earth disturbance ACTIVITY on any portion, part, or during any stage of, a larger common plan of development or sale that involves ~~[equal to or greater than 1]~~ ONE (1) acre ~~[to less than 5 acres]~~ ~~(0.4 to 2 hectares)~~ OR MORE of earth disturbance ACTIVITY ~~[with a~~

point source discharge to surface waters of this Commonwealth] over the life of the project.

[~~(ii) Five acres (2 hectares) or more of earth disturbance, or an earth disturbance on any portion, part or during any stage of, a larger common plan of development or sale that involves 5 acres (2 hectares) or more of earth disturbance over the life of the project.~~]

Nondischarge alternative--Environmentally sound and cost-effective BMPs that individually or collectively eliminate the net change IN [from preexisting] stormwater volume, rate and quality for storm events up to and including the 2-year/24-hour storm WHEN COMPARED TO THE STORMWATER RATE, VOLUME AND QUALITY PRIOR TO THE EARTH DISTURBANCE ACTIVITIES TO MAINTAIN AND PROTECT THE EXISTING QUALITY OF THE RECEIVING SURFACE WATERS OF THIS COMMONWEALTH.

Normal pool elevation--

(i) For bodies of water which have no structural measures to regulate height of water, the height of water at ordinary stages of low water unaffected by drought.

(ii) For structurally regulated bodies of water, the elevation of the spillway, outlet control, or dam crest which maintains the body of water at a specified height.

(iii) The term does not apply to wetlands.

Oil and gas activities--Earth disturbance associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

Operator--A person who has one or more of the following:

(i) Oversight responsibility of earth disturbance activity on a project site or a portion thereof [which] who has the ability to make modifications to the [Erosion and Sediment Control] E & S Plan, PCSM Plan or site specifications.

(ii) Day-to-day operational control over earth disturbance activity on a project site or a portion thereof to ensure compliance with the [Erosion and Sediment Control] E & S Plan or PCSM Plan.

Perennial stream--A body of water flowing in a channel or bed composed primarily of substrates associated with flowing waters and capable, in the absence of pollution or other manmade stream disturbances, of supporting a benthic macro-invertebrate community which is composed of two or more recognizable taxonomic groups of organisms which are large enough to be seen by the unaided eye and can be retained by a United States Standard No. 30 sieve (28 meshes per inch, 0.595 mm

openings) and live at least part of their life cycles within or upon available substrates in a body of water or water transport system.

* * * * *

Person--[An] Any operator, [natural person, partnership, association or corporation or an agency, instrumentality or entity of Federal or State government, including a municipality] individual, public or private corporation, partnership, association, municipality or political subdivision of this Commonwealth, institution, authority, firm, trust, estate, receiver, guardian, personal representative, successor, joint venture, joint stock company, fiduciary; Department, agency or instrumentality of State, Federal or local government, or an agent or employee thereof; or any other legal entity.

* * * * *

[*Permanent pool*--The area within a sediment basin which is designed to be inundated with water at all times.

Principal spillway--The structure within a sediment basin which controls the discharge of water from the facility.]

[*Point source*--

--(i) Any discernible, confined and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, or vessel or other floating craft, from which pollutants are or may be discharged.

--(ii) The term includes concentrated or channelized flow associated with stormwater.

--(iii) The term does not include sheet flow associated with stormwater.]

Pollutant--Any contaminant or other alteration of the physical, chemical, biological or radiological integrity of surface water which causes or has the potential to cause pollution as defined in section 1 of The Clean Streams Law (35 P. S. § 691.1).

Post construction stormwater--Stormwater associated with a project site after the earth disturbance activity has been completed and the project site is permanently stabilized.

PCSM--Post construction stormwater management.

PCSM Plan--A site-specific plan CONSISTING OF BOTH DRAWINGS AND A NARRATIVE THAT [identifying] IDENTIFIES BMPs to manage changes in stormwater runoff volume, rate and water quality after earth disturbance activities have ended and the project site is permanently stabilized.

PPC Plan--Preparedness, Prevention and Contingency Plan--A written plan that identifies an emergency response program, material and waste inventory, spill and leak prevention and response, inspection program, housekeeping program, security and external factors, AND THAT IS developed and implemented at the construction site to control potential discharges of pollutants other than sediment into waters of this Commonwealth.

Project site--The entire area of activity, development, lease, or sale including:

* * * * *

[ROC--Registration of coverage for the permit by rule]

Road Maintenance Activities—Earth disturbance activities within the existing road cross-section [~~such as grading and repairing existing~~] OR RAILROAD RIGHT-OF-WAY INCLUDING: SHAPING OR RE-STABILIZING unpaved [~~road surfaces~~] ROADS; SHOULDER GRADING; SLOPE STABILIZATION; cutting [~~road banks,~~] OF EXISTING CUT SLOPES; INLET AND ENDWALL CLEANING; RESHAPING AND cleaning [~~or clearing~~] drainage ditches AND SWALES; PIPE CLEANING; PIPE REPLACEMENT; SUPPORT ACTIVITIES INCIDENTAL TO RESURFACING ACTIVITIES SUCH AS MINOR VERTICAL ADJUSTMENT TO MEET GRADE OF RESURFACED AREA; BALLAST CLEANING; LAYING ADDITIONAL BALLAST; REPLACING BALLAST, TIES AND RAILS; and other similar activities. THE EXISTING ROAD CROSS-SECTION CONSISTS OF THE ORIGINAL GRADED AREA BETWEEN THE EXISTING TOES OF FILL SLOPES AND TOPS OF CUT SLOPES ON EITHER SIDE OF THE ROAD AND ANY ASSOCIATED DRAINAGE FEATURES.

RIPARIAN BUFFER—A BMP THAT IS AN AREA OF PERMANENT VEGETATION ALONG SURFACE WATERS.

Riparian forest buffer—A [~~BMP~~] TYPE OF RIPARIAN BUFFER that [~~is an area~~] CONSISTS of permanent vegetation [~~consisting of~~] THAT IS predominantly native trees, shrubs and forbs along surface waters that is maintained in a natural state or sustainably managed to protect and enhance water quality, stabilize stream channels and banks, and [~~buffer~~] SEPARATE land use activities from surface waters.

* * * * *

Sediment--Soils or other **erodible** materials transported by [~~surface water~~]
STORMWATER as a product of erosion.

* * * * *

[Skim--To remove the uppermost portion of water within a sediment basin.]

Soil loss tolerance (T)--The maximum amount of soil loss, in tons/acre/year, that a given soil type can tolerate and still permit a high level of crop production to be sustained economically and indefinitely. [~~Values for~~] T **VALUES** for various soil types may be obtained from the *Pennsylvania Soil and Water Conservation Technical Guide*, USDA NRCS, 1991 (as amended and updated).

Stabilization--The proper placing, grading, constructing, reinforcing, lining, and covering of soil, rock or earth to [~~insure~~] **ensure** their resistance to erosion, sliding or other movement.

Stormwater--Runoff from precipitation, snowmelt, [~~and~~] surface runoff and drainage.

Surface waters--Perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps, and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds, and constructed wetlands used as part of a wastewater treatment process.

* * * * *

Top of streambank--First substantial break in slope between the edge of the bed of the stream and the surrounding terrain. The top of streambank can either be a natural or constructed (that is, road or railroad grade) feature, lying generally parallel to the watercourse.

* * * * *

§ 102.2. Scope and purpose.

(a) This chapter requires persons proposing or conducting earth disturbance activities to develop, implement and maintain BMPs to minimize the potential for accelerated erosion and sedimentation **and to manage post construction stormwater.**

* * * * *

§ 102.4. Erosion and sediment control requirements.

(a) For agricultural plowing or tilling activities **or for animal heavy use areas**, the following erosion and sediment control requirements apply:

* * * * *

(2) Written **[Erosion and Sediment Control]** E & S Plans are required for **THE FOLLOWING ACTIVITIES THAT DISTURB 5,000 SQUARE FEET (464.5 SQUARE METERS) OR MORE OF LAND:**

(i) agricultural plowing or tilling activities; ~~[or for]~~

(ii) animal heavy use areas ~~[that disturb 5,000 square feet (464.5 square meters) or more of land]~~.

(3) The landowner, and any lessee, renter, tenant or other land occupier, conducting or planning to conduct agricultural plowing or tilling activities, **or operating an animal heavy use area**, are jointly and individually responsible for developing a written **[Erosion and Sediment Control]** E & S Plan and implementing and maintaining BMPs, including those identified in the **[Erosion and Sediment Control]** E & S Plan.

(4) The **[Erosion and Sediment Control]** E & S Plan ~~[shall be]~~ **must include cost-effective and reasonable BMPs** designed to minimize the potential for accelerated erosion and sedimentation from agricultural plowing or tilling activities **and animal heavy use areas**.

(i) For agricultural plowing or tilling activities, the E & S Plan must, at a minimum, limit soil loss from accelerated erosion to the soil loss tolerance (T) over the planned crop rotation.

(ii) For agricultural plowing and tilling activities that will occur on fields with less than 25% **PLANT COVER OR CROP RESIDUE** cover and within 100 feet of a river, or perennial or intermittent stream, additional BMPs shall be implemented to minimize accelerated erosion and sedimentation.

(iii) For animal heavy use areas, the E & S Plan must identify BMPs to minimize accelerated erosion and sedimentation. BMPs and their design standards are listed in the current amended and updated version of the appropriate National Resources ~~[conservation]~~ **CONSERVATION** Service conservation practice standards such as Heavy Use Area Protection, Critical Area Planting, Fencing, Wastewater Treatment Strip, Constructed Wetland, Use Exclusion, Animal Trails and Walkways, Diversions, and Roof Runoff Structure.

(5) The **[Erosion and Sediment Control]** E & S Plan ~~[shall]~~ **must contain plan maps [, soils maps,] that show the location of features including surface waters {of this Commonwealth,} and drainage patterns, field and property boundaries, buildings and**

farm structures, animal heavy use areas, roads and crossroads, and BMPs; soils maps; and a description of BMPs including animal heavy use area practices and procedures, tillage systems, schedules, and crop rotations[, and cost effective and technically practical conservation measures]. The plan must be consistent with the current conditions and activities on the agricultural operation.

(6) The E & S Plan must contain an implementation schedule. The plan shall be implemented according to the schedule, and the BMPs shall be operated and maintained as long as there are agricultural plowing or tilling activities or animal heavy use areas, on the agricultural operation.

(7) The portion of a conservation plan that identifies BMPs UTILIZED to minimize accelerated erosion and sedimentation from agricultural plowing or tilling activities, or from operation of animal heavy use areas, may be used to satisfy the E & S Plan requirements of this subsection if it meets the requirements of paragraphs (4)--(6).

(8) The [Erosion and Sediment Control] E & S Plan shall be available for review and inspection at the [project site during each stage of the agricultural plowing or tilling activity] agricultural operation.

(9) Nothing in this section negates the requirements under other provisions of this chapter, such as those applicable to construction activities.

(b) For earth disturbance activities other than agricultural plowing or tilling or animal heavy use areas, the following erosion and sediment control requirements apply:

(1) The implementation and maintenance of [erosion and sediment control] E & S BMPs are required to minimize the potential for accelerated erosion and sedimentation, including [for] those activities which disturb less than 5,000 square feet (464.5 square meters).

(2) A person proposing earth disturbance activities shall develop and implement a written [Erosion and Sediment Control] E & S Plan under this chapter if one or more of the following criteria apply:

* * * * *

(ii) The person proposing the earth disturbance activities is required to develop an [Erosion and Sediment Control] E & S Plan [pursuant to] UNDER this chapter OR under OTHER Department regulations[~~other than those contained in this chapter~~].

* * * * *

(3) The **[Erosion and Sediment Control]** E & S Plan shall be prepared by a person trained and experienced in **[erosion and sediment]** E & S control methods and techniques **[, and shall be designed to minimize the potential for accelerated erosion and sedimentation]** **APPLICABLE TO THE SIZE AND SCOPE OF THE PROJECT BEING DESIGNED.**

(4) **[Earth disturbance activities shall be planned and conducted to minimize the extent and duration of the disturbance.] Unless otherwise authorized by the Department or conservation district after consultation with the Department, earth disturbance activities shall be planned and implemented to the extent practicable in accordance with the following:**

(i) **Minimize the extent and duration of the earth disturbance.**

(ii) **Maximize protection of existing drainage features and vegetation.**

(iii) **Minimize soil compaction.**

(iv) **Utilize other measures or controls that prevent or minimize the generation of increased stormwater runoff.**

~~**[(v) Protect, maintain, reclaim and restore the quality of water and the existing and designated uses of waters within this Commonwealth.]**~~

(5) The **[Erosion and Sediment Control]** E & S Plan **[shall]** **must** contain **drawings and narrative which describe** the following:

* * * * *

(iv) The **[amount]** **volume and rate** of runoff from the project **[area]** site and its upstream watershed area.

(v) The location of **all surface waters** ~~**[of this Commonwealth]**~~ which may receive runoff within or from the project site and their classification under **[to]** Chapter 93.

(vi) A **[written depiction]** **narrative description** of the location and type of perimeter and onsite BMPs used before, during and after the earth disturbance activity.

(vii) A sequence of BMP installation and removal in relation to the scheduling of earth disturbance activities, prior to, during and after earth disturbance activities **that ensure the proper functioning of all BMPs.**

(viii) **Supporting calculations and measurements.**

* * * * *

(x) A maintenance program which provides for **the operation and maintenance of BMPs and the inspection of BMPs** on a weekly basis and after each **[measurable rainfall] stormwater** event, including the repair **OR REPLACEMENT** of **[the]** BMPs to ensure effective and efficient operation. **The program must provide for completion of a written report documenting each inspection and all BMP repair, OR REPLACEMENT and maintenance activities.**

* * * * *

(xii) ~~[Identify]~~ **IDENTIFICATION OF THE** naturally occurring geologic formations or soil conditions that may have the potential to cause pollution during earth disturbance activities and include BMPs to avoid or minimize potential pollution and its impacts from the formations.

(xiii) ~~[Evaluate the]~~ **IDENTIFICATION OF** potential ~~[for]~~ thermal impacts to surface waters **OF THIS COMMONWEALTH** from the earth disturbance activity ~~[and include]~~ **INCLUDING** BMPs to avoid, minimize or mitigate potential pollution from thermal impacts.

(xiv) The E & S Plan shall be planned, designed and implemented to be consistent with the PCSM Plan under § 102.8 (relating to PCSM requirements). Unless otherwise approved by the Department, the E & S Plan must be separate from the PCSM Plan and labeled "E & S" or "Erosion and Sediment Control Plan" and be the final plan for construction.

(xv) ~~[Identify]~~ **IDENTIFICATION OF** existing and proposed riparian forest buffers.

(6) E&S ANTIDegradation Implementation for Special Protection Waters. In order to satisfy the Antidegradation Implementation Requirements of 25 Pa Code Section 93.4c(b), [Where] FOR an earth disturbance activity [may result in a discharge to a water of this Commonwealth] THAT REQUIRES A PERMIT UNDER THIS CHAPTER AND FOR WHICH ANY RECEIVING SURFACE WATERS OF THIS COMMONWEALTH IS classified as High Quality or Exceptional Value ~~[under]~~ **UNDER** Chapter 93, the person proposing the activity shall **IN THEIR PERMIT APPLICATION: [as applicable, use] [the following Special Protection]**

(i) EVALUATE AND INCLUDE nondischarge alternatives **IN THE E&S PLAN, UNLESS A PERSON DEMONSTRATES THAT NONDISCHARGE ALTERNATIVES DO NOT EXIST FOR THE PROJECT.**

(ii) IF THE PERSON MAKES THE DEMONSTRATION IN (i) THAT NONDISCHARGE ALTERNATIVES DO NOT EXIST FOR THE PROJECT, THE E&S PLAN SHALL INCLUDE [and] ABACT, [BMPs to maintain and protect

~~the water from degradation~~[:] **EXCEPT AS PROVIDED IN § 93.4C(b)(1)(iii) (RELATING TO SEJ).**

(iii) **FOR PURPOSES OF THIS CHAPTER, NONDISCHARGE** ~~[Nondischarge]~~ alternatives and ABACT ~~[BMPs]~~ and their design standards are listed in the *Erosion and Sediment Pollution Control Program Manual*, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008 (April 2000), as amended and updated.

(i) Special sediment basin requirements.

(A) Principal spillways shall be designed to skim water from the top 6 inches (15 centimeters) of the dewatering zone, or shall have permanent pools greater than or equal to 18 inches (46 centimeters) deep.

(B) The basin shall be designed with a flow length to basin width ratio of 4:1 or greater.

(C) The basin shall be designed so that it dewateres in at least 4 days and no more than 7 days when at full capacity.

(ii) Channels, collectors and diversions shall be lined with permanent vegetation, rock, geotextile or other nonerosive materials.

(iii) BMPs that divert or carry surface water shall be designed to have a minimum capacity to convey the peak discharge from a 5-year frequency storm.

(iv) Upon completion or temporary cessation of the earth disturbance activity, or any stage thereof, the project site shall be immediately stabilized.

(v) ~~(7)~~ The Department ~~[or county conservation district]~~ may approve alternative BMPs which will maintain and protect existing water quality and existing and designated uses.

~~[(7)](8)~~ The ~~[Erosion and Sediment Control]~~ E & S Plan, **inspection reports and monitoring records** shall be available for review and inspection by the Department or the ~~[county]~~ conservation district at the project site during all stages of the earth disturbance activity.

~~[(8)](9)~~ Upon complaint or site inspection, the Department or ~~[county]~~ conservation district may require that the E & S Plan be submitted for review and approval to ensure compliance with this chapter.

(c) The Department **may require**, or ~~[county]~~ the conservation district **[may require]** **after consultation with the Department** may require, other information necessary to adequately review a plan, or may require ~~[additional]~~ **ALTERNATIVE** BMPs, on a

case-by-case basis, when necessary to ensure the maintenance and protection of water quality and existing and designated uses.

(d) A person proposing or conducting an earth disturbance activity shall obtain the other necessary permits and authorizations from the Department or conservation district, related to the earth disturbance activity, before commencing [with] the earth disturbance activity.

(e) Persons proposing an earth disturbance activity that requires permit coverage under § 102.5 (relating to requirements) shall have permit coverage prior to commencing the earth disturbance activity.

§ 102.5. Permit requirements.

(a) ~~[An NPDES permit stormwater discharges associated with construction activities.~~

~~(1) [Other than agricultural plowing or tilling activities, animal heavy use areas, timber harvesting activities or road maintenance activities, a person proposing an earth disturbance activity that involves equal to or greater than 1 acre [and less than 5 acres] (0.4 [to 2] hectares) of earth disturbance [with a point source discharge to surface waters], or an earth disturbance on any portion, part, or during any stage of, a larger common plan of development or sale that involves equal to or greater than 1 acre [and less than 5 acres] (0.4 [to 2] hectares) of earth disturbance [with a point source discharge to surface waters over the life of the project], shall obtain an individual NPDES Permit or coverage under a general NPDES permit [or NPDES permit by rule] for Stormwater Discharges Associated with Construction Activities prior to commencing the earth disturbance activity.~~

~~[(2) Other than agricultural plowing or tilling activities, animal heavy use areas, timber harvesting activities or road maintenance activities, a person proposing an earth disturbance activity that involves 5 acres (2 hectares) or more of earth disturbance, or an earth disturbance on any portion, part, or during any stage of, a larger common plan of development or sale that involves 5 acres (2 hectares) or more of earth disturbance over the life of the project, shall obtain [a general or] [an individual NPDES Permit for Stormwater Discharges Associated With Construction Activities or coverage under a general NPDES permit or NPDES permit by rule for Stormwater Discharges Associated with Construction Activities prior to commencing the earth disturbance activity.~~

~~—(3) [In addition to other applicable requirements, persons required to obtain an Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities for projects proposed in special protection watersheds shall evaluate and use BMPs in accordance with [the] antidegradation requirements of {Chapter 93 (relating to water quality standards)} 102.4(b)(6) AND 102.8(h) regardless of whether the discharge is new, additional or increased.~~

(b) A person proposing a timber harvesting or road maintenance activity involving 25 acres (10 hectares) or more of earth disturbance shall obtain an **[Erosion and Sediment Control Permit]** E & S Permit under this chapter prior to commencing the earth disturbance activity.

(c) A person proposing oil and gas activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project shall obtain an E & S Permit under this chapter prior to commencing the earth disturbance activity.

(d) Other than agricultural plowing or tilling activities, animal heavy use areas, timber harvesting or road maintenance activities, a person proposing earth disturbance activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project that do not require a permit under subsections (a), (b), AND (c), ~~[(g) and (i)]~~ shall obtain an E & S Permit under this chapter prior to commencing the earth disturbance activity.

(e) For earth disturbance activities authorized by a permit under this chapter, a preconstruction meeting is required unless the permittee has been notified otherwise in writing by the Department or conservation district. The permittee shall ~~[contact]~~ INVITE the Department or conservation district TO ATTEND THE PRECONSTRUCTION MEETING AND MUST PROVIDE at least SEVEN (7) days NOTICE OF THE PRECONSTRUCTION MEETING TO ALL INVITED ATTENDEES[but not more than 30 days prior to the commencement of construction]. Permittees, co-permittees, operators, and licensed professionals or designees responsible for THE EARTH DISTURBANCE ACTIVITY; INCLUDING IMPLEMENTATION OF E&S AND PCSM PLANS AND critical stages of IMPLEMENTATION OF THE APPROVED PCSM PLAN ~~[construction]~~ must attend a preconstruction meeting[along with the Department or conservation district].

(f) A person proposing earth disturbance activities requiring a permit or permit coverage under this chapter shall be responsible to ensure implementation ~~[and long-term operation and maintenance]~~ of the PCSM Plan.

(g) A person proposing or conducting an earth disturbance activity approved under a Department permit issued under a chapter other than Chapter 92 (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance) or this chapter, which includes requirements to comply with Chapter 92 and this chapter, need not obtain an additional **[Erosion and Sediment Control]** E & S Permit or NPDES Permit for Stormwater Discharges Associated With Construction Activities.

(h) Operators who are not the permittee shall be co-permittees.

(i) A person proposing or conducting an earth disturbance activity associated with discharging dredged or fill material to waters of the United States which is required to obtain a permit or coverage under a permit under section 404 of the

Clean Water Act (33 U.S.C.A. § 1344) need not obtain an additional E & S Permit or NPDES Permit for Stormwater Discharges Associated with Construction Activities for the area of disturbance covered by the Clean Water Act section 404 permit.

[(d)](j) A person proposing or conducting agricultural plowing or tilling activities or animal heavy use areas is not required to obtain an [Erosion and Sediment Control] E & S Permit, or an NPDES Permit for Stormwater Discharges Associated With Construction Activities, for these activities under this chapter.

[(e)](k) A person proposing or conducting an earth disturbance activity who is not required to obtain a Permit under this chapter shall comply with the other provisions of this chapter.

(l) A PERSON SHALL PREPARE AND IMPLEMENT A PPC PLAN WHEN STORING, USING OR TRANSPORTING MATERIALS INCLUDING: FUELS, CHEMICALS, SOLVENTS, PESTICIDES, FERTILIZERS, LIME, PETROCHEMICALS, WASTEWATER, WASH WATER, CORE DRILLING WASTEWATER, CEMENT, SANITARY WASTES, SOLID WASTES, OR HAZARDOUS MATERIALS ONTO, ON, OR FROM THE PROJECT SITE DURING EARTH DISTURBANCE ACTIVITIES. THE PPC PLAN SHALL BE AVAILABLE UPON REQUEST BY THE DEPARTMENT OR CONSERVATION DISTRICT.

(m) THE DEPARTMENT MAY ISSUE GENERAL PERMITS FOR ACTIVITIES NOT SUBJECT TO NPDES REQUIREMENTS.

(1) AUTHORIZATION. THE DEPARTMENT MAY ISSUE A GENERAL PERMIT ON A REGIONAL OR STATEWIDE BASIS OR LIMITED TO SPECIFIC WATERSHEDS, PARTICULAR CATEGORIES OF STREAMS OR DESIGNATED GEOGRAPHIC REGIONS, FOR A CATEGORY OF ACTIVITIES NOT SUBJECT TO THE NPDES REQUIREMENTS, BUT REGULATED UNDER THIS CHAPTER, IF THE DEPARTMENT DETERMINES THE FOLLOWING:

(i) THE PROJECTS IN THE CATEGORY ARE SIMILAR IN NATURE.

(ii) THE PROJECTS IN THE CATEGORY CAN BE ADEQUATELY REGULATED UTILIZING STANDARDIZED SPECIFICATIONS AND CONDITIONS, INCLUDING REFERENCE TO SPECIFIC CRITERIA AND REQUIREMENTS ADOPTED BY ANOTHER FEDERAL OR STATE AGENCY WHICH ADEQUATELY REGULATE THE PARTICULAR CATEGORY OF ACTIVITIES.

(iii) THE PROJECTS WHICH ARE IN THE CATEGORY AND MEET THE SPECIFICATIONS AND CONDITIONS WILL COMPLY WITH THE REQUIREMENTS OF THIS CHAPTER.

(iv) THE PROJECTS WHICH ARE IN THE CATEGORY IN THE OPINION OF THE DEPARTMENT, ARE MORE APPROPRIATELY CONTROLLED UNDER A GENERAL PERMIT THAN UNDER INDIVIDUAL PERMITS.

(v) THE PROJECTS WHICH ARE IN THE CATEGORY INDIVIDUALLY AND CUMULATIVELY DO NOT HAVE THE POTENTIAL TO CAUSE SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACT.

(2) CONTENTS OF GENERAL PERMITS. EACH GENERAL PERMIT ISSUED BY THE DEPARTMENT WILL INCLUDE THE FOLLOWING CONTENTS:

(i) A CONCISE DESCRIPTION OF THE CATEGORY OF ACTIVITY COVERED BY THE GENERAL PERMIT, INCLUDING EXCEPTIONS TO THAT CATEGORY.

(ii) A SPECIFICATION OF THE WATERSHEDS, STREAMS OR GEOGRAPHIC AREAS WHERE THE GENERAL PERMIT IS EFFECTIVE.

(iii) A SET OF STANDARDIZED SPECIFICATIONS FOR THE PARTICULAR CATEGORY OF ACTIVITY OR A REFERENCE TO SPECIFIC CRITERIA AND REQUIREMENTS ADOPTED BY ANOTHER FEDERAL OR STATE AGENCY WHICH ADEQUATELY REGULATES THE PARTICULAR CATEGORY OF ACTIVITY.

(iv) A SET OF CONDITIONS GOVERNING THE ACTIVITIES, OPERATION, MAINTENANCE, INSPECTION AND MONITORING OF THE PROJECTS COVERED BY THE GENERAL PERMIT AS ARE NECESSARY TO ASSURE COMPLIANCE WITH THIS CHAPTER AND WITH OTHER LAWS ADMINISTERED BY THE DEPARTMENT.

(v) A SPECIFICATION OF THE PROCESS FOR OBTAINING COVERAGE UNDER AND AUTHORIZATION TO USE THE GENERAL PERMIT.

(3) PROCEDURE FOR ISSUANCE.

(i) AT LEAST 30 DAYS PRIOR TO ISSUANCE OF A GENERAL PERMIT, THE DEPARTMENT:

(A) WILL PUBLISH NOTICE IN THE PENNSYLVANIA BULLETIN OF INTENT TO ISSUE A GENERAL PERMIT, INCLUDING THE TEXT OF THE PROPOSED GENERAL PERMIT.

(B) WILL PROVIDE AN OPPORTUNITY FOR INTERESTED MEMBERS OF THE PUBLIC, FEDERAL AND STATE AGENCIES TO PROVIDE WRITTEN COMMENTS ON A PROPOSED GENERAL PERMIT.

(C) MAY, AT ITS DISCRETION, HOLD A PUBLIC HEARING ON A PROPOSED GENERAL PERMIT FOR THE PURPOSES OF GATHERING INFORMATION AND COMMENTS.

(ii) UPON ISSUANCE OF A GENERAL PERMIT, THE DEPARTMENT WILL PLACE A NOTICE IN THE PENNSYLVANIA BULLETIN OF THE AVAILABILITY OF THE GENERAL PERMIT.

(4) COMPLIANCE WITH PERMIT CONDITIONS, REGULATIONS AND LAWS. A PERSON WHO CONDUCTS AN ACTIVITY PURSUANT TO A GENERAL PERMIT ISSUED UNDER THIS SUBSECTION SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE GENERAL PERMIT, WITH THIS CHAPTER AND OTHER APPLICABLE LAWS.

(5) ADMINISTRATION OF GENERAL PERMITS. GENERAL PERMITS MAY BE ISSUED, AMENDED, SUSPENDED, REVOKED, REISSUED OR TERMINATED UNDER THIS CHAPTER. ISSUANCE OF A GENERAL PERMIT DOES NOT EXEMPT A PERSON FROM COMPLIANCE WITH THIS TITLE.

(6) DENIAL OF COVERAGE. THE DEPARTMENT MAY DENY, REVOKE, SUSPEND OR TERMINATE COVERAGE UNDER A GENERAL PERMIT FOR FAILURE TO COMPLY WITH THE CLEAN STREAMS LAW, THIS CHAPTER OR THE CONDITIONS OF THE GENERAL PERMIT AND THE DEPARTMENT MAY REQUIRE THE PERSON TO APPLY FOR AN INDIVIDUAL PERMIT.

§ 102.6. Permit applications and fees.

(a) *Permit requirements.* A person proposing or conducting an earth disturbance activity which requires [an Erosion and Sediment Control Permit or an NPDES Permit for Stormwater Discharges Associated with Construction Activities] a permit under § 102.5 (relating to permit requirements), shall:

(1) Submit to the Department or a [county] conservation district a complete application OR NOI [or notice of intent] [~~or-ROC~~], an [Erosion and Sediment Control] E & S Plan meeting the requirements of § 102.4 (relating to erosion and sediment control requirements), a PCSM Plan meeting the requirements of § 102.8 (relating to PCSM requirements), and other information the Department may require. UNLESS OTHERWISE SPECIFIED IN THIS CHAPTER, FOR NPDES

PERMITS, THE APPLICATION OR NOI MUST ALSO MEET THE REQUIREMENTS CONTAINED IN CHAPTER 92.

(2) Provide proof of consultation with the Pennsylvania Natural **[Diversity Inventory (PNDI)] Heritage Program (PNHP)** regarding the presence of a State or Federal threatened or endangered species on the project site. If the Department or **[county]** conservation district determines, based upon **[PNDI] PNHP** data or other sources, that the proposed earth disturbance activity may adversely impact the species or critical habitat, the person proposing the earth disturbance activity shall consult with the Department or **[county]** conservation district to avoid or prevent the impact. If the impact cannot be avoided or prevented, the person proposing the activity shall demonstrate how the impacts will be minimized in accordance with State and Federal laws pertaining to the protection of threatened or endangered flora and fauna and **[its] THEIR** habitat.

~~**[(3) Prepare and implement a PPC Plan when storing, using or transporting materials including: fuels, chemicals, solvents, pesticides, fertilizers, lime, petrochemicals, wastewater, wash water, core drilling wastewater, cement, sanitary wastes, solid wastes, or hazardous materials onto, on, or from the project site during earth disturbance activities. The PPC Plan shall be available upon request by the Department or conservation district.]**~~

(b) *Permit fees.*

(1) **[Erosion and Sediment Control Permit applications for timber harvesting and road maintenance activities shall be accompanied by an application fee of \$500.**

(2) **Applications and Notices of Intent for an NPDES Permit for Stormwater Discharges Associated with Construction Activities shall be submitted and accompanied by the fee established pursuant to Chapter 92 (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance).]**

A person submitting a permit application~~[,]~~ **OR NOI [or ROC]** shall submit a fee as follows: **A \$500 ADMINISTRATIVE FILING FEE FOR GENERAL PERMITS AND A \$1, 500 ADMINISTRATIVE FILING FEE FOR INDIVIDUAL PERMITS. IN ADDITION, \$100 FOR EACH DISTURBED ACRE IS REQUIRED TO BE ADDED TO THE BASE ADMINISTRATIVE FILING FEE FOR PROJECTS OF ONE ACRE OR GREATER OF DISTURBANCE. THE FEES WILL BE CALCULATED BASED UPON THE FOLLOWING FORMULA: BASE FEE PLUS \$100 FOR EACH DISTURBED ACRE. FOR FRACTIONAL ACREAGE, THE ACREAGE SHALL BE ROUNDED TO THE CLOSEST WHOLE NUMBER.**

~~**[(i) NPDES permit by rule—\$2,500.**~~

~~**—(ii) General NPDES Permit—\$2,500.**~~

~~(iii) Individual NPDES Permit \$5,000.~~

~~(iv) General E & S Permit \$2,500.~~

~~(v) Individual E & S Permit \$5,000.]~~

(2) The Department will review the adequacy of the fees established in this section at least once every 3 years and provide a written report to the EQB. The report will identify any disparity between the amount of program income generated by the fees and the costs to administer these programs, and contain recommendations to adjust fees to eliminate the disparity, including recommendations for regulatory amendments.

(3) Conservation districts may charge additional fees in accordance with section 9 (13) of the Conservation District Law (3 P. S. § 857(13)).

(4) ANY FEDERAL OR STATE AGENCY OR INDEPENDENT STATE COMMISSION THAT PROVIDES FUNDING FOR PROGRAM ADMINISTRATION BY THE DEPARTMENT THROUGH TERMS AND CONDITIONS OF A MUTUAL AGREEMENT MAY BE EXEMPT FROM THE FEES IN THIS SECTION.

(5) FEES COLLECTED BY THE DEPARTMENT OR CONSERVATION DISTRICT UNDER THIS CHAPTER WILL BE DEPOSITED INTO A RESTRICTED REVENUE ACCOUNT KNOWN AS THE CLEAN WATER FUND AND UTILIZED TO OFFSET THE OPERATING COSTS TO ADMINISTER THE PROGRAM.

(c) *Complete applications or NOI.*

(1) An application or NOI for a permit is not complete until the necessary information and requirements under The Clean Streams Law (35 P. S. § 691.1--691.1001) and this chapter have been satisfied by the applicant.

(2) When the Department OR CONSERVATION DISTRICT determines that an application or NOI is incomplete or contains insufficient information to determine compliance with this chapter, it will notify the applicant in writing. The applicant shall have 60 days to PROVIDE THE INFORMATION NECESSARY TO complete the application or NOI, or the Department OR CONSERVATION DISTRICT will consider the application to be withdrawn by the applicant. Requests for a specific extension may be sought by the applicant in writing. The applicant will be notified in writing when an application or NOI is considered withdrawn. When an application or NOI is considered withdrawn, the Department OR CONSERVATION DISTRICT will close the application file and take no [further] action to review the file.

(3) IF THE APPLICATION HAS BEEN WITHDRAWN IN ACCORDANCE WITH (c)(2) [the incomplete or deficient application is returned or withdrawn,] the fees associated with filing the application will not be refunded.

§ 102.7. Permit termination.

(a) Upon permanent stabilization of the earth disturbance activity under § 102.22[(c)](a)(2) (relating to permanent stabilization), AND INSTALLATION OF BMPS IN ACCORDANCE WITH AN APPROVED PLAN PREPARED AND IMPLEMENTED IN ACCORDANCE WITH §§ 102.4 AND 102.8 (RELATING TO E&S AND PCSM REQUIREMENTS), the ~~[person who obtains permit coverage under this chapter]~~ PERMITTEE OR CO-PERMITTEE shall submit a notice of termination to the Department or [county] conservation district.

(b) The notice of termination [shall] must include:

* * * * *

(5) ~~[An identification]~~ IDENTIFICATION of the persons who HAVE AGREED TO AND WHO will be responsible for LONG TERM operation and maintenance of the PCSM BMPs in accordance with SECTION 102.8 (m) [the approved PCSM Plan], AND PROOF OF COMPLIANCE WITH 102.8(m)(2).

(c) Until the permittee OR CO-PERMITTEE has received written ~~[acknowledgement]~~ APPROVAL OF [an] A NOTICE OF TERMINATION, the permittee OR CO-PERMITTEE will remain responsible for compliance with the permit terms and conditions including LONG TERM operation and maintenance of all PCSM BMPs on the project site and is responsible for violations occurring on the project site. THE DEPARTMENT OR CONSERVATION DISTRICT WILL CONDUCT A FINAL INSPECTION AND APPROVE OR DENY THE NOTICE OF TERMINATION WITHIN 30 DAYS.

§ 102.8. PCSM requirements.

(a) PCSM APPLICABILITY. [A] AFTER THE EFFECTIVE DATE OF THIS CHAPTER, A person proposing [an] A NEW earth disturbance activity that requires [NPDES] permit coverage under this chapter or other NEW Department permit that requires compliance with this chapter shall be responsible to ensure that a written PCSM Plan is developed, implemented, operated and maintained[.] IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION. A PERSON CONDUCTING EARTH DISTURBANCE ACTIVITIES PURSUANT TO A PERMIT ISSUED BEFORE THE EFFECTIVE DATE OF THIS CHAPTER AND RENEWED PRIOR TO JANUARY 1, 2013, SHALL IMPLEMENT, OPERATE AND MAINTAIN THE PCSM REQUIREMENTS IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE EXISTING PERMIT. AFTER JANUARY 1, 2013, THE RENEWAL OF ANY PERMIT ISSUED BEFORE THE EFFECTIVE

DATE OF THIS CHAPTER, SHALL COMPLY WITH THE REQUIREMENTS OF THIS SECTION.

(b) **GENERAL PCSM PLANNING AND DESIGN.** The management of post construction stormwater shall be planned and conducted to the extent practicable in accordance with the following:

- (1) Preserve the integrity of stream channels and **MAINTAIN AND** protect the physical, biological and chemical qualities of the receiving stream.
- (2) Prevent an increase in the rate of stormwater runoff.
- (3) Minimize any increase in stormwater runoff volume.
- (4) Minimize impervious areas.
- (5) Maximize the protection of existing drainage features and existing vegetation.
- (6) Minimize land clearing and grading.
- (7) Minimize soil compaction.
- (8) Utilize other ~~[measures or controls]~~ **STRUCTURAL OR NON-STRUCTURAL BMPS** that prevent or minimize ~~[the generation of increased]~~ **CHANGES IN** stormwater runoff ~~[and pollutants]~~.

~~[(9) Protect, maintain, reclaim and restore the quality of water and the existing and designated uses of waters within this Commonwealth.]~~

(c) **CONSISTENCY WITH E&S PLAN.** The PCSM Plan shall be planned, designed and implemented to be consistent with the E & S Plan under § 102.4(b) (relating to erosion and sediment ~~[and]~~ control requirements).

(d) **SEPARATE PLAN.** Unless otherwise approved by the Department, the PCSM Plan must be separate from the E & S Plan and labeled "PCSM" or "Post Construction Stormwater Management Plan" and be the final plan for construction.

(e) **PCSM PLAN PREPARER REQUIREMENTS.** The PCSM Plan shall be prepared by a person trained and experienced in PCSM design methods and techniques **APPLICABLE TO THE SIZE AND SCOPE OF THE PROJECT BEING DESIGNED.**

(f) **PCSM PLAN CONTENTS.** The PCSM Plan must contain drawings and A narrative **CONSISTENT WITH THE** requirements ~~[as described within]~~ **OF** this chapter ~~[and other supporting documentation]~~. The PCSM Plan shall be designed to

minimize the threat to human health, safety and the environment to the greatest extent practicable. PCSM Plans must contain at a minimum the following:

- (1) The existing topographic features of the project site and the immediate surrounding area.
- (2) The types, depth, slope, locations and limitations of the soils and geologic formations.
- (3) The characteristics of the project site, including the past, present and proposed land uses and the proposed alteration to the project site.
- (4) Identification of the net change in volume and rate of stormwater from preconstruction hydrology to post construction hydrology for the entire project site and each drainage area.
- (5) Identification of the location of surface waters OF THIS COMMONWEALTH, which may receive runoff within or from the project site and their classification under Chapter 93 (relating to water quality standards).
- (6) A written description of the location and type of PCSM BMPs including construction details for permanent stormwater BMPs including permanent stabilization specifications and locations.
- (7) A sequence of PCSM BMP implementation or installation in relation to earth disturbance activities of the project site and a schedule of inspections for critical stages of PCSM BMP installation.
- (8) Supporting calculations.
- (9) Plan drawings.
- (10) A [long-term] LONG TERM operation and maintenance schedule, which provides for inspection of PCSM BMPs, including the repair, replacement, or other routine maintenance of the PCSM BMPs to ensure [effective and efficient] PROPER FUNCTION AND operation. The program must provide for completion of a written report documenting each inspection and all BMP repair and maintenance activities and how access to the PCSM BMPs will be provided.
- (11) [Identification of the persons responsible for long-term operation and maintenance of the PCSM BMPs].
- (12) Procedures, which ensure that the proper measures for [the] recycling or disposal of materials associated with or from the PCSM BMPs are in accordance with Department laws, regulations and requirements.

~~((13)~~12) Identification of naturally occurring geologic formations or soil conditions that may have the potential to cause pollution after earth disturbance activities are completed and PCSM BMPs are operational~~[s]~~ and development of a management plan to avoid or minimize potential pollution and its impacts.

~~((14)~~13) ~~[An evaluation]~~ IDENTIFICATION of potential thermal impacts from post construction stormwater to surface waters OF THIS COMMONWEALTH ~~[and inclusion]~~ INCLUDING BMPs to avoid, minimize or mitigate potential pollution from thermal impacts.

~~((15)~~14) A riparian forest buffer management plan when required under § 102.14 (relating to riparian ~~[forest]~~ buffer requirements).

~~((16)~~15) Additional information requested by the Department.

(g) PCSM PLAN STORMWATER ANALYSIS. EXCEPT FOR REGULATED ACTIVITIES THAT REQUIRE SITE RESTORATION OR RECLAMATION, AND SMALL EARTH DISTURBANCE ACTIVITIES IDENTIFIED IN SUBPARAGRAPH (n), PCSM Plans for proposed activities requiring a permit under this chapter require the following additional information:

(1) ~~[Analytical testing and assessment]~~ PREDEVELOPMENT SITE CHARACTERIZATION AND ASSESSMENT of soil~~[s]~~ AND geology~~[, and other predevelopment site characteristics]~~ including APPROPRIATE infiltration and geotechnical studies that identify location and depths of test sites and methods used.

(2) Analysis demonstrating that the PCSM BMPs will meet the volume reduction and water quality requirements specified in an applicable Department approved and current Act 167 stormwater management watershed plan; or manage the net change for storms up to and including the 2-year/24-hour storm event when compared to preconstruction runoff volume and water quality. The analysis for the 2-year/24-hour storm event shall be conducted using the following minimum criteria:

(i) Existing predevelopment nonforested pervious areas must be considered meadow in good condition or its equivalent EXCEPT FOR REPAIR, RECONSTRUCTION, OR RESTORATION OF ROADWAYS OR RAIL LINES, OR CONSTRUCTION, REPAIR, RECONSTRUCTION, OR RESTORATION OF UTILITY INFRASTRUCTURE WHEN THE SITE WILL BE RETURNED TO EXISTING CONDITION.

(ii) When the existing project site contains impervious area, 20% of the existing impervious area to be disturbed must be considered meadow in good condition or better, except for repair, reconstruction or restoration of roadways~~[s]~~ or RAIL LINES, OR CONSTRUCTION, REPAIR, RECONSTRUCTION, OR

RESTORATION OF utility infrastructure[s] when the site will be returned to existing condition.

(iii) WHEN THE EXISTING SITE CONTAINS IMPERVIOUS AREA AND THE EXISTING SITE CONDITIONS HAVE PUBLIC HEALTH, SAFETY OR ENVIRONMENTAL LIMITATIONS, THE APPLICANT MAY DEMONSTRATE TO THE DEPARTMENT THAT IT IS NOT PRACTICABLE TO SATISFY THE REQUIREMENT IN (ii), BUT THE STORMWATER VOLUME REDUCTION AND WATER QUALITY TREATMENT WILL BE MAXIMIZED TO THE EXTENT PRACTICABLE IN ORDER TO MAINTAIN AND PROTECT EXISTING WATER QUALITY AND EXISTING AND DESIGNATED USES.

(iv) APPROACHES OTHER THAN THAT REQUIRED BY (g)(2) MAY BE PROPOSED BY THE APPLICANT WHEN THE APPLICANT DEMONSTRATES TO THE DEPARTMENT THAT THE ALTERNATIVE WILL EITHER BE MORE PROTECTIVE THAN REQUIRED BY (g)(2) OR WILL MAINTAIN AND PROTECT EXISTING WATER QUALITY AND EXISTING AND DESIGNATED USES BY MAINTAINING THE SITE HYDROLOGY, WATER QUALITY, AND EROSION IMPACTS OF THE CONDITIONS PRIOR TO INITIATION OF ANY EARTH DISTURBANCE ACTIVITIES.

(3) Analysis demonstrating that the PCSM BMPs will meet the rate requirements specified in an applicable Department approved and current Act 167 stormwater management watershed plan; or manage the net change in peak rate for the 2-, [5-] 10-, [25-] 50-, and 100-year/24-hour storm events in a manner not to exceed preconstruction rates.

(i) Hydrologic COMPUTATIONS OR A routing analysis [is] ARE required to demonstrate THAT this requirement HAS BEEN [is] met.

(ii) Exempt from this requirement are Department approved direct discharges to tidal areas or Department-approved no detention areas.

(iii) APPROACHES OTHER THAN THAT REQUIRED BY (g)(3) MAY BE PROPOSED BY THE APPLICANT WHEN THE APPLICANT DEMONSTRATES TO THE DEPARTMENT THAT THE ALTERNATIVE WILL EITHER BE MORE PROTECTIVE THAN REQUIRED BY (g)(3) OR WILL MAINTAIN AND PROTECT EXISTING WATER QUALITY AND EXISTING AND DESIGNATED USES BY MAINTAINING THE PRECONSTRUCTION SITE HYDROLOGIC IMPACT.

(4) [Identify] IDENTIFICATION OF the methodologies for calculating the total runoff volume and peak rate of runoff and provide supporting documentation and calculations.

(5) ~~[Construction]~~ IDENTIFICATION OF CONSTRUCTION techniques or special considerations to address soil and geologic limitations.

(6) The Department may require, or after consultation with the Department a conservation district may require^[3] additional information necessary to adequately review a PCSM Plan or may require additional BMPs, on a case-by-case basis, when necessary to ensure the RESTORATION, maintenance and protection of water quality and existing and designated uses.

(h) PCSM IMPLEMENTATION FOR SPECIAL PROTECTION WATERS. IN ORDER TO SATISFY THE ANTIDEGRADATION IMPLEMENTATION REQUIREMENTS OF 25 PA CODE SECTION 93.4c(b), AN EARTH DISTURBANCE ACTIVITY THAT REQUIRES A PERMIT UNDER THIS CHAPTER AND FOR WHICH ANY RECEIVING WATER THAT IS ~~[When a PCSM Plan is being developed for an activity that may result in a discharge to a water of this Commonwealth]~~ classified as High Quality or Exceptional Value under Chapter 93, the person proposing the activity shall IN THEIR PERMIT APPLICATION: [use]

(1) EVALUATE AND INCLUDE nondischarge ALTERNATIVES IN THE PCSM PLAN UNLESS A PERSON DEMONSTRATES THAT NONDISCHARGE ALTERNATIVES DO NOT EXIST FOR THE PROJECT.

(2) IF THE PERSON MAKES THE DEMONSTRATION IN (1) THAT NONDISCHARGE ALTERNATIVES DO NOT EXIST FOR THE PROJECT, THE PCSM PLAN SHALL INCLUDE ~~[and] ABACT, [BMPs to maintain and protect the water from degradation,]~~ EXCEPT AS PROVIDED IN § 93.4c(b)(1)(iii) (RELATING TO SEJ).

(3) FOR PURPOSES OF THIS CHAPTER, ~~[Specifically, the person proposing the activity shall use PCSM BMPs that collectively achieve no net change when compared to preconstruction discharges, in stormwater runoff volume, rate and water quality during storm events up to and including the 2-year/24-hour storm event. Nondischarge]~~ NONDISCHARGE alternatives and ABACT ~~[BMPs]~~ and their design standards are listed in the *Pennsylvania Stormwater Best Management Practices Manual* Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated.

(i) COMPLAINT OR SITE INSPECTION. Upon complaint or site inspection, the Department or conservation district may require that the PCSM Plan be submitted for review and approval to ensure compliance with this chapter.

(j) PCSM REPORTING AND RECORDKEEPING. The PCSM Plan, inspection reports and monitoring records shall be available for review and inspection by the Department or the conservation district.

(k) LICENSED PROFESSIONAL OVERSIGHT OF CRITICAL STAGES. A licensed professional or a designee shall be present onsite and SHALL be responsible during critical stages of implementation of the approved PCSM Plan. THE CRITICAL STAGES MAY INCLUDE THE INSTALLATION OF ~~[including]~~ underground treatment or storage BMPs, structurally engineered BMPs, or other BMPs as deemed appropriate by the Department OR THE CONSERVATION DISTRICT.

(l) FINAL CERTIFICATION. The permittee shall include with the notice of termination "Record Drawings" with a final certification statement from a licensed professional, which reads as follows:

"I (name) do hereby certify pursuant to the penalties of 18 Pa.C.S.A. § 4904 to the best of my knowledge, information and belief, that the accompanying record drawings accurately reflect the ~~[redline drawings]~~ AS-BUILT CONDITIONS, are true and correct, and are in conformance with Chapter 102 of the rules and regulations of the Department of ~~[Environment]~~ ENVIRONMENTAL Protection and that the project site was constructed in accordance with the approved PCSM Plan, ALL APPROVED PLAN CHANGES and accepted construction practices."

(1) The permittee shall retain a copy of the record drawings as a part of the approved PCSM Plan.

(2) The permittee shall provide a copy of the record drawings as a part of the approved PCSM Plan to the person identified in this section as being responsible for the LONG TERM operation and maintenance of the PCSM BMPs.

(m) PCSM LONG TERM OPERATION AND MAINTENANCE REQUIREMENTS.

(1) THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG TERM OPERATION AND MAINTANENCE OF PCSM BMPS UNLESS ~~[Unless]~~ a different person is IDENTIFIED IN THE NOTICE OF TERMINATION AND HAS AGREED TO LONG TERM OPERATION AND MAINTENANCE OF PCSM BMPS] ~~approved in writing by the Department, operation and maintenance of PCSM BMPs shall be the responsibility of the landowner of the property where the PCSM BMP is located].~~

(2) ~~[The deed for]~~ FOR any property containing a PCSM BMP, ~~[shall]~~ THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM BMP AND THE RELATED OBLIGATIONS IN THE ORDINANRY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST identify the PCSM BMP, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG TERM OPERATION AND MAINTENANCE FOR PCSM BMPS and provide notice that the responsibility for

LONG TERM operation and maintenance of the PCSM BMP is a covenant that runs with the land ~~[and]~~ that is BINDING UPON AND enforceable by subsequent grantees, AND PROVIDE PROOF OF FILING WITH THE NOTICE OF TERMINATION UNDER 102.7(b)(5).

(3) FOR COMMONWEALTH OWNED-PROPERTY, A COVENANT THAT RUNS WITH THE LAND IS NOT REQUIRED UNTIL THE TRANSFER OF THE LAND CONTAINING A PCSM BMP OCCURS. UPON TRANSFER OF THE COMMONWEALTH OWNED-PROPERTY CONTAINING A PCSM BMP, THE DEED SHALL COMPLY WITH THE REQUIREMENTS CONTAINED IN THIS SUBSECTION.

(4) THE PERSON RESPONSIBLE FOR PERFORMING LONG TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM BMPs OR TO PERFORM LONG TERM OPERATION AND MAINTENANCE AND PROVIDE NOTICE THEREOF TO THE DEPARTMENT.

(5) A ~~[grantor]~~ PERMITTEE OR CO-PERMITTEE that fails to TRANSFER LONG TERM OPERATION AND MAINTENANCE OF THE PCSM BMP OR OTHERWISE FAILS TO comply with this requirement shall remain jointly AND SEVERALLY responsible with the landowner for LONG TERM operation and maintenance of the PCSM BMPs located on the property.

(n) *REGULATED ACTIVITIES THAT REQUIRE SITE RESTORATION OR RECLAMATION, AND SMALL EARTH DISTURBANCE ACTIVITIES.* The portion of a site reclamation or restoration plan that identifies PCSM BMPs to manage stormwater from oil and gas activities or mining activities permitted in accordance with Chapters ~~[77]~~ 78 and 86--90]; TIMBER HARVESTING ACTIVITIES; PIPELINES; OTHER SIMILAR UTILITY INFRASTRUCTURE; DEPARTMENT PERMITTED ACTIVITIES INVOLVING LESS THAN ONE ACRE OF EARTH DISTURBANCE; or ~~[a plan for]~~ abandoned mine land reclamation activities, THAT REQUIRE COMPLIANCE WITH THIS CHAPTER, may be used to satisfy the ~~[PCSM Plan]~~ requirements of this section if the PCSM, reclamation OR RESTORATION plan meets the requirements of subsections (b), (c), (e), (f), (h), (i), AND (l), and WHERE APPLICABLE (m).

EROSION AND SEDIMENT CONTROL AND POST CONSTRUCTION STORMWATER MANAGEMENT BMPs

§ 102.11. General requirements.

(a) **BMP AND DESIGN STANDARDS.** A person conducting or proposing to conduct an earth disturbance activity shall [design]:

(1) **Design**, implement and maintain E & S BMPs to minimize the potential for accelerated erosion and sedimentation [in order] to protect, maintain, reclaim and restore water quality and existing and designated uses. Various E & S BMPs and their design standards are listed in the *Erosion and Sediment Pollution Control Program Manual* (Manual), Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008 [(January 1996)] (April 2000), as amended and updated.

(2) If required to develop a PCSM Plan, design, implement and maintain PCSM BMPs to mimic preconstruction stormwater runoff conditions to protect, maintain, reclaim and restore water quality and existing and designated uses. Various PCSM BMPs and their design standards are listed in the *Pennsylvania Stormwater Best Management Practices Manual* (Stormwater BMP Manual), Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated.

(3) If required to develop a riparian forest buffer, design, implement and maintain the buffer in accordance with § 102.14 (relating to riparian [forest] buffer requirements). Various design, construction, and maintenance standards are listed in the *Riparian Forest Buffer Guidance*, (Buffer Guidance), Commonwealth of Pennsylvania, Department of Environmental Protection, No. 395-5600-001 (2009), as amended and updated.

(4) IF REQUIRED TO DEVELOP A PPC PLAN, THE PERSON SHALL DESIGN, IMPLEMENT, AND MAINTAIN THE PPC PLAN TO PROTECT WATERS OF THE COMMONWEALTH FROM DISCHARGES OF POLLUTANTS FROM ACCIDENTAL SPILLS, RELEASES OR OTHER ACTIVITIES AND MUST MEET THE REQUIREMENTS IDENTIFIED IN CHAPTER 91. GUIDANCE FOR PPC PLANS IS INCLUDED IN THE GUIDELINES FOR THE DEVELOPMENT AND IMPLEMENTATION OF ENVIRONMENTAL EMERGENCY RESPONSE PLANS, COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION, NO. 400-2200-001, AS AMENDED AND UPDATED.

(b) **ALTERNATIVE BMP AND DESIGN STANDARDS.** BMPs and design standards other than those listed in the [Manual] Manuals or Buffer Guidance may be used when a person conducting or proposing to conduct an earth disturbance activity demonstrates to the Department [or a county conservation district] that the alternate BMP or design standard minimizes accelerated erosion and sedimentation or manages stormwater during and after the completion of earth disturbance activities to achieve the regulatory standards in subsection (a).

(c) INCORPORATION OF FEDERAL EFFLUENT LIMITATION GUIDELINES AND STANDARDS FOR THE CONSTRUCTION AND DEVELOPMENT POINT

SOURCE CATEGORY, 40 CFR PART 450. ACTIVITIES REQUIRING AN NPDES PERMIT UNDER THIS CHAPTER SHALL ALSO COMPLY WITH THE FEDERAL REGULATORY REQUIREMENTS UNDER 40 CFR PART 450, INCLUDING ALL APPENDICES THERETO, WHICH ARE INCORPORATED BY REFERENCE TO THE EXTENT THAT THESE PROVISIONS ARE APPLICABLE AND NOT CONTRARY TO PENNSYLVANIA LAW. IN THE EVENT OF ANY CONFLICT AMONG FEDERAL AND PENNSYLVANIA REGULATORY PROVISIONS, THE PROVISION EXPRESSLY SET OUT IN THIS CHAPTER SHALL BE UTILIZED UNLESS THE FEDERAL PROVISION IS MORE STRINGENT.

(d) THE PROVISIONS OF THIS CHAPTER ADOPTED BY THE EQB ON (editor's note add EQB adoption date), ARE EFFECTIVE (editor's note add the date ninety days after date of publication, and add citation from *Pa Bulletin*).

§ 102.14 Riparian [~~forest~~] buffer requirements.

(a) General requirements *FOR MANDATORY RIPARIAN BUFFERS*. EXCEPT AS IN ACCORDANCE WITH PARAGRAPH (d), PERSONS PROPOSING OR CONDUCTING EARTH DISTURBANCE ACTIVITIES WHERE THE ACTIVITY REQUIRES A PERMIT UNDER THIS CHAPTER SHALL:

(1) NOT CONDUCT EARTH DISTURBANCE ACTIVITIES WITHIN 150 FEET OF A PERENNIAL OR INTERMITTENT RIVER, STREAM, OR CREEK, OR LAKE, POND OR RESERVOIR WHERE THE PROJECT SITE IS LOCATED IN AN EXCEPTIONAL VALUE OR HIGH QUALITY WATERSHED ATTAINING ITS DESIGNATED USE AS LISTED BY THE DEPARTMENT AT THE TIME OF APPLICATION AND SHALL PROTECT ANY EXISTING RIPARIAN BUFFER IN ACCORDANCE WITH THIS SECTION; OR

(2) WHERE THE PROJECT SITE IS LOCATED IN AN EXCEPTIONAL VALUE OR HIGH QUALITY WATERSHED WHERE THERE ARE WATERS FAILING TO ATTAIN ONE OR MORE DESIGNATED USES AS LISTED IN CATEGORY 4 OR 5 ON PENNSYLVANIA'S INTEGRATED WATER QUALITY MONITORING AND ASSESSMENT REPORT, AS AMENDED AND UPDATED, AT THE TIME OF THE APPLICATION, AND THE PROJECT SITE CONTAINS, IS ALONG OR WITHIN 150 FEET OF A PERENNIAL OR INTERMITTENT RIVER, STREAM, OR CREEK, LAKE, POND OR RESERVOIR SHALL, IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION:

(i) PROTECT AN EXISTING RIPARIAN FOREST BUFFER; OR

(ii) CONVERT AN EXISTING RIPARIAN BUFFER TO A RIPARIAN FOREST BUFFER; OR

(iii) ESTABLISH A NEW RIPARIAN FOREST BUFFER.

~~[(1)](b)~~ *Riparian forest buffer CRITERIA. TO QUALIFY AS A RIPARIAN FOREST BUFFER UNDER THIS CHAPTER, AN EXISTING, CONVERTED OR NEWLY ESTABLISHED RIPARIAN FOREST BUFFER, WHETHER MANDATORY OR VOLUNTARY, MUST MEET THE FOLLOWING REQUIREMENTS RELATED TO COMPOSITION, WIDTH AND MANAGEMENT: [Persons proposing or conducting earth disturbance activities shall incorporate a riparian forest buffer within the boundaries of the project site in accordance with this section if one of the following apply:*

~~—(i) The activity requires a permit under this chapter, is located within an Exceptional Value watershed, and the project site contains, is along or within, 150 feet of a river, stream, creek, lake, pond or reservoir.~~

~~—(ii) The activity is authorized utilizing the permit by rule under this chapter.~~

~~—(2) Other approvals that include buffer. A riparian forest buffer may be required to be incorporated within the boundaries of a project site in accordance with this section by other rules, regulations, order, permit or other approval of the Department.~~

~~—(3) Discharges into the buffer. Concentrated flow and accelerated erosion and sedimentation shall be managed in the area upgrade and along the riparian forest buffer in accordance with §§ 102.4(b) —(e) and § 102.8 (relating to erosion and sediment control requirements; and PCSM requirements).~~

~~—(4) Existing buffer composition. An existing riparian forest buffer must: meet the requirements of subsection (d); consist predominantly of native trees and shrubs that provide at least 60% uniform canopy cover; noxious weeds and invasive species must be removed or controlled to the extent possible.~~

~~—(5) Existing site enhancement. Existing sites that consist of predominantly native woody vegetation that do not meet all of the criteria in paragraph (3) shall be enhanced or widened, or both, by additional plantings in open spaces around existing native trees and shrubs to establish a riparian forest buffer. Noxious weeds and invasive species shall be removed or controlled to the extent possible.~~

~~—(6) Buffer establishment. On sites with no native woody vegetation, a riparian forest buffer shall be established in accordance with this chapter.~~

~~—(7) Wetlands and buffers. Wetlands located in the riparian forest buffer shall be protected and maintained consistent with Chapter 105 (relating to dam safety and waterway management).~~

~~—(8) Plan submission. The applicant shall prepare and submit a plan for riparian forest buffer management to the Department or conservation district as part of the PCSM Plan. The riparian forest buffer management plan must describe how the management requirements of this section will be met.~~

~~—(b)(1) Composition. A RIPARIAN FOREST BUFFER IS A RIPARIAN BUFFER THAT CONSISTS PREDOMINANTLY OF NATIVE TREES, SHRUBS AND FORBS THAT PROVIDE AT LEAST 60% UNIFORM CANOPY COVER. AN EXISTING RIPARIAN FOREST BUFFER DOES NOT HAVE TO BE ALTERED TO ESTABLISH INDIVIDUAL ZONES 1 AND 2 UNDER (b)(1)(iii), BUT AT A MINIMUM, MUST HAVE A TOTAL AGGREGATE WIDTH OF THE COMBINED ZONES UNDER (b)(2).~~

~~(i) EXISTING RIPARIAN BUFFER CONVERSION TO A RIPARIAN FOREST BUFFER. RIPARIAN BUFFERS THAT CONSIST PREDOMINANTLY OF NATIVE WOODY VEGETATION BUT DO NOT SATISFY THE COMPOSITION OF (b)(1)(i) OR THE WIDTH REQUIREMENTS OF (b)(2) SHALL BE ENHANCED OR WIDENED OR BOTH BY ADDITIONAL PLANTINGS IN OPEN SPACES AROUND EXISTING NATIVE TREES AND SHRUBS THAT PROVIDE AT LEAST 60% UNIFORM CANOPY COVER. AN EXISTING RIPARIAN FOREST BUFFER DOES NOT HAVE TO BE ALTERED TO ESTABLISH INDIVIDUAL ZONES 1 AND 2 UNDER (b)(1)(iii), BUT AT A MINIMUM, MUST HAVE A TOTAL AGGREGATE WIDTH OF THE COMBINED ZONES UNDER (b)(2). NOXIOUS WEEDS AND INVASIVE SPECIES SHALL BE REMOVED OR CONTROLLED TO THE EXTENT POSSIBLE.~~

~~(ii) RIPARIAN FOREST BUFFER [establisement] ESTABLISHMENT. ON SITES WITH NO NATIVE WOODY VEGETATION, A RIPARIAN FOREST BUFFER SHALL BE ESTABLISHED AND SHALL BE COMPOSED OF ZONES IN ACCORDANCE WITH (b)(1)(iii), AND SHALL MEET THE WIDTH REQUIREMENTS OF (b)(2). NOXIOUS WEEDS AND INVASIVE SPECIES SHALL BE REMOVED OR CONTROLLED TO THE EXTENT POSSIBLE.~~

~~[(1) Buffer zones. At a minimum, newly established riparian forest buffers must be composed of two distinct zones, Zones 1 and 2 (See paragraph (2) regarding zones). Concentrated flow and accelerated erosion and sedimentation shall be managed in the area upgrade and along the riparian forest buffer in accordance with this subsection and subsections (c) – (e) and § 102.8.~~

~~—(2)(iii) Zones.~~

(A) Zone 1. Undisturbed NATIVE [forest] [(trees)] TREES must begin at the top of the streambank or normal pool elevation of a lake, pond or reservoir and occupy a strip of land measured horizontally on a line perpendicular from the top of

streambank or normal pool elevation of a lake, pond or reservoir. Predominant vegetation must be composed of a variety of native riparian tree species.

(B) *Zone 2. Managed NATIVE [forest] [(trees and shrubs)] TREES AND SHRUBS* must begin at the landward edge of Zone 1 and occupy an additional strip of land measured horizontally on a line perpendicular from the top of streambank or normal pool elevation of a lake, pond or reservoir. Predominant vegetation must be composed of a variety of native riparian tree and shrub species.

[(c) *Measurements.* Riparian forest buffers must be measured horizontally with no more than a 10% variation below the minimum width from the normal pool elevation for lake, pond or reservoir and from top of streambank or top of slope for streams].

[(d)](2) *Average minimum widths.*

[(1)](i) *[All waters] WATERS OTHER THAN SPECIAL PROTECTION. A TOTAL OF ONE [One] hundred feet (30.5 METERS), COMPRISED OF [(50 feet (15.2 METERS) IN Zone 1 and 50 feet (15.2 METERS) IN Zone 2 for newly established riparian forest buffers)] along all rivers, perennial or intermittent streams [(both sides)], lakes, ponds or reservoirs. [Concentrated flow and accelerated erosion and sedimentation shall be managed in the area upgrade and along the riparian forest buffer in accordance with §§ 102.4(b)–(c) and § 102.8.]*

[(2) *Impaired waters.* One hundred fifty feet (75 feet Zone 1 and 75 feet Zone 2 on newly established riparian forest buffers) along all rivers, perennial or intermittent streams (both sides), lakes, ponds or reservoirs. Concentrated flow and accelerated erosion and sedimentation shall be managed in the area upgrade and along the riparian forest buffer in accordance with §§ 102.4(b)–(c) and 102.8.]

[(3)](ii) *Special protection waters. A TOTAL OF ONE [One] hundred fifty feet (45.7 METERS), COMPRISED OF [(75)50 feet (15.2 METERS) IN Zone 1 and [75]100 feet (30.5 METERS) IN Zone 2 on newly established riparian forest buffers)] ALONG [special protection waters (High Quality and Exceptional Value designations) on] all rivers, perennial or intermittent streams [(both sides), and the shoreline of] lakes, [and] ponds OR RESERVOIRS IN SPECIAL PROTECTION WATERS (HIGH QUALITY AND EXCEPTIONAL VALUE DESIGNATIONS). [Concentrated flow and accelerated erosion and sedimentation shall be managed in the area upgrade and along the riparian forest buffer in accordance with §§ 102.4(b)–(c) and 102.8.]*

[(4) *Existing buffer width.* Existing riparian forest buffers must meet minimum aggregate widths of this chapter.]

[(5)](iii) *Average RIPARIAN FOREST buffer width.* The average riparian forest buffer width shall be calculated based upon the entire length of streambank or

shoreline that is located within OR ALONG the boundaries of the project site. When calculating the buffer length the natural streambank or shoreline shall be followed.

[(e)](3) Management requirements.

[(1) Both existing and newly established riparian forest buffers, including wetlands and floodplains, shall be managed and maintained to enhance and maximize the unique value of these resources.]

(2) EXISTING, CONVERTED AND NEWLY [Newly] established riparian forest buffers [and sites with existing woody vegetation] shall be managed in accordance with [the] A riparian forest buffer management plan IN SUBSECTION 102.14(b)(4) and [until established vegetation consists of predominantly native trees and shrubs that provide at least 60% uniform canopy cover and noxious weeds and invasive species have been removed or controlled to the extent possible for a period of at least (5) years.] WILL BE PROTECTED IN ACCORDANCE WITH PARAGRAPH (g).

(4) MANAGEMENT PLAN. THE RIPARIAN FOREST BUFFER MANAGEMENT PLAN SHALL BE A PART OF THE PCSM PLAN AND INCLUDE AT A MINIMUM:

(i) A PLANTING PLAN FOR CONVERTED OR NEWLY ESTABLISHED RIPARIAN FOREST BUFFERS THAT IDENTIFIES THE NUMBER, DENSITY, AND SPECIES OF NATIVE TREES AND SHRUBS APPROPRIATE TO GEOGRAPHIC LOCATION THAT WILL ACHIEVE 60% UNIFORM CANOPY COVER.

(ii) A MAINTENANCE SCHEDULE AND MEASURES FOR CONVERTED OR NEWLY ESTABLISHED RIPARIAN FOREST BUFFERS TO ENSURE SURVIVAL AND GROWTH OF PLANTINGS AND PROTECTION FROM COMPETING PLANTS AND ANIMALS INCLUDING NOXIOUS WEEDS AND INVASIVE SPECIES OVER A FIVE (5) YEAR ESTABLISHMENT PERIOD INCLUDING ACTIVITIES OR PRACTICES USED TO MAINTAIN THE RIPARIAN FOREST BUFFER INCLUDING THE DISTURBANCE OF EXISTING VEGETATION, TREE REMOVAL, SHRUB REMOVAL, CLEARING, MOWING, BURNING OR SPRAYING IN ACCORDANCE WITH LONG TERM OPERATION AND MAINTENANCE.

(iii) AN INSPECTION SCHEDULE AND MEASURES TO ENSURE LONG TERM MAINTENANCE AND PROPER FUNCTIONING OF RIPARIAN FOREST BUFFERS MEETING THE REQUIREMENTS OF § 102.14(b)(1), INCLUDING MEASURES TO REPAIR DAMAGE TO THE BUFFER FROM STORM EVENTS GREATER THAN THE 2 YEAR/24 HOUR STORM.

(c) MANDATORY REQUIREMENTS FOR ALL RIPARIAN BUFFERS.

(1) MANAGEMENT OF STORMWATER INTO THE RIPARIAN BUFFER. STORMWATER AND ACCELERATED EROSION AND SEDIMENTATION SHALL BE MANAGED IN ACCORDANCE WITH §§ 102.4(b)--(e) AND § 102.8 (RELATING TO EROSION AND SEDIMENT CONTROL REQUIREMENTS; AND PCSM REQUIREMENTS) SO AS TO ENSURE THAT STORMWATER ENTERS THE AREA UPGRADE AND ALONG THE RIPARIAN BUFFER AS SHEET FLOW OR SHALLOW CONCENTRATED FLOW DURING STORM EVENTS UP TO AND INCLUDING THE 2 YEAR/24 HOUR STORM.

(2) WETLANDS. WETLANDS LOCATED IN THE RIPARIAN BUFFER SHALL BE PROTECTED AND MAINTAINED CONSISTENT WITH CHAPTER 105 (RELATING TO DAM SAFETY AND WATERWAY MANAGEMENT).

(3) MEASUREMENTS. RIPARIAN BUFFERS MUST BE MEASURED HORIZONTALLY AND PERPENDICULARLY TO THE BANK WITH NO MORE THAN A 10% VARIATION BELOW THE MINIMUM WIDTH FROM THE NORMAL POOL ELEVATION FOR LAKE, POND OR RESERVOIR AND FROM TOP OF STREAMBANK.

(d) EXCEPTIONS.

(1) THE REQUIREMENTS OF 102.14(a) DO NOT APPLY FOR EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH THE FOLLOWING:

(i) A PROJECT SITE LOCATED GREATER THAN 150 FEET (45.7 METERS) FROM A RIVER, STREAM, CREEK, LAKE, POND OR RESERVOIR;

(ii) ACTIVITIES INVOLVING LESS THAN ONE (1) ACRE (0.4 HECTARES) OF EARTH DISTURBANCE;

(iii) ACTIVITIES WHERE PERMIT COVERAGE IS NOT REQUIRED UNDER THIS CHAPTER;

(iv) ACTIVITIES WHERE A PERMIT OR AUTHORIZATION FOR THE EARTH DISTURBANCE ACTIVITY REQUIRED UNDER THIS CHAPTER WAS OBTAINED, OR APPLICATION SUBMITTED PRIOR TO THE EFFECTIVE DATE OF THIS REGULATION;

(v) ROAD MAINTENANCE ACTIVITIES SO LONG AS ANY EXISTING RIPARIAN BUFFER IS UNDISTURBED TO THE EXTENT PRACTICABLE;

(vi) THE REPAIR AND MAINTENANCE OF EXISTING PIPELINES AND UTILITIES SO LONG AS ANY EXISTING RIPARIAN BUFFER IS UNDISTURBED TO THE EXTENT PRACTICABLE;

(vii) OIL AND GAS, TIMBER HARVESTING, OR MINING ACTIVITIES FOR WHICH SITE RECLAMATION OR RESTORATION IS PART OF THE PERMIT AUTHORIZATION IN ACCORDANCE WITH 25 Pa. CODE CHAPTERS 78 AND 86-90, AND THIS CHAPTER SO LONG AS ANY EXISTING RIPARIAN BUFFER IS UNDISTURBED TO THE EXTENT PRACTICABLE; OR

(viii) A SINGLE FAMILY HOME THAT IS NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE AND THE PARCEL WAS ACQUIRED BY THE APPLICANT PRIOR TO THE EFFECTIVE DATE OF THESE REGULATIONS.

(ix) ACTIVITIES AUTHORIZED BY A DEPARTMENT PERMIT UNDER ANOTHER CHAPTER OF THIS TITLE WHICH CONTAINS SETBACK REQUIREMENTS, AND THE ACTIVITY COMPLIES WITH THOSE SETBACK REQUIREMENTS.

(2) FOR EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH THE FOLLOWING, THE DEPARTMENT, OR THE CONSERVATION DISTRICT AFTER CONSULTATION WITH THE DEPARTMENT, MAY GRANT A WAIVER FROM ANY OF THE REQUIREMENTS OF 102.14(a) AND (b) UPON A DEMONSTRATION BY THE APPLICANT THAT THERE ARE REASONABLE ALTERNATIVES FOR COMPLIANCE WITH THIS SECTION, SO LONG AS ANY EXISTING RIPARIAN BUFFER IS UNDISTURBED TO THE EXTENT PRACTICABLE AND THAT THE ACTIVITY WILL OTHERWISE MEET THE REQUIREMENTS OF THIS CHAPTER:

(i) THE PROJECT IS NECESSARY TO ABATE A SUBSTANTIAL THREAT TO THE PUBLIC HEALTH OR SAFETY;

(ii) LINEAR PROJECTS WHICH MAY INCLUDE PIPELINES, PUBLIC ROADWAYS, RAIL LINES, OR UTILITY LINES;

(iii) ABANDONED MINE RECLAMATION ACTIVITIES THAT ARE CONDUCTED PURSUANT TO DEPARTMENT AUTHORIZATION OR PERMIT;

(iv) PROJECTS OF A TEMPORARY NATURE WHERE THE SITE WILL BE FULLY RESTORED TO ITS PRE-EXISTING CONDITION DURING THE TERM OF THE PERMIT UNDER THIS CHAPTER;

(v) REDEVELOPMENT PROJECTS WHICH MAY INCLUDE BROWNFIELDS OR USE OF OTHER VACANT LAND AND PROPERTY WITHIN A DEVELOPED AREA FOR FURTHER CONSTRUCTION OR DEVELOPMENT; OR

(vi) PROJECTS FOR WHICH COMPLIANCE WITH THE REQUIREMENTS OF 102.14(a) OR (b) IS NOT APPROPRIATE OR FEASIBLE DUE TO SITE CHARACTERISTICS, OR EXISTING STRUCTURES AT THE PROJECT SITE.

(3) THE APPLICANT SHALL SUBMIT A WRITTEN REQUEST FOR A WAIVER TO THE DEPARTMENT OR THE CONSERVATION DISTRICT AS PART OF THE APPLICATION FOR A PERMIT UNDER THIS CHAPTER.

(4) AN APPLICANT REQUESTING A WAIVER MAY PROPOSE AND THE DEPARTMENT MAY ALLOW OFFSITE PROTECTION, CONVERSION, OR ESTABLISHMENT OF RIPARIAN FOREST BUFFERS OR IN-LIEU-OF COMPENSATION TO FUND RIPARIAN FOREST BUFFER PROTECTION, ENHANCEMENT OR ESTABLISHMENT.

(5) PROJECTS QUALIFYING FOR AN EXCEPTION UNDER THIS SUBSECTION ARE NOT RELIEVED FROM COMPLIANCE WITH OTHER APPLICABLE REQUIREMENTS OF THIS CHAPTER OR OTHER LAWS ADMINISTERED BY THE DEPARTMENT.

(e) UTILIZATION OF RIPARIAN FOREST BUFFERS.

(1) ANTIDegradation PRESUMPTION. EXCEPT FOR RIPARIAN BUFFERS PROTECTED PURSUANT TO SUBSECTION (a)(1) OR (d), A RIPARIAN FOREST BUFFER MEETING THE REQUIREMENTS OF THIS SECTION WILL PREVENT THERMAL IMPACTS AND IS A NONDISCHARGE ALTERNATIVE. WHEN INCLUDED IN AN E&S PLAN OR PCSM PLAN MEETING THE REQUIREMENTS OF THIS CHAPTER, THE PROPOSED EARTH DISTURBANCE ACTIVITY WILL SATISFY THE REQUIREMENTS OF 102.4(b)(6) AND 102.8(h), UNLESS DATA OR INFORMATION PROVIDED OR AVAILABLE TO THE DEPARTMENT DURING THE PERMIT APPLICATION OR AUTHORIZATION REVIEW PROCESS SHOWS THAT THE PROPOSED EARTH DISTURBANCE ACTIVITY WILL DEGRADE WATER QUALITY.

(2) TRADING OR OFFSETTING CREDITS. EXCEPT FOR RIPARIAN BUFFERS PROTECTED PURSUANT TO SUBSECTION (a)(1) OR (d) WHERE PROTECTION OF EXISTING, OR CONVERSION, OR THE ESTABLISHMENT OF A RIPARIAN FOREST BUFFER WHICH MEETS THE REQUIREMENTS OF THIS SECTION AND IS ABOVE BASELINE REGULATORY REQUIREMENTS, CREDITS MAY BE AVAILABLE FOR TRADING OR OFFSETS IN ACCORDANCE WITH ANY PROCEDURES ESTABLISHED BY THE DEPARTMENT OR ANY REGULATIONS RELATED TO TRADING OR OFFSETTING DEVELOPED UNDER THIS TITLE.

(3) VOLUNTARY RIPARIAN FOREST BUFFER. PERSONS THAT PROTECT, CONVERT OR ESTABLISH A NEW RIPARIAN FOREST BUFFER MEETING

THE REQUIREMENTS OF THIS SECTION, MAY QUALIFY FOR BENEFITS UNDER SUBSECTION (1) OR (2).

(f) ACTIVITIES WITHIN A RIPARIAN BUFFER.

(1)

~~[(3)]~~ The following practices and activities are prohibited within the riparian ~~[forest]~~ buffer:

(i) Soil disturbance by grading, stripping of topsoil, plowing, cultivating or other practices EXCEPT AS ALLOWED IN SUBPARAGRAPH (f)(3)(i).

(ii) Draining by ditching, underdrains or other drainage systems.

(iii) Housing, grazing or otherwise maintaining animals FOR AGRICULTURAL OR COMMERCIAL PURPOSES.

(iv) Storing or stockpiling materials.

(v) Off road vehicular travel.

~~[(4)](2)~~ The following practices and activities are ~~[acceptable]~~ ALLOWABLE in the riparian ~~[forest]~~ buffer when ~~[permitted]~~ AUTHORIZED by the Department:

(i) Construction or placement of roads, bridges, trails, storm drainage, utilities or other structures.

(ii) Water obstructions or encroachments.

(iii) RESTORATION PROJECTS.

~~[(5)](3)~~ The following practices and activities are ~~[allowable]~~ ALLOWED within the riparian ~~[forest]~~ buffer:

(i) Activities or practices used to maintain the riparian ~~[forest]~~ buffer including the disturbance of existing vegetation, AND tree AND SHRUB removal, [shrub removal,] AS NEEDED TO ALLOW FOR NATURAL SUCCESSION OF NATIVE VEGETATION AND PROTECTION OF PUBLIC HEALTH AND SAFETY ~~[clearing, mowing, burning or spraying in accordance with the long-term operation and maintenance plan].~~

~~[(ii) Restoration projects, facilities, emergency response and other activities approved by the Department.~~

~~—(iii) Scientific studies approved by the Department, including water quality monitoring and stream gauging.~~

~~[(iv)](ii) Timber harvesting [operations only in Zone 2, as described in this section, that maintain at least 60% uniform canopy cover of predominantly native trees and shrubs and are identified in a Forest Stewardship Plan approved by the Department of Conservation and Natural Resources]~~ ACTIVITIES IN ACCORDANCE WITH THE RIPARIAN FOREST BUFFER MANAGEMENT PLAN AS PART OF THE PCSM PLAN.

~~[(v)](iii) Passive~~ OR LOW IMPACT recreational activities SO LONG AS THE FUNCTIONING OF THE RIPARIAN BUFFER IS MAINTAINED.

(iv) EMERGENCY RESPONSE AND OTHER SIMILAR ACTIVITIES.

(v) RESEARCH AND DATA COLLECTION ACTIVITIES, WHICH MAY INCLUDE WATER QUALITY MONITORING AND STREAM GAUGING.

~~[(f)](g)~~ *Permanent protection of riparian [forest] buffers.*

(1) Existing, CONVERTED and newly established riparian [forest] buffers including access easements must be protected in perpetuity through deed restriction, conservation easement, local ordinance, ~~[or]~~ permit conditions OR ANY OTHER MECHANISMS THAT ENSURE THE LONG TERM FUNCTIONING AND INTEGRITY OF THE RIPARIAN BUFFER.

(2) For any existing or newly established riparian [forest] buffer, the boundary limits of the riparian [forest] buffer must be identified and clearly marked.

~~[(g)](h)~~ *Reporting.* [Permittees] PERSONS WHO PROTECT AN EXISTING, CONVERT, OR ESTABLISH A RIPARIAN BUFFER IN ACCORDANCE WITH THIS SECTION shall complete data forms provided by the Department [for newly established and existing riparian forest buffers] and SHALL submit [them] THE FORMS to the Department or conservation district [as part of the PCSM Plan] WITHIN ONE YEAR OF ESTABLISHMENT OR PROTECTION.

[§ 102.15. Permit by rule for low impact projects with riparian forest buffers.

~~—(a) Qualifying for coverage. Persons proposing or conducting an earth disturbance activity requiring a permit authorization under this chapter shall qualify for permit coverage under this rule if they meet the requirements of this section, which supersede any requirements of Chapter 92 (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance). An earth disturbance activity that requires a permit authorization under this chapter that is not consistent with this section shall obtain coverage under a general or individual NPDES Permit~~

for Discharges Associated with Construction Activities or other E & S control permit under this chapter prior to commencing the earth disturbance activity.

—(b) Permit-by-rule exclusions. The following sites or the activities associated with the project are not eligible for coverage under the permit-by-rule:

—(1) Projects located in or with the potential to discharge to waters that have a designated or existing use of Exceptional Value under Chapter 93 (relating to water quality standards).

—(2) Earth disturbance activities conducted in or on the following sensitive areas:

—(i) Highly erodible conditions (soils in combination with percent slope) as follows:

—(A) 3% to 8% slope with soil K factor greater than 0.37.

—(B) 8% to 15% slope with soil K factor greater than 0.28.

—(C) 15% slope with soil K factor greater than 0.18.

—(ii) Geological formations that present a risk to public health, safety and the environment including:

—(A) Sinkhole development.

—(B) Land sliding.

—(C) With the significant potential to cause or contribute to pollution when disturbed; including acid, radioactive and arsenic bearing formations.

—(iii) Wetlands or floodplains, unless earth disturbance in these areas is required for access and utilities and is authorized under Chapter 105 or 106 (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance; and floodplain management).

—(3) Lands that are currently contaminated from a spill or release of a hazardous material, or hazardous, toxic, or other regulated substance, as these terms are defined in this title, that pose a risk or threat to public health, safety, or the environment.

—(4) The earth disturbance is being proposed or conducted by a person who has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit and schedule of compliance or order issued by the Department.

~~—(5) The earth disturbance activities or potential discharges will adversely affect a Pennsylvania or federal endangered or threatened species.~~

~~—(c) *Permit conditions.* Persons conducting earth disturbance activities under this permit shall meet the following requirements:~~

~~—(1) Persons seeking coverage under permit-by-rule shall first schedule a presubmission meeting with the Department or the conservation district prior to submitting an ROC. The meeting shall also be attended by the professional engineer, geologist or landscape architect registered in this Commonwealth that will be responsible for project design and the operator when known. At the presubmission meeting, the registrant shall provide:~~

~~—(i) A site location map (United States Geologic Survey or equivalent) including:~~

~~—(A) All waters of this Commonwealth and water quality classifications under Chapter 93 (relating to water quality standards);~~

~~—(B) Existing site conditions;~~

~~—(C) Limits of earth disturbance activities;~~

~~—(D) Preliminary site design;~~

~~—(E) Total project acres and boundaries;~~

~~—(ii) A presubmission meeting checklist using a form provided by the Department.~~

~~—(2) When the project site contains, is along, or within 100 feet of a river, stream, creek, lake, pond or reservoir, the registrant shall:~~

~~—(i) Establish new or preserve existing riparian forest buffers at least 100 feet in width between the top of streambank or normal pool elevation of a lake, pond or reservoir and areas of earth disturbance;~~

~~—(ii) Establish new or preserve existing riparian forest buffers at least 150 feet in width between the top of streambank or normal pool elevation of a lake, pond or reservoir and disturbed areas for projects located in high-quality or impaired watersheds;~~

~~—(iii) Design or maintain, or both, a riparian forest buffer in accordance with *Riparian Forest Buffer Guidance*, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 395-5600-001 (2009), as amended and updated;~~

~~—(3) The earth disturbance must not exceed 15 acres at a time. If the total disturbed area will exceed 15 acres over the life of the project, earth disturbance~~

shall be sequenced in a manner that provides for stabilization prior to disturbance of subsequent phases.

—(4) Earth disturbance activities on any portion, part, or during any stage of, a larger common plan of development or sale over the life of the project must meet the requirements and be covered under a single ROC.

—(i) Any significant new or increased changes to the earth disturbance activities that are not included in the original ROC shall be submitted to the Department or conservation district through an amended ROC in accordance with this section.

—(ii) The new or increased earth disturbance activities may not commence until receipt of written verification of coverage.

—(5) Analysis demonstrating that the PCSM BMPs will: meet the volume reduction and water quality requirements specified in an applicable Department approved and current Act 167 stormwater management watershed plan; or manage the net change for storms up to and including the 2-year/24-hour storm event when compared to preconstruction runoff volume and water quality. The analysis for the 2-year/24-hour storm event shall be conducted using the following minimum criteria:

—(i) Existing predevelopment nonforested pervious areas must be considered meadow in good condition or its equivalent.

—(ii) When the existing project site contains impervious area, 20% of the existing impervious area to be disturbed must be considered meadow in good condition or better, except for repair, reconstruction, or restoration of roadways or utility infrastructure when the site will be returned to existing condition.

—(6) Analysis demonstrating that the PCSM BMPs will: meet the rate requirements specified in an applicable Department approved and current Act 167 stormwater management watershed plan; or manage the net change in peak rate for the 2-, 5-, 10-, 25-, 50-, and 100-year/24-hour storm events in a manner not to exceed preconstruction rates.

—(i) Hydrologic routing analysis is required to demonstrate this requirement is met.

—(ii) Exempt from this requirement are Department approved direct discharges to tidal areas or Department approved no detention areas.

—(7) Retain the services of a professional engineer, geologist or landscape architect registered in this Commonwealth who shall:

—(i) Prepare and seal E & S and PCSM Plans to be submitted with the ROC which contain the following certification:

"I (name) do hereby certify, pursuant to the penalties of 18 Pa.C.S.A. § 4904, to the best of my knowledge, information and belief that the ROC, E & S and PCSM Plans are true and correct, and are in conformance with Chapter 102 of the rules and regulations of the Department of Environmental Protection."

—(ii) Identify in the E & S and PCSM Plans a schedule of inspections for critical stages of E & S and PCSM BMP installation and provide oversight responsibility during construction of those critical stages.

—(iii) Oversee and seal any necessary modifications to E & S and PCSM Plans; and submit copies of modified plans to the Department or conservation district.

—(iv) Prepare and seal record drawings and provide certification that the E & S and PCSM BMPs were installed consistent with E & S and PCSM Plans submitted with the ROC.

—(8) Upon receipt of the Verification of Coverage, the registrant shall notify the Department or conservation district at least 7 business days before commencing construction.

—(9) The registrant or co-registrant shall have the E & S Plan, PPC Plan, PCSM Plan, and other documents required by this permit by rule available at the site for review by the Department, conservation district, or other authorized local, State or Federal government official.

—(10) The registrant shall implement the plans developed and verified in accordance with this section.

—(11) The registrant or an agent shall notify the Department or conservation district at least 3 days prior to critical stages of E & S and PCSM BMP installation.

—(d) *Projects located in High Quality watersheds or watersheds impaired for sediment or stormwater.*

—(1) *Watersheds.* Permit-by-rule registrants proposing projects that are located in watersheds that have a designated or existing use of high quality, or nonspecial protection waters impaired for sediment or stormwater shall demonstrate that all construction and post construction discharges will not degrade the physical, chemical or biological characteristics of the surface waters and may not utilize the social or economic justification process established under § 93.4c(b)(iii) (relating to implementation of antidegradation requirements). In addition to the 150-foot riparian forest buffer, registrants shall utilize solely nondischarge alternative BMPs in their E & S and PCSM Plans.

—(2) *Public notice.*

~~—(i) The registrant shall provide a public notice once a week for 3 consecutive weeks in at least one newspaper of general circulation within the geographical area of the project site prior to submission for the ROC. The contents of every public notice must include the following:~~

~~—(A) The name, address and phone number of the registrant.~~

~~—(B) A 30-day period following publication of the notice during which written comments may be submitted by interested persons to the applicant.~~

~~—(C) A brief description of each registrant's activities and project location which result in the discharge proposed for the permit-by-rule.~~

~~—(D) The name of the receiving water and watershed to which each discharge is made and a short description of the location of each discharge on the waterway indicating whether the discharge is a new or an existing discharge.~~

~~—(E) The location of the nearest downstream potable water supply, or a finding that no potable water supply will be affected by the proposed discharge.~~

~~—(F) The means by which interested persons may comment upon the proposed project.~~

~~—(G) Contact information including the name, address and phone number where interested persons may obtain further information regarding the project.~~

~~—(H) The existing or designated use of the receiving surface water under Chapter 93.~~

~~—(ii) The registrant shall provide proof that public notice has been published in a newspaper of general circulation covering the locality or localities in which the activity is or will be located. The proof of public notice, along with any comments and responses, shall be submitted with the ROC.~~

~~—(c) *Municipal notification.* At least 30 days prior to submission of the ROC, the registrant shall provide written notification to every municipality in which the proposed earth disturbance activity will be located under section 1905-A of The Administrative Code of 1929 (71 P. S. § 510-5). Proof of this notification shall be submitted with the complete ROC.~~

~~—(f) *Written E & S Plan, PCSM Plan and PPC Plan.* The registrant shall develop an E & S Plan, PCSM Plan and PPC Plan in accordance with the requirements of this chapter and the following:~~

~~—(1) The E & S BMPs required by this section shall be designed and implemented to meet the standards and specifications identified in the Department's *Erosion and*~~

Sediment Pollution Control Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008 (April 2000), as amended and updated.

—(2) PCSM BMPs shall be designed and implemented to meet the standards and specifications identified in the Pennsylvania Stormwater Best Management Practices Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated.

—(3) Both the E & S Plan and the PCSM Plan must include a riparian forest buffer designed in accordance with § 102.14 (relating to riparian forest buffer requirements) and this section.

—(4) Both the E & S Plan and PCSM Plan must minimize the accelerated erosion and sedimentation and must use PCSM BMPs that collectively achieve no net change when compared to preconstruction discharges in stormwater runoff volume, rate and water quality. This shall be accomplished first through the use of site design and nonstructural BMP approaches, and if necessary, structural filtration, infiltration and runoff control BMPs in accordance with Erosion and Sediment Pollution Control Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008 (April 2000), and Stormwater Best Management Practices Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated.

—(5) Both the E & S Plan and PCSM Plan shall be prepared and sealed by a professional engineer, geologist or landscape architect registered in this Commonwealth.

—(6) Prepare a PPC Plan in accordance with Guidelines for the Development and Implementation of Environmental Emergency Response Plans, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 400-2200-001 (April 2001), as amended and updated.

—(g) E & S Plan for the permit-by-rule. The E & S Plan submitted under this section must meet the requirements of § 102.4 (relating to erosion and sediment control requirements) and also include the following categories of E & S BMPs to be installed and maintained. The installation of BMPs shall be conducted in the following sequence:

—(1) Site preparation, sensitive area and buffer protection. Prior to commencement of any earth disturbance activity including clearing and grubbing, the registrant shall clearly delineate sensitive areas, riparian forest buffer boundaries, areas proposed for infiltration practices, the limits of clearing, and trees that are to be conserved within the project site and install appropriate barriers where equipment may not be parked, staged, operated or located for any purpose.

~~—(2) *Site access.* This is the first land-disturbance activity to take place at the site and the registrant should provide BMPs to minimize accelerated erosion and sedimentation from the following areas: entrance to the site, construction routes, and areas designated for equipment or other use at the site including parking areas and soil stockpiles.~~

~~—(3) *Sediment barriers.* The registrant shall install perimeter BMPs after the construction site is accessed, keeping associated clearing and grubbing limited to only that amount required for installing perimeter BMPs.~~

~~—(4) *Diversion.* The registrant shall include outlet protection, constructed to divert upslope clean water runoff around the disturbed area (when necessary).~~

~~—(5) *Sediment basins and traps.* Outlet protection included shall be constructed prior to the remaining clearing/grubbing and other earth disturbance activities.~~

~~—(6) *Sediment laden water channels or other conveyance.* This method shall be used to divert stormwater runoff water to the appropriate BMPs such as traps and ponds and should be installed prior to the remaining clearing/grubbing and other earth disturbance activities.~~

~~—(7) *Land clearing and grading.* The registrant shall implement clearing and grading only after all downslope E & S BMPs have been constructed and stabilized.~~

~~—(8) *Surface stabilization.* The registrant shall apply temporary or permanent stabilization measures immediately to any disturbed areas where work has reached final grade, has been delayed or otherwise has been temporarily suspended.~~

~~—(9) *Construction of buildings, utilities, and paving.* During construction, the registrant shall install and maintain any additional E & S BMPs that may be required and implement structural PCSM BMPs.~~

~~—(10) *Landscaping and final stabilization, topsoiling, trees, and shrubs.* After construction is completed, the registrant shall install stabilization BMPs including: permanent seeding, mulching, sodding and riprap, and complete implementation of PCSM BMPs in this last construction phase. The registrants stabilize all open areas, including borrow and spoil areas, and remove all temporary BMPs and stabilize any disturbances associated with the removal of the BMP.~~

~~—(h) *PCSM Plan for the permit-by-rule.* The PCSM Plan submitted under this section must meet the requirements of § 102.8 (relating to PCSM requirements), and also include the following categories of BMPs to be installed and maintained:~~

~~—(1) *Nonstructural BMPs.* Nonstructural BMPs which promote the treatment, infiltration, evaporation and transpiration of stormwater runoff shall be used.~~

~~–(2) Low impact, conservation and green infrastructure designs. These designs shall be used to minimize the generation of runoff by preserving open space, preserving natural areas, reducing the amount of impervious surface, and other green infrastructure design principles that utilize or mimic infiltration or evapotranspiration.~~

~~–(3) Volume reduction and infiltration practices. These practices must include either engineered structures or landscape features designed to capture, reuse, recycle and manage, or infiltrate runoff that mimic preconstruction conditions.~~

~~–(4) Runoff practices. These practices shall be designed and constructed to convey runoff, increase evaporation and manage rate. The practices are to also promote infiltration, filtration and biological uptake of pollutants.~~

~~–(5) Filtration practices. These practices shall be used to treat runoff through filter media that are designed to capture pollutants through the processes of physical filtration of solids or cation exchange of dissolved pollutants.~~

~~–(i) ROC under the permit by rule. Registrants seeking coverage under this permit by rule shall prepare and submit a complete ROC to the Department or conservation district. The ROC must demonstrate eligibility under and compliance with this section and include:~~

~~–(1) An ROC checklist.~~

~~–(2) An E & S Plan prepared by a professional engineer, geologist or landscape architect registered in this Commonwealth.~~

~~–(3) A PCSM Plan prepared by a professional engineer, geologist, or landscape architect registered in this Commonwealth.~~

~~–(4) Proof of municipal notice.~~

~~–(5) Proof of public notice along with all comments and responses for projects in High Quality watersheds impaired for sediment or stormwater.~~

~~–(6) Proof of consultation with the PNHP regarding the presence of a State or Federal threatened or endangered species on the project site.~~

~~–(7) Applicable fees.~~

~~–(j) Eligibility verification. Upon submission of the ROC, the Department or the conservation district will review the ROC for consistency with the eligibility criteria, conditions and other requirements of this section, and make a determination of coverage within 30 days. Upon determination of eligibility, the Department or the conservation district will provide written verification of coverage for 5 years. The~~

registrant may apply for other permit coverage as referenced in this section if coverage under this permit-by-rule is denied.

—(k) Coverage notice. The Department will provide notice in the *Pennsylvania Bulletin* of every approval of coverage under this permit-by-rule.

—(l) Requiring coverage under an individual permit or general permit.

—(1) The Department may deny coverage under this permit-by-rule, or may amend, revoke, suspend or terminate previously issued coverage under this permit-by-rule and require the registrant to apply for and obtain either a general or an individual NPDES permit for failure to meet the requirements of this section. An interested person may petition the Department to take action under this subsection. If a permittee is notified by the Department that previously authorized coverage under this permit is revoked, terminated or suspended and that a general or individual NPDES permit is required, the registrant shall submit a complete NPDES NOI or application, in conformance with this chapter, within 90 days of receipt of the notification, unless the discharger is already in possession of a valid general or individual NPDES permit. Failure to submit the NOI or application within 90 days shall result in automatic termination of coverage under the permit-by-rule. If the project site is in compliance with this chapter, a timely submission of a complete NOI or application shall result in continuation of coverage under the permit-by-rule until the Department takes final action on the pending NOI or permit application.

—(2) An action of the Department or the conservation district denying coverage under this permit-by-rule, or requiring a general or an individual NPDES permit, is not a final action of the Department until the registrant submits and the Department takes final action on an individual permit application.

—(m) ROC. Persons requesting an ROC under this permit-by-rule shall submit to the Department or conservation district an administratively complete and acceptable ROC at least 30 days prior to the expiration date of the coverage. In the event that a timely, administratively complete, and acceptable application for renewal of coverage has been submitted and the Department or conservation district is unable, through no fault of the permittee, to reissue the approval for coverage before the expiration date of the approved coverage, the terms and conditions of the approved coverage will be automatically continued and will remain fully effective and enforceable pending the issuance or denial of the renewal of coverage, provided the permittee is, and has been, operating in compliance with the terms and conditions of the permit-by-rule.

—(n) Other permits or approvals. Nothing in this permit-by-rule relieves the registrant of the obligation to obtain any other applicable permits, or of complying with all Federal, State or local laws, regulations or standards for the construction, operation and maintenance of the project.

~~—(o) *Termination of coverage.* A permit-by-rule registrant covered under this section shall comply with § 102.7 (relating to permit termination) to terminate permit coverage.~~

~~—(p) *Program audit.*~~

~~—(1) The Department will audit the permit-by-rule to verify the effectiveness and the level of environmental protection that the permit provides. The audit will include the following:~~

~~—(i) Evaluation of whether the objectives of riparian forest buffers, conservation design and permittee compliance are being met.~~

~~—(ii) Whether the professional engineer, geologist or landscape architect registered in this Commonwealth plan certifications are accurate and effective.~~

~~—(iii) The adequacy of permittee plan development and BMP implementation and maintenance.~~

~~—(iv) The effectiveness of achieving the desired environmental results.~~

~~—(2) This audit process will not only report noncompliance and corrective actions, but also highlight areas of good practices and favorable results. That information will be used to develop policy or amend regulations for enhanced and continual improvement.]~~

§ 102.22. [Permanent] Site stabilization.

(a) *Permanent stabilization.* Upon final completion of an earth disturbance activity or any stage or phase of an activity, the site shall [be] immediately have topsoil restored, replaced, or amended, seeded, mulched or otherwise permanently stabilized and protected from accelerated erosion and sedimentation.

[(b) Erosion and sediment control]

(1) E & S BMPs shall be implemented and maintained until the permanent stabilization is completed. Once permanent stabilization has been established, the temporary E & S BMPs shall be removed. Any areas disturbed in the act of removing temporary E & S BMPs shall be permanently stabilized upon completion of the temporary E & S BMP removal activity.

[(c)](2) For an earth disturbance activity or any stage or phase of an activity to be considered permanently stabilized, the disturbed areas shall be covered with one of the following:

[(1)](i) A minimum uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation.

[(2)](ii) An acceptable BMP which permanently minimizes accelerated erosion and sedimentation.

(b) *Temporary stabilization.*

(1) Upon temporary cessation of an earth disturbance activity or any stage or phase of an activity where a cessation of earth disturbance activities will exceed **[3] 4** days, the site shall be immediately seeded, mulched, or otherwise protected from accelerated erosion and sedimentation pending future earth disturbance activities.

(2) For an earth disturbance activity or any stage or phase of an activity to be considered temporarily stabilized, the disturbed areas shall be covered with one of the following:

(i) A minimum uniform coverage of mulch and seed, with a density capable of resisting accelerated erosion and sedimentation.

(ii) An acceptable BMP which temporarily minimizes accelerated erosion and sedimentation.

ENFORCEMENT

§ 102.31. Applicability.

The Department or a **[county]** conservation district may enforce this chapter under The Clean Streams Law (35 P. S. §§ 691.1--691.1001).

§ 102.32. Compliance and enforcement provisions.

* * * * *

(b) If the Department finds that pollution or a danger of pollution results from an act of God in the form of sediment from land for which a complete Conservation Plan has been developed by the **[county]** conservation district and the Natural Resource Conservation Service, and the plan has been fully implemented and maintained, the landowner shall be excluded from the penalties of **[the act] The Clean Streams Law (35 P. S. § 691.1--691.1001).**

(c) A person aggrieved by an action of a conservation district under this chapter **[may] SHALL** request an informal hearing with the Department within 30 days following the notice of the action. **THE DEPARTMENT WILL SCHEDULE THE INFORMAL HEARING AND MAKE A FINAL DETERMINATION WITHIN 30**

DAYS OF THE REQUEST. Any final determination by the Department under the informal hearing may be appealed to the EHB in accordance with established administrative and judicial procedures.

(d) For enforcement action taken under this subchapter, the Department or conservation district may collect or recover, from the responsible party, costs and expenses involved in taking enforcement action in accordance with this subchapter and initiating cost recovery actions under this subchapter. The Department or conservation district may collect the amount in the same manner as civil penalties are collected under section 605 of The Clean Streams Law (35 P. S. § 691.1605).

RESPONSIBILITIES OF LOCAL GOVERNING BODIES

§ 102.41. Administration by [county] conservation districts.

(a) The Department may delegate by written agreement the administration and enforcement of this chapter to [county] conservation districts if they have adequate and qualified staff, and are; or will be; implementing the program identified in the delegation agreement.

(b) An acceptable program shall have the concurrence and approval of the governing body of the county in which the [county] conservation district operates.

(c) The Department will retain program administration and enforcement over projects which cross the political boundaries of [county] conservation districts unless otherwise authorized by the Department.

§ 102.42. Notification of application for permits.

A municipality or county which issues building or other permits shall notify the Department or [county] conservation district within 5 days of receipt of an application for a permit involving an earth disturbance activity consisting of [5 acres] 1 acre ([2] 0.4 hectares) or more.

§ 102.43. Withholding permits.

[A] With the exception of local stormwater approvals or authorizations, a municipality or county may not issue a building or other permit or [final] approval to those proposing or conducting earth disturbance activities requiring a Department permit until the Department or a [county] conservation district has issued the [Erosion and Sediment Control] E & S or individual NPDES Permit, or approved coverage under the general NPDES Permit for Stormwater Discharges Associated With Construction Activities under § 102.5 (relating to permit requirements).

FEE REPORT FORM

Department of Environmental Protection
Agency

May 17, 2010

Date

Kenneth F. Murin

Contact Person

717-787-6827

Phone Number

FEE COLLECTIONS:

	<u>Prior Year</u>	<u>Current Year</u>	<u>Projected</u>
	FY 2006	FY 2007	FY 2011
Current	\$705,750	\$635,750	
Proposed			\$7,573,200

FEE TITLE AND RATE:

	<u>NPDES Stormwater Construction Permit</u>	<u>Erosion & Sediment Control Permit</u>
Current:		
General Permit:	\$ 250	\$ 500
Individual Permit:	\$ 500	\$ 500
Proposed:		
General Permit:	\$ 500	\$ 500
Individual Permit:	\$1,500	\$1,500
Disturbance Fee:	\$ 100/acre	\$ 100/acre

FEE OBJECTIVE:

The existing permit fee for the Chapter 102 program (including both Erosion and Sediment Control (E&S) and NPDES Permits) do not currently offset the costs to implement the program. The permit fees established under this rulemaking have been developed to offset the costs to the Department to administer the program related to permit reviews, inspections, technical assistance, and program oversight. It cannot be determined if they will adequately offset additional compliance/enforcement activities, training or associated management tasks for the Department or conservation districts. Additional accounting procedures are needed for a more detailed analysis. Permitting data was extracted from eFACTS and annual reports from delegated county conservations districts and DEP Regional Offices for 2006, 2007, and 2008 as a starting point for estimating what revenue new fees may provide.

FEE RELATED ACTIVITIES AND COSTS:

Examples of Chapter 102 program activities include:

Training – The Department conducts at a minimum annual training for regional staff and conservation district staff. Additionally, the Department conducts localized training and regional meetings to address specific needs of the conservation districts and DEP regions.

Permit Review – The Department and conservation districts conduct erosion control plan and post construction stormwater management plan reviews under two categories of permits: NPDES permits (delegated by EPA to DEP to meet federal Clean Water Act) and state erosion and sediment control (E&S) permits which are authorized under the Pennsylvania Clean Streams Law. Reviews include an administrative completeness review and a technical review to ensure the plans have been designed in accordance with Chapter 102 and other related Department regulations.

Inspections – The Department and conservation districts conduct reviews at the beginning and end of earth disturbance activities, as well as periodic inspections throughout the term of permit coverage. Inspections require the completion of an inspection report and follow up to ensure any violations were addressed.

Program oversight – The Department delegates many responsibilities of the Chapter 102 program to the conservation districts. In order to ensure that districts are meeting the obligations of the delegation agreement, the Department conducts periodic reviews of district operations. This involves a file review of issued permits and the accompanying plans along with site visits to conduct field inspections that verify plan implementation.

Compliance – The Department seeks compliance with Chapter 102 through plan reviews and site inspections. The Department first seeks to gain compliance through voluntary participation by permittees, this has proven to be the most cost effective and expedient approach. When this is not achievable the Department takes increasing steps towards compliance from issuing Notices of Violation to taking penalty actions.

ANALYSIS:

To implement the Chapter 102 program, the costs will vary depending upon the number of projects permitted in a given year. The fee increase is an attempt to better meet the needs of the Chapter 102 program. While the permit fees have been chosen to assume the cost of implementation from application submittal to permit termination, the increase may not meet the needs of the Chapter 102 program. Some conservation districts may still need to charge an additional review fee and the increase may not meet all of the funding needs of the Department. Under the Conservation District Law (3 P.S. §859(2)), districts can charge additional fees to meet their increasing costs and have been charging review fees above and beyond the permit filing fee. Additional time accounting procedures must be developed and utilized to adequately identify staff time spent on all related program activities to properly distribute those costs to appropriate fee categories.

It is estimated that the proposed fees will cover the cost for Chapter 102 program activities identified above focusing on the permitting, inspection and technical assistance components of the program. The vast majority of activities regulated by this Chapter are permitted under the NPDES Stormwater Construction Permitting program. Currently the fees are \$250 for a general permit and \$500 for an individual permit. These fees have not been increased since 2000. The Department does not anticipate that conservation districts delegated the administration of the program will experience any decrease in revenue based from fees under this rulemaking. In addition, these increased permit application fees are not intended to supersede conservation district's ability to levy fees under the authority of the Conservation District Law. Based on data for 2006, 2007 and 2008, the conservation districts collect an annual average \$4,674,525 in plan review fees. The Conservation District Fund Allocation Program (CDFAP) also provides revenue to conservation districts to partially cover the cost of technical positions to implement the program.

Fiscal analysis clearly identifies the need for additional permit fees to continue administration of Chapter 102 in the Commonwealth. The estimated cost to administer the Chapter 102 program for the first year, fiscal year 2011/2012 is \$7,814,080. The average number of permittees over the three year period of 2006, 2007 and 2008 were 412 Individual NPDES Stormwater Construction Permits, 2079 General NPDES Stormwater Construction Permits and 558 E&S Permits each year which includes one year of record for E&S Permits associated with oil & gas activities. It is likely that a number of permittees submitted for more than one of the permits included in the total, however, if each permit is counted separately, the total number of permit applicants could be expected to be approximately 2,463 per year, not including the expected increase from oil & gas activities. If the Department considers E&S permits from oil and gas activities added in, the expected combined total is about 3,000 permits each year issued through the E&S and NPDES Stormwater Construction programs. Based on the annual permit number average and the annual average disturbed acres for this time frame and projecting these averages with an associated activity cost due to the proposed regulations, the average annual projected revenue from permit fees for this program is \$7,573,200. Thus the projected amount collected in revenue does not cover the estimated cost of the program.

Program permits are represented by 12% from governmental units 8% from state agencies and the remaining 80% represents the private portion of the regulated community. The proposed revisions to the regulation will increase program permit fees from an average annual \$692,200 (\$164,800 NPDES IPs plus \$527,400 GPs) in existing fees to \$6,058,560 in proposed new fees (\$494,400 base NPDES Stormwater Construction IP fee plus \$1,054,800 GPs plus \$4,509,400 disturbance fee) to the private sector. Local governments will see an average annual increase from \$103,830 (\$24,720 NPDES IPs plus \$79,110 GPs) to \$908,784 in proposed new fees (\$74,160 base NPDES Stormwater Construction IP fee plus \$158,220 GPs plus \$676,400 disturbance fee). State government could potentially see an average annual increase from \$69,220 (\$16,480 NPDES IPs plus \$52,740 GPs) to \$605,856 in proposed new fees (\$49,440 base NPDES Stormwater Construction IP fee plus \$105,480 GPs plus \$450,900 disturbance fee) but will receive revenue of \$7,573,200 annually associated with the Chapter 102 Erosion and Sediment Control Program.

RECOMMENDATION AND COMMENT:

This rulemaking for Chapter 102 sets forth the requirements for earth disturbance activities to minimize erosion and sedimentation and manage stormwater. The Department is proposing an increased fee for activities requiring a permit.

At least every three years, the Department will evaluate and recommend any necessary regulatory changes to the fees in this section to the Environmental Quality Board to address any disparity between program income generated by the fees and program costs. The regulatory amendment will be based upon an evaluation of the NPDES and E&S program fees income and the Department's costs of administering the NPDES and E&S programs.

The Agriculture Advisory Board (AAB) and the Water Resources Advisory Committee (WRAC) held meetings on the dates listed below to review the Department's proposed drafts of the Chapter 102 regulations. Both committees provided invaluable advice and insight to the Department during these meetings. The Department considered all and agreed to many of the recommendations made by the AAB and WRAC. The Department revised the permit fee section (102.6) to provide for a restructured permit fee that now includes lower general and individual permit administrative filing "base" fees as well as a per acre disturbance fee in response to public comments.

Proposed Rulemaking:

- AAB :
 - February 21, 2007 Overview of proposed revisions
 - October 10, 2007 Overview of proposed revisions
 - December 19, 2007 Discussion of proposed draft language for agricultural activities
 - April 15, 2009 Consideration of Proposed Chapter 102 rulemaking

- WRAC:
 - January 10, 2007 Overview of proposed revisions
 - January 9, 2008 Overview of proposed revisions
 - July 22, 2008 Overview of riparian forest buffers
 - February 25, 2009 Overview of proposed permit-by-rule
 - April 8, 2009 Consideration of Proposed Chapter 102 rulemaking
 - April 23, 2009 Special Meeting – continuation of proposed Chapter 102
 - April 29, 2009 Second Special Meeting – continuation of proposed Chapter 102 (No quorum of WRAC)

Final Rulemaking:

- AAB:
 - February 17, 2010 Overview of proposed final rulemaking
- WRAC:
 - February 19, 2010 Overview of proposed final rulemaking
 - March 17, 2010 Special Meeting – Consideration of Chapter 102 final rulemaking; approved with comments.

Title 25. Environmental Protection
Part I. Department of Environmental Protection
Subpart C. Protection of Natural Resources
Article II. Water Resources
Chapter 102. Erosion and Sediment Control and Stormwater Management

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341	Michael G. and Linda McKinne 1846 Mount Pleasant Rd. Mount Joy, PA 17552-8517

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343	Mr. Harry Robbins 223 Shingle Mill Dr. Drums, PA 18222-1209
344	Dr. Carol Gold 134 E. Doris Ave. State College, PA 16801-6234
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346	Ms. Sarah Vogel 218 Neilson Ave. Pittsburgh, PA 15238-3622
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350	Ms. Rosemary Caolo 1512 E. Gibson St. Scranton, PA 18510-1902
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713	Mr. Roy Boyle RR 2 Box 416A Hollidaysburg, PA 16648
714	Mr. Michael Jackson 8621 Black Valley Rd Everett, PA 15537
715	Ms. Laura Jackson 8621 Black Valley Rd Everett, PA 15537
716	Robert & Georgia Bottenfield 2409 William Penn Hwy Williamsburg, PA 16693

717	Ms. Peggy Keating-Butler 413 Nelson Rd Morrisdale, PA 16858
718	Ms. Alice Fleischer 8615 Riverview Heights Dr Huntingdon, PA 16652
719	Mr. George Mahon 534 54th St Altoona, PA 16602
720	Ms. Helena Kotala 259 McMullen Rd Altoona, PA 16601
721	Mr. David Bonta PO Box 68 Tyrone, PA 16686
722	Mr. Charles Hoyer 254 Charma Dr Tyrone, PA 16686
723	Luis & Cindy Moore 4307 3rd Ave Altoona, PA 16602
724	Mr. Warren Baker 1364 Hoovers Ln Tyrone, PA 16686
725	Ms. Marcia Bonta Plummers Hollow Rd Tyrone, PA 16686
726	Ms. Judy Shunk 605 N 8th St Bellwood, PA 16617
727	Ms. Melissa Hilands 713 Washington Ave Tyrone, PA 16686
728	Mr. James Russell 576 Fair Valley Rd Martinsburg, PA 16662
729	Mr. Kayci Russell 576 Fair Valley Rd Martinsburg, PA 16662
730	Ms. Maria Kotala 259 McMullen Rd Altoona, PA 16601
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742	Ms. Jennifer Gelinis 729 Arlington Rd Penn Valley, PA 19072
743	Mr. Peter Downs 3 Schiller Ave Narberth, PA 19072
744	Ms. Jaquelin Genbig 160 Greenwood Ave Ambler, PA 19002
745	Ms. Marilyn Fegur 152 Greenwood Ave Ambler, PA 19002
746	Ms. Karen Baginski 31 Betsy Ln Ambler, PA 19002
747	Ms. Sharon Whayd 116 Gillin Rd Ambler, PA 19002

748	Lynn Taylor 15 Betsy Ln Ambler, PA 19002
749	Ms. Paula Lean 45 Betsy Ln Ambler, PA 19002
750	Ms. Mary Maguire 504 Brockhurst Narberth, PA 19072
751	Ms. Megan Carr 1295 Perri Place Blue Bell, PA 19422
752	Mr. James Carr 1295 Perri Place Blue Bell, PA 19422
753	Ms. Susan Mudambi 680 Cedar Dr Blue Bell, PA 19422
755	Mr. John Crumbine 1120 Guernsey Ct Blue Bell, PA 19422
756	Chris Carl 526 Brookhurst Ave Penn Valley, PA 19072
757	Mr. Matt Adam 709 Stoke Rd Villanova, PA 19085
758	Ms. Mindy Cohen Mindy Cohen & Assoc Inc 612 Cedar Ln Villanova, PA 19085
759	Ms. Judith Harr 8901 Montgomery Ave Wyndmoor, PA 19038
760	Massie & Helen Pacchione 8517 Widener Rd Wyndmoor, PA 19038
761	Ms. Mary Ellen Mahoney 1655 Caslow Circle Blue Bell, PA 19422
762	Mr. Ryan Gerland 28 Mercer Hill Rd Ambler, PA 19002
763	Ms. Nicole Koffel 28 Mercer Hill Rd Ambler, PA 19002
764	Mr. Jim Gerome 28 Mercer Hill Rd Ambler, PA 19002

765	Mr. William McDevitt 203 Atwood Rd Erdenheim, PA 19038
766	Ms. Leslie McDevitt 203 Atwood Rd Glenside, PA 19038
767	Marian J. Keel-Bryson 909 Harston Ln Erdenheim, PA 19038
768	Mr. Peter Lockhart 358 Aubury Rd Wyndwood, PA 19096
769	Joseph Pizzo 23 Delaware Ct Newtown, PA 18940
770	Ms. Kathleen Lukomski 23 Delaware Ct Newtown, PA 18940
771	Mr. Derrick Lukomski-Pizzo 23 Delaware Ct Newtown, PA 18940
772	Mr. Evan Lukomski 23 Delaware Ct Newtown, PA 18940
773	Ms. Cindia Lukomski 113 Brookside Dr Holland, PA 18966
774	Ms. Kathy Lukomski 113 Brookside Dr Holland, PA 18966
775	Mr. Dan Lorch 164 Hillcroft Way Newtown, PA 18940
776	Mr. Richard Smith 51 Ardsley Ct Newtown, PA 18940
777	Ms. Jennifer Storz 41 Greenridge Circle Newtown, PA 18940
778	Mr. Paul D'Amizo 818 Downs Rd Erdenheim, PA 19038
779	Mr. Lee Silver 205 Glendalough Rd Erdenheim, PA 19038
780	Mr. Michael de Quevedos 701 Avondale Rd Erdenheim, PA 19038

781	Mr. David Adyala 5 Schiller Ave Narberth, PA 19072
782	Ms. Jenifer Eyre 2168 Kenmore Ave Glenside, PA 19038
783	Mr. Michael Faine 7764 Mellon Rd Wyncote, PA 19095
784	Ms. Ellen Weaver 7915 Ronaale Dr Elkins Park, PA 19027
785	Ms. Andrea Mohrotra 18 Douglas Rd Lansdale, PA 19446
786	Ms. Ayonna Johnson 7903 Toby Leech Elkins Park, PA 19027
787	Ms. Loretta LaRue 7906 Clydestone Dr Elkins Park, PA 19027
788	Ms. Katherine Elliott 1702 Clearview Ave Blue Bell, PA 19422
790	Mr. Daniel Blitstein 428 Old Farm Rd Wyncote, PA 19095
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793	Ms. Marian Siegfried 1120 Shepard Dr Blue Bell, PA 19422
794	Mr. William Burr 1417 Guiteras Dr Blue Bell, PA 19422
795	Ms. Sallie Strayer 1650 Sylvan Dr Blue Bell, PA 19422
796	Koronova Natalia 2903 Aspen Circle Blue Bell, PA 19422
797	Ms. Andrea Coccodrilli 1180 McKelvey Ln Blue Bell, PA 19422
798	Ms. Cassie Doheny 1257 Grant Ave Blue Bell, PA 19422

799	Ms. Tara Doheny 1257 Grant Ave Blue Bell, PA 19422
800	Ms. Michele Doheny 1257 Grant Ave Blue Bell, PA 19422
801	Ms. Maria Doheny 1257 Grant Ave Blue Bell, PA 19422
802	Ms. Elaine Doheny 1257 Grant Ave Blue Bell, PA 19422
803	Mr. Luke Doheny 1257 Grant Ave Blue Bell, PA 19422
804	Mr. Jason Doheny 1257 Grant Ave Blue Bell, PA 19422
806	Ms. Noreen McAneny 392 Crescent Rd Hatboro, PA 19040
807	Ms. Amy Donahue 104 Earl Ln Hatboro, PA 19040
808	Ms. Allison Hacken 317 Windsor Ave Hatboro, PA 19040
809	Ms. Donna Hacken 317 Windsor Ave Hatboro, PA 19040
810	Mr. Mark Van Ronzelen 8007 Traymore Ave Wyndmoor, PA 19038
811	Mr. Carlton Smith 1221 Race St Philadelphia, PA 19107
812	Ms. Barbara Dusenbury 8719 Patton Rd Wyndmoor, PA 19038
813	Bill and Carol McGucks 525 E Mermaid Ln Wyndmoor, PA 19038
814	Ms. Kristine Rights 2121 Kenmore Ave Glenside, PA 19038
815	Pat McGrim 208 Mattison Ave Ambler, PA 19002

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825	Ms. Cynthia Gutowski 815 Stoke Road Villanova, PA 19085
826	Ms. Elizabeth Dougherty 635 Spruce Ln Villanova, PA 19085
827	Mr. Fitz Dougherty 635 Spruce Ln Villanova, PA 19085
828	Mr. Jack Dougherty 635 Spruce Ln Villanova, PA 19085
829	Ms. Emily Butte 1212 Mifflin St Philadelphia, PA 19148
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831	Ms. Rebacca Williams 135 Rose Ln Haverford, PA 19041-1724
832	Ms. Lori Bartol 1342 Castle Ave Philadelphia, PA 19148
833	Ms. Anne Misak Clean Water Action/ Campaign for Clean Water 1315 Walnut St. Suite 1650 Philadelphia, PA 19107

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835	Declan McCurry Hahn 514 Hillbrook Rd Bryn Mawr, PA 19010
837	Mr. Jeff Spady 315 Locust Ave Ardmore, PA 19003
838	Mr. Gregory Kelble 111 Armat Ave Ardmore, PA 19003
839	Mr. Andrew Kruc 118 Jackson St Philadelphia, PA 19148
840	Mr. John COMMENTATOR 75 Holland Ave Ardmore, PA 19003
841	Mr. Phil DiClemente 1526 Chalk Ave Blue Bell, PA 19422
842	Ms. Natalie Pasatuci 1230 Tree St Philadelphia, PA 19148-2908
843	Mr. Scott Perlis 609 Greenburg Ln Narberth, PA 19072
844	Mr. David Hewitt 320 Locust Ave Apt 1 Ardmore, PA 19003
845	Taylor Muse 313 Locust Ave Ardmore, PA 19003
846	Mr. William Muse 313 Locust Ave Ardmore, PA 19003
847	Ms. Kimberly Muse 313 Locust Ave Ardmore, PA 19003
848	Ms. Laura Levine 423 Bolsover Rd Wynnewood, PA 19096
849	Ms. Deborah Levine 423 Bolsover Rd Wynnewood, PA 19096
850	Mr. Kevin Levine 423 Bolsover Rd Wynnewood, PA 19096

851	Ms. Amy Levine 423 Bolsover Rd Wynnewood, PA 19096
852	Mr. Marc Levine 423 Bolsover Rd Wynnewood, PA 19096
853	Samaiyah Muhammad 29 School Ln Ardmore, PA 19003
854	Ms. Tess Ryley 5220 Oleander Rd Drexel Hill, PA 19026
855	Kerry Johnston 405 Maplewood Ave Merion Station, PA 19066
856	Ms. Jenny Ma 509 Mercer Rd Merion Station, PA 19066
857	Mr. Andrew dePasquale 532 General Lafayette Rd Merion Station, PA 19066
858	Mr. Robert Cohen 532 General Lafayette Rd Merion Station, PA 19066
859	Mr. Joseph dePasquale 532 General Lafayette Rd Merion Station, PA 19066
860	Ms. Alexandra dePasquale 532 General Lafayette Rd Merion Station, PA 19066
861	Mr. Nick Rogers 112 Westminster Dr North Wales, PA 19454
862	Mr. Steven Hamick 1524 Dickinson St Philadelphia, PA 19146
863	Mr. Andrew Franco 1616 Swain St Philadelphia, PA 19131
864	Mr. Daniel Whatley 4229 Baltimore Ave Apt 2R Philadelphia, PA 19104
865	Ms. Stephanie McCurry 514 Hillbrook Rd Bryn Mawr, PA 19010
868	Mr. Fred Cerequas 135 Shady Ln Lansdale, PA 19446

870	Vrajesh Shah 123 Andrew Ln Lansdale, PA 19446
871	Mr. Thomas Boyd 126 Woodland Dr Lansdale, PA 19446
872	Mr. Glenn Morris 104 Andrew Ln Lansdale, PA 19446
873	Mr. Randy Nash 106 Shady Ln Lansdale, PA 19446
874	Mr. Jonathan Nash 106 Shady Ln Lansdale, PA 19446
875	Ms. Rosie Nash 106 Shady Ln Lansdale, PA 19446
876	Ms. Virginia Boyle 104 Andrew Ln Lansdale, PA 19446
877	Roseanna Boyd 126 Woodland Dr Lansdale, PA 19446
878	Ms. Joann Latona 1928 S Camac St Philadelphia, PA 19148
879	Ms. Susan Messina 2229 S 13th St Philadelphia, PA 19148
880	Mr. Frank Akuchine 3327 N 16th St Philadelphia, PA 19140
881	Mr. Geoffrey Ednie 1242 Daly St Philadelphia, PA 19148
883	Ms. Denise Rogers 313 Country Club Dr Lansdale, PA 19446
884	Mr. Darrin Stanley 1217 Emily St Philadelphia, PA 19148
885	Ms. Patricia Rayfield 507 Putnam Rd Merion Station, PA 19066
886	The Quain Family 510 Mercer Rd Merion Station, PA 19066

887	Ms. Jennifer Bruno 1904 S Camac St Philadelphia, PA 19148
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889	Ms. Tricia Greenhalgh 7000 Ridge Ave Apt C201 Philadelphia, PA 19128
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891	Mr. Peter Folger 1033 Pecan Dr Lansdale, PA 19446
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896	Mr. James Epstein 1600 Hagys Ford Rd Apt 1Y Narberth, PA 19072
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900	Dominique Worrell 215 Parkview Philadelphia, PA 19154
901	Ms. Jessica Peters 75 Holland Ave Ardmore, PA 19003
904	Michele Brown, M.D 200 Cobblestone Dr Ardmore, PA 19003
905	Ms. Susan Hunt 112 Sampson Rd Ardmore, PA 19003
906	Alessandro Satta 4926 Hazel St Philadelphia, PA 19146
907	Mr. Terry Giancatirino 144 Jackson St Philadelphia, PA 19148-3336

908	Ms. Kelly Link 206 Jackson St Philadelphia, PA 19148
909	Mr. Steven Link 206 Jackson St Philadelphia, PA 19148
910	Ms. Christine Turner 2138 S Front St Philadelphia, PA 19148
911	Ms. Marianne Murtha 2110 S Howard St Philadelphia, PA 19148
912	The Lowe Family 237 Highland Ave Ambler, PA 19002
913	Mr. Donald Greene 1040 Pecan Dr Lansdale, PA 19446
914	Ms. Carol Waldspurger 913 Beechwood Dr Lansdale, PA 19446
915	Mrs K. A. Stankiewitch 924 Beechwood Dr Lansdale, PA 19446
916	Mr. Ron Stankiewitch 924 Beechwood Dr Lansdale, PA 19446
917	Ms. April Dolan 1228 Fitzgerald St Philadelphia, PA 19148
919	Ms. Geraldine Walker 12 Sampson Rd Ardmore, PA 19003
920	Mr. Robert Gleeson 130 Shady Ln Lansdale, PA 19446
921	Ms. Shari Nash 106 Shady Ln Lansdale, PA 19446
922	Ms. Marcia Straut 3810 Elizabeth Dr Garnet Valley, PA 19061
923	Mr. Jeff Briggs 165 Mifflin St Philadelphia, PA 19148
924	Tracy Donohue 2014 S Philip St Philadelphia, PA 19148

925	Mr. Dick Hill 156 Reiff Mill Rd PO Box 188 Ambler, PA 19002
926	Mr. Justin Hammond 204 Fulling Mill Ln Ambler, PA 19002
927	Ms. Claudia Slipakoff 410 Longfellow Ave Wyncote, PA 19095
928	Mr. Joseph Borrelli 436 Old Farm Rd Wyncote, PA 19095
929	Dr. Scott Shoemaker 44 S Abington Ave Glenside, PA 19038
931	Mr. Dave Clark 534 Abington Ave Glenside, PA 19038
932	Ms. Regina McDonough 1008 Jackson St Philadelphia, PA 19148
933	Mr. Joseph Malone 1020 Jackson St Philadelphia, PA 19148
934	Ms. Antoinette Malone 1020 Jackson St Philadelphia, PA 19148
935	Ms. Joan Kenworthy 2130 Wharton Ave Glenside, PA 19038
936	Mr. Matthew Homst 1760 Chalk Ave Blue Bell, PA 19422
937	Ms. Amy Fruncillo 860 Valley Rd Blue Bell, PA 19422
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950	COMMENTATOR 201 Parkview Way Newtown PA 18940
951	COMMENTATOR 6 East Park Rd. Newtown, PA 18940
952	COMMENTATOR 37 Parkview Way Newtown, PA 18940

953	COMMENTATOR 110 Broad Acres Rd. Lansdale, PA 19446
954	James R. Ney 320 Richardson Rd. Lansdale, PA 19446
956	Jean Bellavance 148 Bethlehem Pike Ambler, PA 19002-5822
957	Mary Shiongen 112 Llanfair Rd. Ardmore, PA 19003
958	Heather Powers 433 Owen Rd. Wynnewood, PA 19096
959	Margaret Pugliese 324 Aubrey Rd. Wynnewood, PA 19096
960	Sarah Guerry 309 Hathaway Ln. Wynnewood, PA 19096
961	Robert Keller 26 Mercer Hill Rd. Ambler, PA 19002
964	Michael Kobti 750 E. Marshall St. #212 West Chester, PA 19380
965	Brenda McNemy 100 Reiffs Mill Rd., Apt. C-3 Ambler, PA 19002
967	Joanna C. Fauris 100 Reiffs Mill Rd., Apt. C-17 Ambler, PA 19002
968	Mary Jane Smith 139 Reiffs Mill Rd. Ambler, PA 19002
969	Hyung Jun 319 Daniel Drive Ambler, PA 19002
970	Dan McNutty 100 Reiffs Mill Rd., Apt. A6 Ambler, PA 19002
971	Karl Knaak 416 Cedar Lane Lansdale, PA 19446
972	Nadine Mulieka 1409 Taylor Rd. Lansdale, PA 19446

973	COMMENTATOR 403 Bonnie Lane Lansdale, PA 19446
974	Concetta Foschine 1929 S. Sartain St. Philadelphia, PA 19148
975	Maureen Williams 112 Meadowbrook Ave. Hatboro, PA 19040
976	Marie Ferry 24 Woodland Ave. Hatboro, PA 19040
977	Mary Hood 24 Woodland Ave. Hatboro, PA 19040
978	Barbara B. Morgan 524 Wyndmoor Ave. Wyndmoor, PA 19038
979	Charles J. Rhoads 1715 Arch St. Rd. Blue Bell, PA 19422
980	Rebecca Muth 1125 Christian St. Philadelphia, PA 19147
981	Jules E. Childs 416 Old Farm Rd. Wyncote, PA 19095
982	The McGrath Family Glenside, PA 19038
983	Gary Weller 152 Reiffs Mill Rd. Ambler, PA 19002
984	Norm Zayadi 215 Grist Mill Ct. Ambler, PA 19002
985	The Bernhards 265 Hathaway Ln Wynnewood, PA 19096-1902
986	Donna Rapone 142 Mifflin St. Philadelphia, PA 19148
987	Michael Dreyfuss 343 Aubrey Rd. Wynnewood, PA 19096
988	A. Spalazzo 1216 Fitzgerald St. Philadelphia, PA 19148
991	Jessica Kershner 202 Jackson St. Philadelphia, PA 19148

992	Alexander Smith 202 Jackson St. Philadelphia, PA 19148
993	Heidi Crews 332 W. Spring Ave. Ardmore, PA 19003
995	Heidi Syropoulor 617 Montgomery School Ln. Wynnewood, PA 19096
996	E. Syropoulor 617 Montgomery School Ln. Wynnewood, PA 19096
999	Karen Gagnier 501 Lynmere Rd. Bryn Mawr, PA 19010
1001	Joy Pines 514 Mercer Rd. Merion Station, PA 19066
1002	Fred Herr 55 Douglass Rd. Lansdale, PA 19446
1003	Marcia Vansomeren 217 Pine Crest Lansdale, PA 19446
1005	Christine Circaratto 204 Edgemont Ave. Ardmore, PA 19003
1006	Frances Grimillion 1241 Daly St. Philadelphia, PA 19148
1007	Olga Carol Lentine 1229 Tree St. Philadelphia, PA 19148-2907
1008	Rita Jacovini 1230 Mercy St. Philadelphia, PA 19148
1009	Josephine Romano 1849 S. Sartain St. Philadelphia, PA 19148
1010	Benjamin Schultz 1934 S. Warnock St. Philadelphia, PA 19147
1011	Angie Greaney 42 Andrew Ln. Lansdale, PA 19446
1012	Christine Tini 1944 S. 11th St. Philadelphia, PA 19148

1014	Martha Slawch 211 Williamsburg Rd. Ardmore, PA 19003
1015	Harold Lee 7401 Rowland Ave. Cheltenham, PA 19012
1016	Joanne Fields 13075 Townsend Philadelphia, PA 19154
1017	Erin Cain 1200 Cecil B. Moore Apt 109 W. Philadelphia, PA 19122
1018	Jennifer Amorile 1213 Mifflin St. Philadelphia, PA 19148
1019	Frank Inness 1801 Old Gulph Rd. Villanova, PA 19085
1020	Lionnel Davy 406 Long Fellow Rd. Wynecote, PA 19095
1021	Christine Cayer 8509 Widener Rd. Wyndmoor, PA 19038
1022	Mariah Petri 1328 Castle Ave. Philadelphia, PA 19148
1023	Susan Nedme 2159 Kenmore Ave. Glenside, PA 19038
1024	Veierc Tauerij 201 Glendelough Rd. Glenside, PA 19038
1025	Joanne Hutchinson 440 Old Farm Rd. Wyncote, PA 19095
1026	Carol McClellan 8007 Flourtown Ave. Wyndmoor, PA 19038
1027	Joanne Bevelogere 187 Park Ave. Ambler, PA 19002
1028	Ursina Teitelbaum 121 Edgewood Rd. Ardmore, PA 19003
1029	James Abbott 110 Llanfair Rd. Ardmore, PA 19003

1030	Joyce Slapinsky 910 Harston Ln. Erdenheim, PA 19038
1031	James J. Meuefee 8611 Patton Rd. Wyndmoor, PA 19038
1032	COMMENTATOR 8609 Patton Rd. Glenside, PA 19038
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1038	Mrs. A. Cardillo 208 Hendricks St. Ambler, PA 19002
1039	Tina F. Gibson 325 Rosemary Ave. Ambler, PA 19002
1040	Colleen Foley 222 Trinity Ave. Ambler, PA 19002
1041	Antonio Griggs 1934 S. 12th St. Philadelphia, PA 19148
1042	Margaret Azarian 218 Pine Crest Ln. Lansdale, PA 19446
1043	Lynn O'Gara 27 Meadow Glen Rd. Lansdale, PA 19446
1044	Mary M. Kaminstein 409 Maplewood Ave. Merion Station, PA 19066
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1048	Doug L Rocca 1924 S. Camac St. Philadelphia, PA 19148

1049	Michelle Domingo 1924 S. Camac St. Philadelphia, PA 19148
1050	Rosemary Connors 43A W. Athens Ave. Ardmore, PA 19003
1051	Rod Gunn 7907 Toby Leech Dr. Elkins Park, PA 19027
1052	Isabel Sierra 16 Wyndmoor Dr. Wyndmoor, PA 19038
1053	Mr. Jerry Doyle 171 Hillcroft Way Newtown, PA 18940
1054	Mary Layman 212 Almur Ln. Wynnewood, PA 19096
1055	COMMENTATOR 1006 Jackson St. Philadelphia, PA 19148-3011
1056	Kevin and Jean Conlin 702 Fraser Rd. Glenside, PA 19038
1057	JoAnn Leigh 54 Copperleaf Dr. Newtown, PA 18940-1781
1058	Brad Hall 16 Copperleaf Dr. Newtown, PA 18940
1059	Phil Deschamps 21 Claire Dr. Newtown, PA 18940
1060	Colleen Nelson 1 Aster Way Newtown, PA 18940
1061	Nancy Swanson 11 Craig Ct. Newtown, PA 18940
1064	Nathan COMMENTATOR 473 Trimbull Ct. Newtown, PA 18938
1065	Dylan Schaim 524 Atwood Ct. Newtown, PA 18940
1066	Doris B. Schatz 604 Danbury Ct. Newtown, PA 18940

1067	Brian and Tahel O?Mara 615 Danbury Ct. Newtown, PA 18940
1068	Alesia Cowan 524 Atwood Ct. Newtown, PA 18940
1069	Jaeson Har 603 Danbury Ct. Newtown, PA 18940
1070	Abby Horbad 15 Ginger Ct. Newtown, PA 18940
1071	Barbara Krumbbaar 506 Scott Rd. Oreland, PA 19075
1072	Nang V. Tran 534 Drayton. Rd. Oreland, PA 19075
1073	Marjorie Stowe 451 Edgewood Dr. Ambler, PA 19002
1074	Laura Donkus 427 Edgewood Dr. Ambler, PA 19002
1075	Bridney Rovera 2501 Kensington Ave. Philadelphia, PA 19125
1076	Tionna Burch 2501 Kensington Ave. Philadelphia, PA 19125
1077	COMMENTATOR Mariana Bracetti Academy Charter School 2501 Kensington Ave. Philadelphia, PA 19125
1078	Janille COMMENTATOR 2501 Kensington Ave. Philadelphia, PA 19125
1079	Ginger Vera 2501 Kensington Ave. Philadelphia, PA 19125
1080	Michael Ortiz 2501 Kensington Ave. Philadelphia, PA 19125
1081	Shaquan Mack 2501 Kensington Ave. Philadelphia, PA 19125
1082	Cynthia Reyes 2501 Kensington Ave. Philadelphia, PA 19125

1083	Tynisha Foreman 2501 Kensington Ave. Philadelphia, PA 19125
1084	Ashlee L. Hevreux 43 Eaton Ct. Newtown, PA 18940
1085	Shane Wright 43 Eaton Ct. Newtown, PA 18940
1086	Brett Hevreux 43 Eaton Ct. Newtown, PA 18940
1087	Ed Piccolo 428 Mahogany Walk Newtown, PA 18940
1090	Joanne Durann 27 Duval Ct. Newtown, PA 18940
1091	Kristi Durann 27 Duval Ct. Newtown, PA 18940
1092	Lindsey J. Robinson, Ph.D. Clinical Psychologist 409 Edgewood Dr. Ambler, PA 19002
1093	Lucy Lenhardt and Maurice Rdesinski 408 W. Garden Rd. Oreland, PA 19075
1095	Kelly Kann 524 Atwood Ct. Newtown, PA 18940
1096	Sandy G. Pashko 4 Eaton Ct. Newtown, PA 18940
1097	Christopher Howe 2 Craig Ct. Newtown, PA 18940
1098	Jeff Badger 23 Brookside Rd. Erdenheim, PA 19038
1099	Don and Sally Lugg 33 Devon Rd. Newtown, PA 18940
1100	Karen McGuigan 6 S. Ascot Ct. Newtown, PA 18940
1101	Erin Durkin 416 W. Garden Rd. Oreland, PA 19075

1102	Pat Gealam 2103 Bredle Ln. Oreland, PA 19075
1103	Clyde D. Ragland 603 Oreland Mill Rd. Oreland, PA 19075
1104	Brittany Wright 2501 Kensington Ave. Philadelphia, PA 19125
1105	COMMENTATOR 2501 Kensington Ave. Philadelphia, PA 19125
1106	Alexander Sanna 2501 Kensington Ave. Philadelphia, PA 19125
1107	Lyescka Diaz 2501 Kensington Ave. Philadelphia, PA 19125
1108	Cristal COMMENTATOR 2501 Kensington Ave. Philadelphia, PA 19125
1109	Enid COMMENTATOR 2501 Kensington Ave. Philadelphia, PA 19125
1110	James Moore 2501 Kensington Ave. Philadelphia, PA 19125
1111	COMMENTATOR 2501 Kensington Ave. Philadelphia, PA 19125
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1117	Michele Barbin PO Box 142 Snowshoe, PA 16874-0142
1119	Elizabeth Shirey 317 W. Prospect Ave. State College, PA 16801-4617

1120	Pamela Steckler 127 Hoy St. State College, PA 16801
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1122	James. J. Clymer, Managing Partner Key Development Group 128 E. State St., Ste. 110 Kennett Square, PA 19348
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1324	Senator Raphael J. Musto, Rep. Scott Hutchinson and Senator Mary Jo White Environmental Resources and Energy Committee Senate Box 203021 Harrisburg, PA 17120-3021
1325	Representative Chelsa Wagner P.O. Box 202022 Harrisburg, PA 17120-2022
1326	Paul Nass 220 Sunnybrook Rd. Flinton, PA 19031

GENERAL COMMENTS

1. **Comment:** The streams and waterways impacted by these policies are important to me, my family, and my friends and neighbors. Please do the right thing by implementing these changes to the proposed stormwater management regulations. (58, 62, 122, 155, 259, 264, 269, 273, 274, 275, 276, 277, 278, 278, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 315, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 426, 427, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 627, 629, 630, 631, 632, 633, 634, 635, 636, 702, 703, 705, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 725, 727, 728, 729, 730, 731, 732, 735, 1116, 1117, 1118, 1119, 1120, 1121, 1142)

Response: The Department agrees with the commentators that these regulations are important. The Department will continue to implement the Clean Streams Law.

2. **Comment:** *Whether the regulation represents a policy decision of such a substantial nature that it requires legislative review.* (71 P.S. § 745.5b(b)(4)) We acknowledge both the intent to enhance environmental protection and the public comments submitted in support of the regulation. At the same time, the EQB has not fully contemplated the regulation's impact beyond its environmental benefit. Our specific concern relates to the breadth of the issues raised by commentators. Provisions in the EQB's proposal significantly affect a multitude of persons, entities and their interests. For these reasons, we believe the regulation represents a policy decision of such a substantial nature that it requires legislative review. To satisfy this criterion, we recommend that the EQB submit this regulation, along with a full and balanced explanation of its impacts, for legislative consideration before proceeding with a final-form regulation. (1322-IRRC)

Response: The Department does not believe that the regulatory amendments proposed to Chapter 102 represent a significant policy decision that requires legislative consideration. The proposed final regulation is consistent with the existing Chapter 102 requirements, is authorized

by the Clean Streams Law, is mandated by federal regulations and Environmental Hearing Board decisions. Moreover, as indicated by some commentators, including the Pennsylvania Chamber of Business and Industry, aspects of the regulation are critically necessary to bring clarity and standardized regulatory approaches to stormwater management, particularly related to compliance with the Chapter 93 regulations. For example, the proposed antidegradation implementation provisions provided in 102.4(b)(6) and 102.8(h) provide much needed statement of antidegradation performance standards in the wake of recent EHB decisions. Likewise, the provisions in 102.8 codify and provide a standardized regulatory framework for post construction stormwater management requirements that the Department has been implementing since 2002, again largely in response to federal mandate and adverse EHB decisions. In preparing the final draft of the regulations Department staff met again with the Standing Committee members and other interested legislators and responded to their questions and addressed the majority of the concerns raised. The Department has fully considered the impacts and benefits of the regulatory amendments and has provided a more detailed statement related to those considerations in the final order accompanying the rule.

3. **Comment:** *Economic or fiscal impacts of the regulation.* (71 P.S. § 745.5b(b)(1)) We strongly recommend that the EQB work directly with all of the commentators to explore and address economic and fiscal impact. The EQB should present its findings in the final-form regulation so that the public, state government, local government, the legislature and this Commission can evaluate the full impact of the costs imposed by the regulation in considering whether the final-form regulation is in the public interest. (1322-IRRC)

Response: In response to IRRC requests and request by the Standing Committees, the Department has undertaken further economic analysis and has included an extensive analysis in the Order to this rulemaking. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

4. **Comment:** *Direct and indirect costs to the Commonwealth and to its political subdivisions:* The direct and indirect costs to the Commonwealth must be evaluated. The Department of Transportation and the Department of Conservation and Natural Resources commented on their respective concerns with the regulation. As discussed below, the Public Utility Commission is also affected by this regulation. We also believe there will be an impact on local government that was not fully evaluated. The Department of Transportation comments are extensive stating, among many issues, that the regulation will increase their agency's costs due to several provisions. Those concerns include the scope of the regulation, the effect on many miles of roadways along streams, forced purchase of land or acquisition of conservation easements, increased design and construction costs, the requirement for maintenance in perpetuity, site stabilization requirements, cover types required, studies, delays caused by required meetings, maintenance of roadways and bridges, potential increase in the length of bridges to accommodate required buffer areas and multiple permit. Based on the impacts described by the Department of Transportation, we believe it is reasonable to conclude that there are similar impacts on any political subdivision that owns, builds and maintains roads along streams. We question, for

example, how many miles of local roadways would be affected by the regulation and how that may affect local governments who must comply with the regulation's requirements. This information is needed for a full evaluation of the regulation's impact on local government. The Department of Conservation and Natural Resources commented that permit fees may affect the viability of a project and that it is concerned it will not have the time or staffing resources to fulfill the requirement of Section 102.14(e)(5)(iv) that requires Department of Conservation and Natural Resources approval. Additionally, while it did not comment, the Public Utility Commission would be affected by the proposed regulation. Costs for riparian forest buffers will be passed on to utility ratepayers according to the comment of the Energy Association of Pennsylvania. There are also safety, reliability and indirect cost concerns because the riparian forest buffer requirements contradict existing safety requirements that require utilities to keep gas and electric lines clear of woody brush. The direct and indirect costs to the Commonwealth and its political subdivisions must be fully evaluated. The findings of this evaluation must be included with the submittal of the final-form regulation. (1322-IRRC)

Response: Section 102.8 contains the performance standards for linear project reflects accommodation of the unique attributes of linear projects. Roadway and linear projects are a significant source of potential pollution associated with earth disturbance activities, it is important in terms of protecting waters of this Commonwealth that these projects protect the waters and it is appropriate that it is incorporated in this rulemaking.

5. **Comment:** *Direct and indirect costs to the private sector:* The direct and indirect costs to the private sector must be evaluated. Among the many concerns raised, cost issues related to riparian forest buffers, burdensome permit-by-rule requirements, a multitude of property issues (e.g., restriction of land use without compensation, leases, land acquisition, retroactive application of the regulation, the effect on agriculture in general and the effect on use of agricultural land), maintenance and restriction in perpetuity, studies, meetings, the definition of "animal heavy use areas," distinction from nutrient management regulations, permit fees, returning streams to "existing use," possible lack of public notice of stream classifications and the impact on the state forest industry. These public comments describe extensive direct and indirect costs to the private sector. The EQB must fully evaluate these costs. The findings of this evaluation must be included with the submittal of the final-form regulation. (1322-IRRC)

Response: The Department has evaluated these costs and included a detailed explanation in the Regulatory Analysis Form and the Order. This rulemaking is primarily a codification of existing requirements and therefore costs associated with increased permit fees, as-built drawings, and on-site licensed professional have been considered. Sustainable, natural BMP options that provide lower costs for the regulated community are encouraged. Ultimately the costs and impacts associated with this rule are decided by the person undertaking the activity and their design professional through the design choices they make. The rule requires that a licensed professional regularly inspect the implementation of critical stages of BMP construction and submit a certification that the BMP is properly constructed. This certification will acknowledge that the BMPs have been properly constructed and in working order and therefore there will be an improved expectation of optimal performance for the long-term operation.

6. **Comment:** *Adverse effects on prices of goods and services and competition:* Related to the direct and indirect costs is the effect on prices of goods, services and competition. There were many comments by associations whose ultimate concern is the effect on their businesses. The Energy Association of Pennsylvania stated costs would be passed on to ratepayers. Pennsylvania Waste Industries, Inc. outlined costs that would be passed on to consumers. The price of farm products would be affected if farmers lose the use of lands, and furthermore continue to pay taxes on that land. The Pennsylvania Builders Association stated the regulation would affect development. The Pennsylvania Forest Products Association commented that the regulation threatens the future viability of the state's forest products economy. The Pennsylvania Coal Association commented that if the regulation is applied to its members it would suffer a competitive disadvantage from coal produced in other states. The EQB should fully evaluate the effect of the regulation on the prices of goods, services and competition in Pennsylvania. The findings of this evaluation must be included with the submittal of the final-form regulation. (1322-IRRC)

Response: The Department has evaluated these costs and included a detailed explanation in the Regulatory Analysis Form and the Order.

7. **Comment:** *Nature of required reports, forms or other paperwork and the estimated cost of their preparation; Nature and estimated cost of legal and consulting services:* The EQB should evaluate the costs imposed by the requirements that will require legal and consulting services. The EQB should also evaluate the cost of reports, forms and paperwork required to comply with the regulation. In summary, relating to the criterion of economic and fiscal impact, the EQB should fully evaluate the compliance costs of the regulation described by the commentators along with any other impacts. The EQB should use this evaluation to present a comprehensive, accountable review of the persons and entities impacted by the final-form regulation and the costs imposed by the final-form regulation. We will review and consider these impacts in our determination of whether the final-form regulation is in the public interest. (1322-IRRC)

Response: The Department has evaluated these costs and included a detailed explanation in the Regulatory Analysis Form and the Order.

8. **Comment:** Need for the regulation; Protection of the public health, safety and welfare and the effect on the Commonwealth's natural resources. (71 P.S. § 745.5b(b)(2) and (3)(iii)) Several commentators challenged the need for the rulemaking. Commentators stated that existing regulation has been sufficient to protect Pennsylvania's waters from erosion, sediment and stormwater. While the regulation may represent an upgrade of protection, the EQB should explain the specific problems the regulation addresses. For example, is there a documented widespread erosion, sediment control and stormwater problem that demonstrates the need for the regulation?

The EQB should provide an explanation of the need for this regulation. Additionally, the Department of Transportation requested an exemption provision for purposes of protecting the public safety on roadways. The Department of Transportation also contends that over time, a riparian forest buffer may produce large trees and debris that could block streams and flood roadways. The EQB should evaluate these concerns, explain the balance of protecting the

environment versus the public safety of roadways, and amend the regulation as appropriate. (1322-IRRC)

Response: While several commentators challenged the need for the rulemaking, the majority of the commentators did not, and supported the proposed rulemaking. This is an update of existing requirements for a well established and accepted regulatory program. However, there is a significant source of water quality impairment associated with the earth disturbance activities in the construction and agriculture sectors related to sediment pollution and stream degradation as a result in increased stormwater volumes. The requirements of this final form rulemaking will lead to better plan development that will help the Department and conservation districts in the effort to review plans as well as lead to better compliance.

9. **Comment:** The Water Resources Advisory Committee asked the EQB to solicit input on three issues. We commend the Water Resources Advisory Committee for the cogency of the three key issues it raised. The Water Resources Advisory Committee understood and anticipated the controversy of these three issues: permit-by-rule, long-term maintenance of PCSM and riparian forest buffers. For example, virtually the full spectrum of interested parties who commented on the permit-by-rule provision found the EQB's proposal to be fatally flawed either in its protection of the environment or in its practicality for a potential permit holder. Given this insightful guidance, we request an explanation of what factors caused the EQB to override its advisory committee and move forward with the regulation without further consideration of these issues. We will consider the EQB's response as part of our determination of whether the final-form regulation is in the public interest. (1322-IRRC)

Response: The Department did not override the guidance of its advisory committee. On the contrary, the Department honored the Water Resources Advisory Committee's request to include three important questions on issues. Further, the Department incorporated numerous WRAC member comments as a result of the multiple meetings with the Committee. However, during the discussion of the proposed rule, WRAC was not able to reach consensus and requested EQB to put the three important specific questions in the proposed rulemaking Preamble and asked for public comment on the full proposal and those issues specifically.

As a result, the Department included those specific questions in the proposed rulemaking Preamble and asked for public comment on the full proposal and those issues specifically. As a result, over 1,300 individuals, organizations, businesses and interest groups submitted comments. This Comment/Response document, as well as the final form rulemaking, contains numerous revisions as a result of the public input and the input from the Water Resources Advisory Committee and the Agricultural Advisory Board

10. **Comment:** Relationship of Chapter 102 to other regulations, decisions and laws. Several comments included concerns about the relationship of Chapter 102 to other chapters in Department of Environmental Protection (DEP) regulation including Chapters 78, 92, 93 and 105. The Pennsylvania Coal Association does not believe Chapter 102 applies to its members' operations because their operations are regulated by DEP's Bureau of Mining and Reclamation. In its comments on Section 102.4(b)(6) and 102.8(h), the Pennsylvania Chamber of Business and Industry lists several decisions by the Environmental Hearing Board. These decisions emphasize

the importance of the relationship between different chapters under DEP regulation. Additionally, the Pennsylvania Oil and Gas Association cites an exemption of oil and gas activities from NPDES permitting in the Federal Energy Policy Act of 2005.

The EQB should explain how it considered decisions by the Environmental Hearing Board in the development of this regulation. The EQB should also explain how the regulated community, DEP and the Environmental Hearing Board can properly distinguish Chapter 102 from or integrate Chapter 102 with other chapters of regulation under DEP. It should add language to Chapter 102 to more clearly explain its relationship to or distinguish its requirements from other chapters. (1322-IRRC)

Response: *Relationship to other regulations.* Chapter 102 is referenced in nearly two dozen other chapters of Title 25, including, for example chapters related to coal and non coal mining (Chapters 77 and 86), oil and gas (Chapter 78), sewage facilities (Chapter 71), dams, water obstructions and encroachments (Chapter 105), land recycling (Chapter 250) and multiple waste management related chapters (Chapters 273, 275, 277, 279, 281, 283, 287, 288, 289, 29, 293, 295, and 297). The Department does not disagree with the Pennsylvania Coal Association or other commentators that their operations are regulated and permitted by Chapters other than 102. However, typically these other chapters – such as Chapters 77, 78 and 86 – also require compliance with Chapter 102.

There are a number of programs administered by the Department where compliance with multiple chapters of Title 25 is overseen by one bureau within the Department through an integrated permit process. Mining, oil and gas and waste management are examples. DEP staff developing the 102 revisions worked directly with Bureau of Mining and Reclamation, Bureau of O&G, BAMR, and BWM, when drafting the Chapter 102 amendments to assure that the regulatory amendments in Ch 102 are properly correlated with regulatory requirements in each of the related programs. Recommendations of the other programs for changes were incorporated into both the Chapter 102 proposed and final amendment text. For example, Section 102.8(n) was developed in close coordination with these other programs in light of the restoration requirements contained in the regulations related to resource extraction.

Consideration of EHB decisions. The Department agrees with the commentator referenced by IRRC that these regulatory amendments must address the recent EHB cases interpreting the Chapter 93 antidegradation requirements in this context of erosion, sediment and stormwater management. The proposed and final regulations do specifically address these Environmental Hearing Board decisions as well as several others. First, in 1999, the EHB concluded that "post construction" stormwater was potential pollution which the Department should have evaluated along with the stormwater discharges that occur during construction activities. *Valley Creek Coalition v. DEP*, 1999 EHB 935. Subsequent EHB decisions including *Blue Mountain Preservation Association v. DEP* and *Alpine Rose Resorts*, 2006 EHB 589 and *Crum Creek Neighbors v. DEP* and *Pulte Homes of PA, LP*, EHB Docket No. 2007-287-L, October 22, 2009 Adjudication, have addressed the adequacy of the Department's post construction stormwater evaluation in permit appeals, essentially confirming the *Valley Creek* decision. These cases taken together are part the basis for inclusion of post construction requirements in Section 102.8,

which codify the post construction requirements that have been part of the permitting program since 2002.

These regulations have also been amended to specifically incorporate Chapter 93 antidegradation implementation requirements as a result of several EHB cases. The federal Clean Water Act requires states to develop and implement “antidegradation” requirements, which in Pennsylvania are found in 25 Pa. Code Chapter 93. In the EHB decisions in *Zlomsowitch v. DEP*, 2004 EHB 756, *Blue Mountain Preservation Association v. DEP and Alpine Rose Resorts*, 2006 EHB 589, and *Crum Creek Neighbors v. DEP and Pulte Homes of PA, LP*, EHB Docket No. 2007-287-L, October 22, 2009 Adjudication, the Board overturned the Department’s current implementation of antidegradation requirements in the permits issued under this chapter. The Department is therefore including specific antidegradation implementation provisions to provide the missing regulatory framework for evaluation of compliance with the Chapter 93 antidegradation provisions in the Chapter 102 program. These antidegradation implementation provisions are found primarily in revised sections 102.4(b)(6) and 102.8(h), and in the definitions of “ABACT” and “nondischarge alternatives” in Section 102.1. A number of members of the regulated community, including the Pennsylvania Chamber of Business and Industry specifically requested the Department clarify these antidegradation implementation provisions to more definitively state how regulated entities demonstrate compliance with antidegradation requirements. The revisions in the final regulation to these sections have been clarified to provide that compliance with 102.4(b)(6) and 102.8(h) constitutes compliance with Section 93.4c(b). Additionally, the Department has included an “Antidegradation Presumption” in Section 102.14(e)(1) which provides a presumption of compliance with antidegradation performance requirements set forth in 102.4(b)(6) and 102.8(h) when a permittee includes a riparian forest buffer meeting the requirements of Section 102.14.

Energy Policy Act of 2005. Although oil and gas activities were exempt from some Clean Water Act permitting requirements by the Energy Policy Act of 2005, EPA’s amendments implementing the Energy Policy Act exemptions were overturned by the federal court. EPA has not revised or otherwise clarified the federal regulations further. In the interim, Pennsylvania developed the Erosion and Sediment Control General Permit to facilitate the oversight of erosion and sediment control permitting for oil and gas sites. This permit is being codified in the final Chapter 102 regulations in Section 102.5(c).

11. **Comment:** Public comment and the need for an advanced notice of final rulemaking. More than 1,300 comments were submitted in support of the regulation citing improved environmental benefits from requirements such as buffers. At the same time, many of those supportive comments included opposition to the permit-by-rule provisions. Additionally, the proposed regulation raised many serious concerns from legislators, state agencies and trade associations on a broad range of issues. Should the EQB wish to proceed, we suggest that prior to submittal of a final-form regulation, the EQB allow for public comment on its amended final-form regulation in the form of an advanced notice of final rulemaking. This will allow the EQB to discover and address remaining concerns with the regulation prior to submittal of a final-form regulation. (1322-IRRC)

Response: Advanced notice of final rulemaking is optional and not required by the Regulatory Review Act. The Department does not believe that advanced notice of final rulemaking is necessary in light of the fact that there was extensive outreach, a 90 day public comment period, as well as three public hearings. The concerns raised by the 1,325 commentators have been fully considered and addressed in the final rulemaking and are detailed in the comment response document.

12. **Comment:** I am pleased to learn that a rule is being considered to improve the state's sediment control and stormwater management. With an increase in natural gas drilling, and the continued threat of factory farming, we must protect our waterways from pollution.(144, 292, 327, 350, 394, 589, 652, 653, 654, 655, 656, 657, 658, 569, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 11,54, 1155, 1156, 1157, 1158, 1160, 1161, 1163, 1164, 1165, 1168, 1169, 1174, 1177, 1179, 1180, 1181, 1189, 1192, 1195, 1196, 1197, 1198, 1199, 1206, 1210, 1211, 1212, 1213, 1216, 1222, 1226, 1243, 1251, 1254, 1258, 1273, 1277, 1283)

Response: The Department acknowledges the support of the proposed rulemaking.

13. **Comment:** As a strong proponent of natural conservation, environmental protection, and sustainable stormwater management, support the goals of the proposed regulatory changes to strengthen and improve the consistency of Erosion and Sediment (E&S) control and post-construction stormwater management (PCSM) in Pennsylvania. However, the proposed rulemaking is somewhat ambiguous, hard-to-follow, and repetitive in places. I suggest that a clear, concise summary be prepared comparing the existing regulations with those being proposed. (1274)

Response: As part of the final rulemaking, the Department has prepared a concise summary within the Order of the proposed rulemaking with the existing rule, and a summary of the final rule as a result of the comments

14. **Comment:** The Proposed Rulemaking must be amended to ensure consistency with the Antidegradation regulations. The Proposed Rulemaking is inconsistent with or obscures the requirements of the Antidegradation regulations, which is likely to lead to the revocation or suspension of permits, as recent Environmental Hearing Board precedent instructs. (1191)

Response: The Department has revised the final rulemaking to clarify the relationship with the Antidegradation regulations. Refer to comments related to 102.4(b)(6) and 102.8(h) for additional response.

15. **Comment:** The revisions to the regulations that attempt to address shortcomings of the permitting process as it now exists, and the revisions that are required to implement requirements of the Federal Clean Water Act are necessary and applauded. (1260)

Response: The Department thanks the commentator for their support.

16. **Comment:** The Proposed Rulemaking would improve the current regulatory program in a number of ways. The Proposed Rulemaking represents an improvement in erosion and sediment control and stormwater management in several respects, including: regulating animal heavy use areas; requiring erosion and sediment control permits for certain oil and gas activities; codifying post-construction stormwater management requirements; updating permit fees; encouraging, and in some cases mandating, riparian forest buffers; and requiring preconstruction and pre-submission meetings. (1191)

Response: The Department thanks the commentator for their support.

17. **Comment:** One of the major pollutants to the creek is sediment. And much of this sediment, we believe, is coming from construction and post-construction activity or lack of activity. We endorse the Commonwealth's efforts to tighten the regulation, as we believe that much of the problem is caused by inadequate regulation at this time. Many times when we check with the Conservation District, they confirm that there was a permit issued and that they were policed and inspected and are in compliance, and I state that, that there just is inadequate regulation in many cases to protect the stream and reduce the sediment load therein. (1297)

Response: The Department thanks the commentator for their support.

18. **Comment:** Pennsylvania's water resources and aquatic ecosystems will benefit from the proposed changes (if clarified and revised appropriately). The regulated community could benefit from improved consistency between different counties/municipalities. (1274)

Response: The Department thanks the commentator for their support.

19. **Comment:** On behalf of the Executive Committee of the Allegheny Group Sierra Club, I would like to address some concerns we have regarding changes in Chapter 102. We appreciate the task before you, and applaud your efforts to effectively review and implement programs to protect Pennsylvania's most sacred resources, especially its water. Pennsylvania has over 83,000 miles of streams, and it is difficult to manage and protect such a vast resource; but for the sake of the beauty of our state, our industry, and our future generations, we must. (1219)

Response: The Department appreciates the support.

20. **Comment:** The PA Environmental Council supports expanding NPDES Permitting Requirements to Include "Oil and Gas Activities" and "Operation of Animal Heavy Use Areas". Without question, both sets of activities present significant potential to cause sediment and stormwater pollution; their proposed inclusion under Chapter 102 is essential and appropriate. (1249)

Response: Neither the proposed nor the final rulemaking expanded NPDES permitting requirements to include oil and gas or animal heavy use areas.

21. **Comment:** A positive aspect of the proposed rule making is that the Commonwealth recognizes that licensed professionals are an important ingredient in the protection of

Pennsylvania waters. The Forest Stewardship Program is also cited in the proposed rule making, and that in itself speaks volumes for forestry and the significance of foresters. (1294, 1305)

Response: The Department acknowledges the comment and agrees that proper forest management is important for water quality protection.

22. **Comment:** I think Chapter 102 - we might have an opportunity here again coming back to the trading program which we've worked with Fair Share Coalition with quite extensively, coming up with a simplified trading program where if a developer can't meet these regulations, there's an opportunity to contribute into a fund to allow the Conservation District to use some of that money to provide forest buffers for these areas where have been identified for high nitrogen and phosphorus for areas where they're immediately next to major stream banks. That way we're really accomplishing something with the little bit of money that we do have. If you can't meet the requirements of the Department in your stormwater regs, but you're still allowed to proceed with your development if you're willing to pay into a fund to help the conservation districts and the farmers install forested buffers, I think we could accomplish a lot more of our environmental goals and still allow for reasonable development of land. (1292)

Response: The Department is developing baseline criteria in other proposed regulations that would provide a regulatory threshold for future trading opportunities. The Department has provided an opportunity to utilize riparian forest buffers in Section 102.14(e)(2) that would allow for the use of trading or offsetting credits in accordance with procedures or regulations established by the Department. In addition, although not explicitly for the trading credit program, these regulations provide a baseline regulatory threshold for erosion and sediment control and stormwater best management practices.

23. **Comment:** The periodic review and revision of environmental protection regulations is an important and necessary step to ensure both a comprehensive and fair address of said regulations to the social, economic and environmental concerns of the Commonwealth. Unfortunately, the proposed Chapter 102 revisions fail to achieve any of the stated or logically assumed goals in this regard. If adopted in their current form, regulatory control of the largest potential sediment and related items polluters will be diminished over current levels, significant increased costs associated with plan designs, inspections and permit fees will cripple rural residential and commercial development, and no measurable statewide gains in water quality will be realized. (9)

Response: The Department disagrees that development will be crippled by this regulation as asserted by the commentator, or the characterization that regulatory control will be diminished. The strength of Pennsylvania's communities is strongly dependent on the strength of the environmental health.

24. **Comment:** The failure of this document (revisions) is that it fails to recognize and categorize the different levels of pollution potential between the various types of earth disturbance and post construction stormwater runoff. The lack of problem recognition and scope at the administrative level dooms these efforts from the start (9)

Response: The Department provides effluent limits in the form of a variety of best management practices (BMPs) in both the Erosion and Sediment Control Program Manual (PADEP # 363-2134-008) and the Stormwater Best Management Practices Manual (PADEP # 363-0300-002) that can be utilized to minimize the potential for pollution both during and after construction activities. In addition, the Department has incorporated the federal effluent limit guidance (ELG) as additional requirements for meeting discharge limits.

25. **Comment:** To adopt the proposed Chapter 102 revisions as written will result in severe negative economic, political and environmental impacts to the Commonwealth. On one hand, the agricultural community will benefit immensely as the revisions remove any remaining vestiges of responsibility for farmers to control accelerated erosion and sediment releases due to plowing and tilling operations. Despite long standing recognition that such operations contribute between 60 and 80% of the total sediment pollution occurring in Pennsylvania, DEP has seen fit to remove any and all control over such work and in fact, is attempting to illegally delegate oversight of agricultural activities to the NRCS, a federal agency with no statute authority to regulate or enforce Commonwealth laws and regulations. One example of the apparent influence by that federal agency is the proposed adoption of the soil loss tolerance factor "T", a non field measurable amount of sediment releases which will only serve to shield the agricultural community from any liability in its continuing annual release of millions of tons of sediment into Commonwealth waterways. This one act will ultimately demonstrate to the people and governments involved in restoring the Chesapeake Bay that Pennsylvania is only providing lip service to it's pledges to be a major contributor in such efforts. With no requirements for E&S plan preparers, no permitting requirements, no plan reviews and with no way to measure "T" compliance, there will be no regulation whatsoever of the agricultural community under the Chapter 102 regulations. As a final item to ensure non interference by DEP, Ag E&S plans only have to incorporate measures that are "cost effective and reasonable". How can anyone dispute or enforce this standard?

Instead of using this opportunity to address the very real problems associated with agricultural activities producing the majority of sediment pollution to Commonwealth water resources; it appears that DEP has deliberately used this process to ensure future overall program failure. As will be highlighted in subsequent comments, this at the significant increased costs that will occur to the remainder of the regulated community. This should have been an opportunity to directly address agricultural E&S plan design and implementation. It was also an opportunity to develop a DEP Agricultural E&S BMP program manual. Instead, we get a weak and illegal attempt to transfer administration of Commonwealth laws and regulations to a federal agency (NRCS), using a pollution release standard immeasurable and therefore unenforceable by DEP, should the very rare event occur and they actually visit a farm. (9)

Response: Revisions to 102 regulations that address agriculture do not remove any E&S requirements on agriculture, as they maintain existing E&S requirements on plowed and tilled lands. Revisions to 102 expand requirements on agriculture by including animal heavy use areas for the first time. These regulations address the two primary sources of erosion on agricultural operations – crop fields and animal heavy use areas. This final rulemaking clarifies current regulations by specifying that an NRCS conservation plan (which meets the requirements of these regulations) can be used to meet the requirements for an agricultural E&S plan.

These regulatory revisions also clarify that an agricultural E&S plan (or an NRCS conservation plan which meets the requirements of these regulations) must meet soil loss tolerance ("T"), which is consistent with existing 102 regulations. Utilizing the "cost effective and reasonable" standard in 102.4 is consistent with the antidegradation standard applicable to non-point sources under other DEP antidegradation regulations. Further, the rulemaking requires additional BMPs when cover is less than 25% and within 100 feet of a stream.

26. **Comment:** I believe these proposed regulations will have the unintended effect of hurting businesses at a time when they are least equipped to deal with this additional burden. Not only will developers and property owners suffer, but also lending institutions, realtors, attorneys, brokers, suppliers, etc. Unfortunately, many of these approved projects will need to have their NPDES permits renewed to address these new policy revisions. It will require developers to modify their plans in mid-construction, adding costs and additional infrastructure that they simply cannot absorb. At the same time, the potential reduction in the number of units or total square footage from a project will eliminate a significant amount of asset value of the property. Banks are already struggling with loan performances. These proposed regulations will contribute additional burden and uncertainty to a project's ability to secure and/or maintain financing. If implemented, these changes could potentially push a number of projects into default. (421, 424, 425, 432, 695, 1122, 1126, 1126, 1133, 1137, 1138, 1175, 1190)

Response: The Department disagrees. It is important to note that the majority of this regulation is a codification of current practices. It does not require permit renewal prior to the expiration date of a current permit. The permittee must meet the requirements of their current permit, and this regulation does not alter any of those existing permit requirements. At the time of the renewal, a permittee may be required to comply with the amended regulations. In addition, once these regulations are published as final in the *Pa. Bulletin*, they will not become effective for an additional 90 days.

27. **Comment:** While we support DEP's goal of protecting our environment, we certainly hope they will support the need for economic vitality. Permit extension requirements which mandate the implementation of current regulations for projects already fully approved and under construction and rigid riparian buffers certainly make it difficult for businesses to be successful. These new requirements will have a serious ripple effect across every industry and will result in greater and continued stress on the citizens and governments of Pennsylvania. I hope that you would consider alternative methods to achieve a common goal for all. (421, 424, 425, 695, 1126, 1133, 1175, 1190, 1267)

Response: The Department acknowledges the economic challenges faced by business at this time and has worked to balance environmental protection and economic vitality. It is important to understand that the majority of this regulation is a codification of current practices and does not require permit renewal prior to the expiration date of the current permit. The Department has incorporated alternative methods based on public comments including waivers and exceptions to the mandatory provisions in the riparian forest buffer section. Further, while some commentators recommended mandating low impact development (LID) techniques as part of Section 102.8 related to PCSM; the Department has chosen instead to provide a more flexible

approach to meet these requirements. The Department does support LID and believes that it provides the lowest cost for implementation and maintenance to the permittee while also providing the highest environmental benefit.

28. **Comment:** I write this letter as an avid outdoorsman and a father whose daughter rows daily on the Schuylkill. I want all the watersheds and rivers in eastern Pennsylvania protected, but I fail to see the rationale for the changes proposed in the Chapter 102 Regulations. Running from Boathouse row to Manayunk, this morning, it's very clear that water quality in the Schuylkill has improved dramatically over the past decades. These improvements came under the existing regulations or prior regulations. The proposed regulations are extreme and are not scientifically substantiated. Certainly, protecting our watersheds is vital to everyone in the region; but the proposed chapter 102 regulations are unwise. Please do not approve the proposed 102 regulations. (1230)

Response: The Department disagrees. In the development of this regulation, the Department carefully considered the science and consulted with academia and other professionals. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

29. **Comment:** The timing of these changes is also unwise. The current recession has basically stopped private residential and commercial development; the resulting job losses are substantial. The lack of private development and construction is hurting all the townships and counties in the Commonwealth, the proposed changes will exacerbate their budget problems. The private or public projects that will be started, as the economy comes out of the recession, will be delayed, will be more expensive, or may be cancelled. (1230)

Response: The Department disagrees. While residential and commercial development may have slowed down, other industries are on the upswing. The continuing effort to protect water resources has a positive impact on the Commonwealth to be economically competitive. It is important to note that the majority of this regulation is a codification of current practices.

30. **Comment:** The proposed rulemaking, while limited in scope in terms of the number of activities which will fall under it, will still have an impact on forest landowners from seeing a return on their ownership investment in their forest land. For some landowners, this impact could be rather substantial. Lost return is not just going to be from lost development opportunities or lost timber harvesting opportunities, but also the potential loss of future revenue from the carbon offset markets, which we anticipate with climate change legislation on either the federal or state level. (1176)

Response: The Department disagrees that the full scope of the final rulemaking has very limited, if any impact, on forest landowners seeking return of investment on their land. This final rulemaking has emphasized the ability for landowners to realize value from carbon and other tradable environmental assets.

31. **Comment:** Right now we believe that the current Chapter 102 regulations, the existing BMPs, along with consistent SFI training for the logging forests and forestry forests, provide good protection for water quality as they exist now. (1287)

Response: Because the majority of this regulation is a codification of current practices, the forestry industry may not notice any impact from their finalization. Only forestry practices with an earth disturbance area over 25 acres will need to obtain an E&S permit.

32. **Comment:** PA Builder's Association believes that the effect of this proposed regulation will be to hinder development and significantly drive up the cost to design and install projects with a great deal of initial paperwork for everyone concerned. We also fear that certain jurisdictions will use this regulation to make it even more difficult to get necessary approvals to develop land. (1264, 1291)

Response: The Department disagrees with the commentator's statement that the regulations will hinder development. Because the regulations predominantly codify existing practices, development activities should see minimal impact in the short term. In the long term developers can expect their property values to increase. When riparian buffers including riparian forest buffers are in place and maintained, greenways are created that enhance the sensory and recreational qualities of a waterbody, a community, and an individual's property. The aesthetic values associated with greenways, which include riparian buffers and riparian forested buffers have economic benefits and can contribute to a sense of pride and well being for communities and property owners. These greenways can also have a positive impact on the value of surrounding property nearby. A greenway in Boulder, Colorado was found to have increased property values in the community by \$5.4 million which resulted in \$500,000 of additional tax revenue annually (Fausold and Liliehilm, 1996). Pennypack Park – a managed greenway along Pennypack Creek in Philadelphia - has been credited with a 33% increase in the value of adjacent property. A net increase of more that \$3.3 million in real estate is attributed to the park. (Chesapeake Bay Foundation, 1996). In a national survey, buffers were perceived as having a positive or neutral impact on adjacent property in 32 out of 39 communities (Schueler, 1995). The clarification of regulatory requirements will benefit persons conducting earth disturbance activities.

33. **Comment:** PECO's electrical activities are coordinated through PJM Interconnection. PJM is a federally-regulated regional transmission organization that keeps the electricity supply and demand in balance for over 51 million people in 13 states. This balance is accomplished by instructing power producers as to how much energy should be generated and by adjusting import and export transactions. PECO's expansion and enhancement of its transmission capabilities are commonly large-scale projects associated with specified outages of fossil and nuclear power plants and also with sections of PECO's transmission system. In most cases coordination of construction schedules, permitting requirements, and PJM constraints is critical to meet the outage schedules. Delays, such as those experienced with the issuance of permits add to the difficulties of meeting these federally-mandated outages. Failure to meet these schedules has the potential for significant electrical service interruption and severe federal fines. The proposed guidance illustrates that little or no consideration of the issues involved in the transmission and

distribution of electrical energy by the utility industry is evident in the proposed guidance document, thereby mandating application of requirements which are impractical, antithetical to sound environmental and conservation principles, and lacking in procedures for allowing variances when circumstances favor such an approach. (1301)

Response: The Department has incorporated within our authority and not superseded by federal requirements, variances for certain requirements relating to utility and linear-type projects, including riparian forest buffers.

34. **Comment:** A clean environment helps our children stay healthy & grow strong. Fresh water is needed for good nutrition and reduce pollution. We need clean water so the value of our homes & farms keeps property on the increase. (1020)

Response: The Department agrees and appreciates the comment.

35. **Comment:** We appreciate all the folks campaigning for us to have clean, fresh, healthy water. Clean water is important to us for many reasons- for the environment and for everyone to be healthy everywhere! (1033)

Response: The Department agrees and appreciates the comment.

36. **Comment:** The purpose of Chapter 102 is Soil Erosion and Sediment Control and Stormwater Management. Act 167 governs stormwater management. Act 167 does not grant DEP the right to enact stormwater regulations. DEP does not have the right to enact regulations unless the power has been granted to them by law. To use a soil erosion law to circumvent the legislature is improper and a misuse of power. (1263)

Response: The Department disagrees. These regulations are authorized under the Clean Streams Law which grants the Department authority to develop regulations to prevent pollution to the waters of the Commonwealth. Specifically, the proposed rulemaking is being made under the authority of Sections 5 and 402 of The Clean Streams Law (35 P. S. §§ 691.5 and 691.402), which authorize the Department of Environmental Protection to formulate, adopt and promulgate rules and regulations that are necessary to implement the provisions of the act, specifically, to regulate accelerated erosion, sedimentation and stormwater runoff from earth disturbance activities to protect, maintain, reclaim and restore waters of this Commonwealth by requiring that accelerated erosion, sedimentation during construction, and volume, rate and quality of post construction stormwater runoff, be minimized and controlled; and section 1920-A of The Administrative Code of 1929 (71 P. S. § 510-20), which authorizes the Board to promulgate rules and regulations that may be determined by the Board to be for the proper performance of the work of the Department.

37. **Comment:** Responsibility for long-term PCSM operation and maintenance in the Paradise Creek (Monroe County) Watershed Assessment, it was found that a majority of the structural PCSM BMPs were failing. Many failures resulted from a lack of maintenance. Chapter 102 is not the correct vehicle to address this topic because the state will not be able to administer or enforce such a program. We feel that Act 167, the Stormwater Management Act, is better suited

for O&M on a watershed scale as opposed to providing for it on a site by site basis. We agree that it is important for Chapter 102 to require that a schedule of O&M be provided and that a legal instrument be required. (693)

Response: Courts have ruled specifically that the Department must evaluate the post construction stormwater impacts on a site by site basis in order to satisfy the requirements of the Clean Streams Law and the Chapter 93 antidegradation regulations. Further, the federal NPDES program contains post construction stormwater management requirements. Site by site stormwater analysis and implementation must be coordinated with and implemented in concert with the watershed based Act 167 stormwater requirements. Municipalities have the option to further regulate subdivision and land development under authority granted to them in the PA Municipalities Planning Code.

38. **Comment:** The recent severe budget cuts forced upon DEP threaten to undermine whatever changes or gains are made by revising Chapter 102. Regulations, however good or well-crafted, must be enforced by adequate numbers of properly trained and equipped Department staff. The budget cuts have undone a decade of progress in the Department and will continue to do harm to our environment for years to come unless they are reversed. (941)

Response: The Department fees have been revised to provide additional funding to support the implementation of the program.

39. **Comment:** As a person who has been actively involved with trying to attract new businesses to the state as well as helping businesses to stay and grow in Pennsylvania, these new proposed regulations would make that process, which is difficult enough, nearly impossible. (422)

Response: These regulatory amendments to a large extent codify the existing program which includes post construction stormwater management, and recommends and relies on riparian forest buffers to satisfy permit requirements. These amendments provide flexibility for meeting the PCSM requirements, has limited the mandatory requirement for riparian forest buffers to projects in EV and HQ waters that are impaired, and include exemptions and waivers for the mandatory riparian forest buffer requirements. These regulations are consistent with federal requirements as well as other neighboring state programs to maintain the Commonwealth's competitive business environment while protecting natural resources. One of Pennsylvania's greatest resources is its plentiful and clean water. With over 83,000 miles of streams, Pennsylvania's water offers a multitude of opportunities to businesses for individual processes as well as recreational activity businesses. This regulation protects that vital resource.

40. **Comment:** We strongly urge the Environmental Quality Board (EQB) to request that DEP creates the technical document prior to the Chapter 102 revisions being implemented. The intent of the Technical Document is to provide DEP Field Staff as well as County Conservation Districts with the necessary understanding of how to enforce the rules set forth in the revised Chapter 102. Without this in place, the enforcement of this Chapter will be open to interpretation by each field staff and county conservation district personnel. This often leads to frustration within the regulated community. If the Environmental Quality Board (EQB) feels this is not

necessary, then we strongly recommend that DEP creates a technical document within 60 days of the Chapter 102 revisions being effective. (645)

Response: The majority of this regulation is a codification of existing practices. The Department provides training and guidance to the regional office and Conservation Districts regarding this program and will provide updated training as needed. Additionally, the Department intends to publish the Erosion and Sedimentation (E&S) Control Manual, as well as the Riparian Forest Buffer Guidance in coordination with the final regulation. Both the E&S Control Manual and the Riparian Forest Buffer Guidance were open for public comment as draft documents when the Chapter 102 proposed rulemaking was open for public comment.

41. **Comment:** As a strong proponent of natural conservation, environmental protection, and sustainable stormwater management, I support the goals of the proposed regulatory changes to strengthen and improve the consistency of Erosion and Sediment control and stormwater management in Pennsylvania. However, the proposed rulemaking is somewhat ambiguous, hard-to-follow, and repetitive in places. In addition, it is not consistent with other Federal, State and County regulations and would be exceptionally difficult to implement. (436, 650)

Response: The final regulation was reformatted and clarifies multiple sections in response to comments which should facilitate implementation.

42. **Comment:** The proposed regulations appear to have been focused on residential or industrial development, and have not taken into consideration linear projects (roadways, electric transmission lines, natural gas pipelines, water and sewer pipelines, etc.). I strongly encourage an overall review of all specific requirements be conducted in terms of their potential impact to linear projects. (436, 650)

Response: The Department amended the final regulation to provide clarity on how the regulations apply to various types of activities including linear projects. In addition, the Department's final regulation provides exceptions to certain requirements involving linear projects.

43. **Comment:** Instead of making the program even more complicated, we would suggest to keep the program and the regulations as they are and to concentrate the Department's and the conservation districts' efforts to improving the quality of submissions of the NOI's, the PCSM plans and to improve the inconsistency that presently exists across the state. (947)

Response: The majority of this regulation is a codification of current program practices. With this codification process, the Department anticipates that the quality of submissions and the consistency will improve.

44. **Comment:** I respectfully request that an additional draft be circulated for review before the regulations become final. (436, 650)

Response: The Department disagrees that another draft or advanced notice of final rulemaking is necessary. The EQB received significant public participation including comments from over 1300 commentators, advising how the final regulation should be drafted. In

developing this proposed rulemaking the Department undertook extensive outreach efforts to meet with stakeholders including: conservation districts, builders, agriculture, other industry groups, environmental groups, legislators and advisory committees.

45. **Comment:** The current economic environment has produced a clear need to reduce the cost and man-hours devoted to review and enforcement of Chapter 102 within DEP and the Conservation Districts. This can be accomplished if the design community and the agencies learn to rely on each other. Learning to trust and rely on each other can be accomplished through interaction in an educational environment. (945)

Response: The Department has conducted training for the design community and will continue to do so. In addition, the Department will work with other stakeholders to design and deliver appropriate training.

46. **Comment:** Inclusion of gas exploration as covered by this legislation is an important first step that should be enacted. The second step must be to open two-way communication with the gas exploration community. Without out-reach to this new type of designer, there are likely to be more, and significant, problems with the implementation of these regulations. The future will be filled with other atypical development like transmission line construction, wind development, and gas pipeline construction. Without a system that allows the department to communicate the expectations for design and learn the intricacies of a new industry, the value of this legislation could be compromised. (945)

Response: The Department will continue to grow its relationship with the gas exploration industry to maintain communication and expectations including these regulatory requirements.

47. **Comment:** On behalf of the Greater Philadelphia Chamber of Commerce (GPCC), representing 5000 businesses and organizations throughout southeastern Pennsylvania, I am writing to express concerns regarding the proposed revisions to the 25 PA Code Chapter 102 regulations. In recent weeks, we have been approached by Chamber members in southeastern Pennsylvania who believe that the new proposed regulations will impact the progress of many individual development projects and threaten an already stressed local construction industry. Planners and managers are concerned that the new procedures will result in lengthier approval processes, and increased construction and design costs, and the denial of permit extensions. Existing projects with future phases could also suffer under the new regulations. Like state and local governments, businesses and industries are struggling through this unprecedented economic downturn. Companies are working very hard to maintain both operational and employment levels. The additional burdens that accompany the proposed regulations could threaten the financial viability of specific projects, as well as some industry employers, including builders, developers, lenders, and suppliers. (692, 1171)

Response: The majority of this regulation is a codification of current program practices therefore, the Department does not agree with the commentator's assertion that these requirements will present burdens that will threaten the financial viability of projects or any industry. The requirement for professional engineer oversight and final drawings can be reduced

by choosing low impact and green designs that generally are less costly to install and over the long term, easier and cheaper to maintain.

48. **Comment:** The adoption of the proposed Chapter 102 regulations appears premature, and should be postponed indefinitely while the environmental and regulated community more carefully assesses the long term value and functionality of those BMP's currently being designed and constructed. Writing new regulations to satisfy the activism of the minority without thoughtful consideration to the economic health of all of the citizens of the Commonwealth is short-sighted, misguided, and fiscally irresponsible. We need to get these rules right the first time. We need more time and sound research before greatly expanding the role and power of a regulatory body that is already struggling to effectively implement existing E&S regulations, guidelines, and policies. (1151)

Response: The Department disagrees that more time is needed to evaluate the available research to support the regulatory requirements. The Department has been implementing post construction stormwater in this program since 2002 and erosion and sediment control requirements since 1972. The Department is revising this regulation based on lessons learned, changing technology and additional science. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

49. **Comment:** Pennsylvania currently has extensive requirements for controlling accelerated erosion. These requirements have been effective. The newly proposed regulations greatly expand the existing erosion and sedimentation (E&S) regulations and add several items not directly related to minimizing accelerated erosion, including, post-construction stormwater management requirements, stormwater runoff restrictions, and riparian forest buffer requirements. No justification or explanation has been given for this gross expansion. (1261)

Response: The Department acknowledges the support of past implementation of the program, however, the majority of this regulation is a codification of current practices. The Department disagrees that there has been a gross expansion of the requirements.

50. **Comment:** Without specific requirements in effect through law, the Department is overreaching when it seeks to mandate any one best management practice (BMP) over another to meet the goals of the law. The Department has produced no evidence that existing water quality is being degraded under the current regulations, but instead seems to rely on the dreadful maxim that more is better. More mandatory requirements are not always better, but always more expensive. (1260)

Response: Riparian buffers are included in this rulemaking because the Department has determined, and a large body of scientific research supports, that riparian forest buffers are the only BMP that can provide all the benefits needed to protect, reclaim and restore surface waters.

51. **Comment:** The proposed rulemaking is the latest attempt by the Department to legislate by regulation. Based on the potential harm to property owners through the decreased value and use of their land, it is evident that the impact of the rules was either not considered or was ignored in an attempt to restrict lawful private use of land for some uncertain environmental benefit. The touting by the Department of outreach efforts on permit-by-rule and riparian forest buffers during 2007-2009 reads more like a list from a scavenger hunt than a serious attempt to represent stakeholders' interests when it is considered that the rules were conceived before the outreach meetings. (1260)

Response: The Department disagrees that the regulations present potential harm to property owners through decreased value of their land. In the final rule, the Department has deleted Section 102.15 (Permit By Rule) option that had included riparian forest buffers; however, the Department has maintained riparian buffer requirements for projects in special protection watersheds. In addition, the Department has provided for exceptions for the riparian forest buffer requirements that will provide additional flexibility for landowners in the development of projects that require permits.

52. **Comment:** The EQB ought to extend the comment period on the Draft Regulations and consider withdrawing the Draft Regulations in light of U.S. EPA's issuance of Final Effluent Limitations Guidelines for Discharges for the Construction and Development Point Source Category, 40 CFR Part 450, published on November 23, 2009. (1272)

Response: The Department disagrees that the comment period needs to be extended. The Department has incorporated by reference the U.S. EPA's Final Effluent Limitations Guidelines.

53. **Comment:** In general, we believe, and are very concerned, that the proposed regulation will hinder development and increase the costs to design and implement projects. You are well aware that Pennsylvania and the rest of the country are enduring a significant economic downturn. Individuals and businesses are working diligently to maintain their business and keeping within constrained budgets. We are concerned that these regulations as proposed will have the effect of negatively impacting business at time when they are not able to address this added burden. Additionally, we are concerned that these regulations could create uncertainty around a project's ability to secure or maintain financing. The result could very well force projects into default. Given these concerns we recommend that the department withdraw this regulation in its entirety. (1321)

Response: The Department acknowledges the economic challenges faced by business at this time and has worked to balance environmental protection and economic vitality. It is important to understand that the majority of this regulation is a codification of current practices and does not require permit renewal prior to the expiration date of the current permit. The Department has incorporated alternative methods based on public comments including waivers and exceptions to the mandatory provisions in the riparian forest buffer section. In addition, once these regulations are published as final in the *Pa. Bulletin*, they will not be effective for an additional 90 days.

54. **Comment:** We recommend reformatting the regulations to provide indentation for all sections and subsections to make the document simplify determination of which subsection a particular item is located under. (1129)

Response: The format for regulations is set by the Legislative Reference Bureau and must be followed by all Commonwealth agencies.

55. **Comment:** I suggest that the proposed rulemaking be returned to the Environmental Quality Board for further consideration with the panel containing significant representation by foresters from the private sector. The proposed rulemaking should not be forwarded to the IRRC or endorsed by the IRRC unless and until returned to the Environmental Quality Board for further consideration. (1149)

Response: The process established for regulatory approval includes going to the Environmental Quality Board for the final rulemaking, as well as IRRC before the final rule becomes effective.

56. **Comment:** Responsible stormwater management requires an understanding of the complex physical relationships and processes involved in the rainfall / runoff process, and the impact man's activities on the land have on these processes. To understand this complex relationship, practitioners (including practicing design professionals and regulatory staff) need to be well versed in a variety of subjects including hydrology, hydraulics, soil sciences, hydrogeology, geomorphology, water chemistry, etc. In addition, practitioners must have tools available that enable them to accurately predict pre-development and post-development runoff characteristics. Unfortunately, a large percentage of practitioners and regulators are not equipped with the education necessary to adequately address the issue these rule changes propose to regulate. The lack of understanding and knowledge of the sciences has and will continue to result in confusion and conflict between regulators and the design profession. Also, this lack of knowledge and understanding has and will continue to result in inefficient and costly designs that don't necessarily provide the environmental protection desired. In addition the design tools or "models" available for engineering analysis of storm runoff have been shown to be inappropriate for application at the scale of typical development projects. Research has demonstrated that applying watershed based models to land development scale projects can result in model predicted runoff peaks rates and volumes that are off from actual measured values by as much as 500 percent or more. But these watershed scale models are the only tools available to assess potential impacts from development activities. Research is desperately needed to provide better analytic tools for analysis of stormwater impacts. Therefore, to effectively protect the Waters of the Commonwealth, the proposed Chapter 102 legislation must include substantial funding to meet existing education and research needs, thereby advancing the science and providing for more cost effective and appropriate solutions to address stormwater impact mitigation. (1255)

Response: The Department has conducted training for the design community and will continue to do so. In addition, the Department will work with other stakeholders to design and deliver appropriate training. The Department continually reviews available stormwater analytic tools, however no specific research funding is currently proposed. Further, the Department relied

upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

57. **Comment:** First, Range Resources believes that longstanding and well-established erosion and sedimentation control requirements have been fully effective in regard to oil and gas activities. The proposed rules include several new and burdensome requirements. No new requirements should be added without adequate justification and no such justification is expressed in connection with this proposed rulemaking. Second, the federal Energy Policy Act of 2005 expressly exempts stormwater discharges associated with oil and gas activities from NPDES permitting programs. Therefore, it is inappropriate to impose any permitting requirements for stormwater discharges associated with oil and gas activities in connection with NPDES permitting requirements. Third, regardless whether or not it is lawful to subject the oil and gas industry to a stormwater permitting program, there is simply no justification for imposing the proposed permitting requirements upon the oil and gas industry. Furthermore, the proposed rule does not specifically address the continued existence of the ESCGP-1 permit for earth disturbance associated with oil and gas activities. (1184, 1250, 1252)

Response: The majority of this regulation is a codification of current practices, and is consistent with the program implementation under the federal Energy Policy Act and the Clean Streams Law. DEP currently maintains authority for ESCGP-1 and has added express authority for issuing general permits in this rulemaking.

58. **Comment:** Rouse appreciates the hard work that the Department put into these draft regulations, and the willingness of the Department to bring into the process the views of diverse stakeholders including members of the housing development business. Nevertheless, as our comments will illustrate, we do believe that in several areas, the Department should consider revisions to enable the regulated community to comply in a meaningful manner. Ultimately, some of the proposed regulations seem unfair because they appear to eliminate regulatory flexibility with respect to the means to achieve the goals. Thus we urge the Department to consider the value of reincorporating more regulatory flexibility into the proposed regulations. (1281)

Response: The Department appreciates recognition of the extensive outreach efforts that preceded this rulemaking. Flexibility has been built into these requirements in several areas, for example 102.8(g) (3) (iii) allows for the applicant to propose alternative PCSM approaches. Another example is 102.14(d) and (e) which addresses a variety of exempted activities and availability of trading or offsetting credits to address specific unusual site situations.

59. **Comment:** The regulations introduce to Chapter 102 terms such as "low impact development" and "low-impact project." We see the Department acting here in the role of land use regulator, perhaps interfering with local control over land use decisions. While perhaps not intentional, favoring certain types of development over another, even if both meet anti-degradation goals, seems impermissible. (1281)

Response: The Department used the term low impact development in the proposed rulemaking as it relates to comprehensive engineering design approach with the goal of maintaining the pre-development hydrology through sustainable, natural techniques – related approaches include conservation design, better site design, and green infrastructure. The Department has incorporated alternative methods based on public comments including waivers and exceptions to the mandatory provisions in the riparian forest buffer section. Further, while some commentators recommended mandating low impact development (LID) techniques as part of Section 102.8 related to PCSM; the Department has chosen instead to provide a more flexible approach to meet these requirements. The Department does support LID and believes that it provides the lowest cost for implementation and maintenance to the permittee while also providing the highest environmental benefit.

60. **Comment:** While the Railroads recognize the important role that the regulations in 25 Pa. Code Chapter 102 can play in protecting Pennsylvania's surface water resources, the Railroads also believe that the proposed regulations will impose requirements that will unnecessarily impinge on Pennsylvania's economic well-being and impermissibly interfere with interstate commerce, at least insofar as the proposed regulations apply to rail activities. The rail lines through Pennsylvania were integral to the development of the United States and are critical to the continuing vitality of Pennsylvania and the country as a whole. The ability of the railroads to efficiently move vast quantities of freight holds enormous promise for contributing to the environmental well-being of both Pennsylvania and the nation. Rail transportation promotes national and state interests and policies by reducing the nation's dependence on foreign sources of energy and in reducing emissions of greenhouse gases as compared to other means of transportation. The proposed regulations have the potential to frustrate the great potential of rail by limiting the ability of the Railroads to proceed with rail projects that are of vital importance to interstate commerce and involve earth disturbance activities. (1256)

Response: The Department has revised the final rulemaking to clarify railroad activities, specifically inclusion of the requirement under road maintenance activities and exceptions within the postconstruction stormwater management and riparian buffers.

61. **Comment:** EPA does support Pennsylvania's efforts to encourage increased use of riparian buffers and a streamlined permitting process. However, the process needs clarification in order to insure that the requirements of the NPDES program are met. (1268)

Response: The Department thanks EPA for their support. The Permit by Rule (Section 102.15) section has been deleted from the final rulemaking. The Department will continue to seek methods of streamlining the permit process.

62. **Comment:** Having evaluated the proposed rule making in regards to the parties consulted in its development and which the Environmental Quality Board has adopted. It is evident that the proposed rule making was developed without sufficient representation of the forestry profession, foresters and landowners. (5, 1305) Under the Public Participation and Outreach (Subsection E), it was noted that the “conservation districts, builders, agriculture, other industry groups, environmental groups, legislators, and advisor committees” were a part of the outreach effort. I did not see mention of any design professionals being included in this outreach group, yet the

professional engineering community will have new requirements under the proposed regulations as currently published. (1159) The proposed rulemaking needs to be returned to the table where foresters, particularly foresters in the private sector, are included in the discussions. (1305)

Response: In developing this proposed rulemaking the Department undertook extensive outreach efforts to meet with stakeholders including: conservation districts, builders, agriculture, other industry groups, environmental groups, legislators and advisory committees. Outreach efforts by DEP Secretary Hanger or members of Executive Staff on key revisions to Chapter 102 included meetings with the Department of Community and Economic Development, the Governor's Action Team, legislators; Pennsylvania Association of Conservation Districts (PACD), PA Builder's Association and building industry representatives, PA Campaign for Clean Water (Coalition of environmental groups including: Chesapeake Bay Foundation, Clean Water Action, Delaware River Keepers, Sierra Club, Trout Unlimited PA Chapter, Penn Future), PA Chamber of Business and Industry, Pennsylvania Oil and Gas Association, Independent Oil and Gas Association, and oil & gas industry representatives, State Conservation Commission, Chesapeake Bay Foundation, Forestry Industry, Professional Geologists, Professional Engineers, the Department of Conservation and Natural Resources and others. In addition presentations were given to the Department's Citizen's Advisory Council, Agricultural Advisory Board (AAB), and Water Resources Advisory Committee (WRAC):

63. **Comment:** I also wish to protest the location of the public hearings. A majority of the EV streams are located North of Interstate 80. All of the hearings were scheduled for locations South of I-80. I saw no notices of the proposed regulation in local newspapers where the people most affected by this regulation reside. It would appear that DEP is trying to limit participation by the affected public. (1263)

Response: The Environmental Quality Board (EQB) received comments from 1,325 individuals, organizations, state and federal agencies. The location of the EQB hearings is intended to give all Pennsylvania residents equal access to participate. Commentators could offer their input by attending a hearing, as 32 commentators did, or by submitting their comments electronically or in writing. The proposed rule was published in the *Pa. Bulletin*, as well as posted on the Department website.

64. **Comment:** I request that any exemptions for oil and gas companies be removed from Pa. Code 25. (949)

Response: Exceptions from riparian buffer requirements are provided in 102.14(d) for a variety of unique site conditions, permit requirements in other regulations and public health and safety reasons.

65. **Comment:** 102.14(a)(4). Given the widespread epidemic of invasive species in some areas of Pennsylvania almost all of the groundcover would have to be removed and replanted to meet this specification. PADEP referred to the draft Forest Buffer Guidance Document for suggested costs of these buffers. \$1400/acre was offered as an average cost by PADEP staff during one of the public meetings. PADEP also suggested the use of volunteer labor to plant these buffers, including environmental groups and donated labor and equipment from industries. We doubt that

volunteer labor or donated materials will be available to the majority of permittees. Additionally, based on similar installations, we believe the design/installation cost per acre to be more accurately \$25,000 - \$40,000 per acre or more, plus monitoring costs. (1152)

Response: The Department has undertaken further economic analysis and has included an extensive analysis in the Order to this rulemaking.

66. **Comment:** As currently proposed, I anticipate that costs would increase somewhat significantly particularly due to the requirements for professional construction oversight, preparation of record drawings and having design professionals "certify" as-built plans, and long-term operation & maintenance (O&M) following construction as well as for both PCSM facilities and riparian buffers. (436, 650)

Response: The Department has undertaken further economic analysis and has included an extensive analysis in the Order to this rulemaking.

67. **Comment:** Section F of the proposed rule making provides only a very weak discussion of costs and impacts. The implication is that costs associated with the proposed changes would be minor. However, significant costs have been overlooked in the Section F summary. The need for a detailed cost and impact analysis is not only our comment, but it is a requirement under Title 1, Chapter 305 of Pennsylvania State Code (Procedures for Delivery and Review of Proposed Regulations). These procedures include completion and delivery of the Independent Regulatory Review Commissions Regulatory Analysis Form. Section III of this form requires a detailed assessment of costs and impacts resulting from the proposed regulatory action. (1255)

Response: The Department has undertaken further economic analysis and has included an extensive analysis in the Order to this rulemaking. The Independent Regulatory Review Commissions Regulatory Analysis Form is also a part of this rulemaking package.

68. **Comment:** There is a discussion that says, "...there may be cost savings as a result of eliminating the outdated and unnecessary requirements.. ." What requirements are being eliminated and how does the Department justify a cost savings to the applicants with new fees and additional requirements? (1123)

Response: The Department has undertaken further economic analysis and has included an extensive analysis in the Order to this rulemaking. The majority of this regulation is a codification of current practices. Requirements that were outdated and deleted from the regulation include several definitions, prescriptive requirements for special protection BMPs and the requirement for immediate interim or temporary stabilization.

69. **Comment:** Regarding funding requirements, the executive summary states that the revision should not result in significant increase compliance costs and further states that there should be a cost savings to developers and the general public. While we agree that outdated requirements have been removed, new requirements have been added. A couple of these items of increase costs are additional inspections, long term O&M monitoring, record keeping, interpretation of definitions such as restoring water quality, and measurements during construction. How can the

Department justify that there will be a reduction in costs? An analysis of the true projected cost should be provided to the public. An ongoing problem is the disparity between the Department's own regional offices and likewise the Department's local conservation district. Each office has their own sets of rules that they play by. For example, one conservation district we work with only allows silt socks, no silt fence. The next conservation district to the north prohibits silt socks since they aren't in the manual. That's one small example. As part of these revisions, consistency needs to be addressed. (1289)

Response: The Department has undertaken further economic analysis and has included an extensive analysis in the Order to this rulemaking. Further, state-wide consistency between DEP regional offices and conservation districts is addressed via periodic training, guidance and informal interaction. The Department appreciates the comments supplied by the commentator on the Erosion and Sediment Control and Stormwater Management Manual; however, updating the Erosion and Sediment Control and Stormwater Management Manual was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

70. **Comment:** While I agree that the proposed rulemaking does remove some outdated requirements, I take exception with the statement that the increase in application fees, costs associated with oversight and preparation of record drawings and long-term operation and maintenance of post-construction stormwater management facilities will be minor. A tenfold increase in proposed permit fees is not minor. Costs associated with professional oversight in the preparation of record drawings will also add significantly to development costs. And no one knows where long-term operation and maintenance costs will end up. While I acknowledge that peak grade measures alone have not and will not provide the level of mitigation required to adequately protect surface waters of the Commonwealth, the costs associated with the additional land needed to develop the same number of residential units or promotional square footage has not been considered. Unless local municipalities are aggressive at altering zoning to increase density to offset the need for more land, the end product will be more urban sprawl. And it's not just the cost of the land, but the cost of energy and other resources associated with urban sprawl. For all these reasons, the costs associated with this proposed rulemaking cannot just be brushed off. Costs will be significant. A rigorous analysis of the true costs is required or should be assessed prior to enactment of this rule change. (1255, 1306)

Response: The Department has undertaken further economic analysis and has included an extensive analysis in the Order to this rulemaking.

71. **Comment:** In the preamble to the proposed amendments, the EQB states that "[t]hese regulatory revisions should not result in significant increased compliance costs for persons proposing or conducting earth disturbance activities." 39 Pa. Bull. at 5135. The preamble cites "moderate" increases in costs due to increased permit fees (discussed hereinafter), and costs associated with the preparation, operation and maintenance of Post Construction Stormwater Management Plans. The EQB and PADEP underestimate the costs to the regulated community if the proposed amendments are adopted without further modification. The EQB and PADEP must acknowledge that in addition to the increase in permit fees, the imposition of any mandatory riparian forest buffer removes the value of the land for alternative uses, thereby reducing the value of the property without any corresponding monetary compensation. The preservation of

land for riparian buffers is a real cost to a landowner if the proposed amendments are adopted without further modification. Moreover, given the number of surface waters that have been designated as "Exceptional Value," the potential amount of land bordering rivers, streams, creeks, lakes, ponds, and reservoirs in EV watersheds is large indeed. Moreover, although the preamble to the proposed regulations states without further amplification that the proposed amendments eliminate "outdated and necessary requirements" (which reference appears to only concern the elimination of the special sediment basin requirements at 25 Pa. Code 5 102.4(i)), the overall effect of the proposed amendments will be to dramatically increase the time and costs to prepare applications, and the costs to comply with new conditions set forth in permits and approvals. Given the foregoing, we request that the EQB and PADEP reexamine the proposed amendments to ensure that the significant costs that will be imposed on the regulated community if these amendments are adopted are properly balanced with the expected environmental benefits. (1323)

Response: The Department has undertaken further economic analysis and has included an extensive analysis in the Order to this rulemaking.

72. **Comment:** The PADEP costs to establish and maintain riparian forest buffer has no basis in reality. PECO has experience in this area and recently created 2 riparian buffers (lightly forested/meadow buffers) over the last 3 years. Using site characteristics from real projects, totals range from a low of about \$5,000 to a high of about \$260,000 per acre and are significantly higher than the \$700.00 to \$4,700.00 proposed by the PADEP. In addition, the maintenance and monitoring (M&M) costs provided by the PADEP ranged from \$0.00 to \$2,725.00/acre, which are also considerably less than the approximately \$10,000.00 to \$15,000.00 annual cost industry is currently paying for M&M projects. Depending upon the site conditions and degree of work that would need to be performed, we estimate a likely spend of around \$80,000 to \$120,000 per acre for the creation of a typical riparian buffer with some tree removal, spot herbicide treatment for invasive species (understory shrubs), enhanced native species plantings, and 5-years of M&M. For the nature of the work performed by utilities in either managing the vegetation in its right-of-ways as required by the Federal Energy Regulatory Commission (FERC), the Northeast Reliability Council (NERC), and Pennsylvania Public Utility Commission (PAPUC) rules, where the intrusion is of the most fleeting temporary nature, the costs associated with this group of proposed regulations are far out of sync with the benefits to be obtained. This is especially the case where current practices already include protection of habitat when such work is conducted. The rule becomes even more out of sync when applied to re-conducting activities necessary for both system reliability and smart grid technologies. In most watersheds, PECO's transmission lines cross on average two streams for every linear mile. The proposed 150-foot riparian buffer in Exceptional Value (EV) watersheds would require 1-acre of restoration per stream crossing. The proposed guidance would conservatively add \$160,000 to \$240,000 per transmission mile. From a purely physical standpoint, here, the intrusion into habitat is even less so than with disturbances created in complying with vegetation management requirements. PECO believes that a rigorous cost-benefit analysis should accompany this guidance document. (1262)

Response: The Department has undertaken further economic analysis and has included an extensive analysis in the Order to this rulemaking.

73. **Comment:** Pennsylvania Forest Products Association (PFPA) and its members also request meetings with the Department to work on implementation of the final rulemaking, including development of an update of the current Timber Harvesters Action Packet and related SFI training. (1176)

Response: The Department appreciates the offer of assistance and intends to work with a variety of stakeholders in the program implementation.

74. **Comment:** Wouldn't you like to drink clean water! Maybe someday you won't! Try doing something to fix problems for a change, not create more! (914) I am personally concerned about the waterways for my children's sake, especially since there is a creek in our backyard and a Superfund down the road from our home. (953) We need clean water action because I know many people have well water, and some are getting contaminated with chemicals from runoff. We need more control for this type of problem. (979) I am writing to you of my concern of the forest, we want to enjoy the lakes that are nice and open for over view. We need these rivers more clean. Drinking water needs to be clean because that's the water we drink. (1082)

Response: The Department agrees with, and appreciates the commentators' remarks regarding the importance of clean water. The Bureau of Watershed Management's mission is to restore and protect Pennsylvania's watersheds through: proper planning and management of water resources and their uses; reducing the impacts of nonpoint sources of pollution on water resources; regulating activities for soil conservation and waterway and wetlands protection; forming partnerships and building local capacity to restore and protect water resources, including drinking water sources; and educating Pennsylvania citizens about watersheds and watershed management.

75. **Comment:** To effectively protect the Waters of the Commonwealth, the proposed Chapter 102 legislation must include both input from, and education of, the professional involved in the implementation of stormwater management. The engineering community involved includes DEP, the Conservation Districts, designers, reviewers and inspectors. There are sound legal principles that mandate that the Conservation Districts and DEP cannot independently develop engineering standards for many of the BMPs without input from the engineering community. The other professionals involved in stormwater management include gas exploration companies, developers, excavators, manufacturers, and others. This legislation must be accompanied by a requirement to fund outreach to the Conservation Districts and the stormwater professional within the community, with the intent of soliciting input into the BMP Manual's design standards and providing better protecting the waters of the Commonwealth. This is especially important given the current reductions in manpower that DEP has suffered. (945)

Response: In developing this proposed rulemaking the Department undertook extensive outreach efforts to meet with stakeholders including: conservation districts, builders, agriculture, other industry groups, environmental groups, legislators and advisory committees. Outreach efforts by DEP Secretary Hanger or members of Executive Staff on key revisions to chapter 102 included meetings with the following groups during 2008-2010: Department of Community and Economic Development, the Governor's Action Team, legislators; Pennsylvania Association of Conservation Districts (PACD), PA Builder's Association and building industry representatives,

PA Campaign for Clean Water (Coalition of environmental groups including: Chesapeake Bay Foundation, Clean Water Action, Delaware River Keepers, Sierra Club, Trout Unlimited PA Chapter, Penn Future), PA Chamber of Business and Industry, Pennsylvania Oil and Gas Association, Independent Oil and Gas Association, and oil & gas industry representatives, State Conservation Commission, Chesapeake Bay Foundation, Forestry Industry, Professional Geologists, Professional Engineers and others. In addition presentations were given to the Department's Citizen's Advisory Council, Agricultural Advisory Board (AAB), and Water Resources Advisory Committee (WRAC):

76. **Comment:** Continued consideration of the proposed rulemaking should seek and include input from foresters from varied employment sectors (public, industry, and consulting) to engage in the discussion and provide input. The proposed rulemaking can also be seen as an opportunity to recognize the expertise of professional forester, and advocate for their licensing within Pennsylvania. (939)

Response: The Department appreciates the comments supplied by the commentator on the Erosion and Sediment Control and Stormwater Management Manual; however, updating the Erosion and Sediment Control and Stormwater Management Manual was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations. The Department will continue to reach out to advisory committees and various interested organizations and individuals regarding this program.

77. **Comment:** I have lived in Ambler for 56 years and have never seen flooding like we have had in the past few months, it's a disgrace. My daughter, husband and three kids live in a house that floods every time in rains and they have mold growing in the basement and the kids are always sick. I would like something to be done about this because it is not fair to have to live this way. (1027)

Response: The Department appreciates the comments supplied by the commentator on flood control. Controlling stormwater runoff both during construction and after construction will have a positive influence on the control of flooding.

GENERAL PROVISIONS

102.1. Definitions.

1. **Comment:** The ABACT definition is greatly appreciated and having the specifics in the new E&S manual will be a great benefit. (256)

Response: The Department appreciates the comment.

2. **Comment:** The definition of "ABACT" in the Proposed Rulemaking is inconsistent with the Antidegradation regulations. (1191)

Response: The Department disagrees. This definition is consistent with the requirements of Chapter 93.4c and its application as it relates to the requirements of this chapter.

3. **Comment:** Pennfuture recommends the following revisions to the Proposed Rulemaking: Section 102.1: Delete the definitions for the terms "ABACT" and "Nondischarge alternative." If the Proposed Rulemaking defines these terms at all, which it need not do if the remaining recommendations are accepted, these terms should be defined by reference to Chapter 93. Under no circumstances should these terms have different meanings in Chapter 102 than they have in Chapter 93. (1191)

Response: The Department disagrees. This definition is consistent with the requirements of Chapter 93.4c and its application as it relates to the requirements of this chapter.

4. **Comment:** ABACT - Antidegradation best available combination of technologies - "quality" in the definition requires clarification or a separately listed definition to document the measure(s) of quality. : (1218)

Response: The Department disagrees. The term quality is a generally accepted term and does not require further definition.

5. **Comment:** "ABACT:" should use the Chapter 93 definition (946)

Response: There is no definition for ABACT in Chapter 93. This definition is consistent with the requirements of Chapter 93.4c and its application as it relates to the requirements of this chapter.

6. **Comment:** ABACT - BMPs which will individually or collectively manage the difference in the net change from pre-existing stormwater volume, rate and quality for events up to and including the 2-year 24-hour storm and that will contribute to the maintenance and protection of the existing quality of the receiving surface water. The application of Section 93.4 c(b)(1)(i)(A) does not translate to non point source stormwater discharges (i.e. stormwater reuse BMPs are non discharge BMPs). The other components of stormwater runoff that degrade water quality and the management of those should be addressed further in the regulation. (693)

Response: The Department has provided additional clarification in Section 102.4(b) and 102.8 relating to the implementation of stormwater management to meet the requirements of Section 93.4 c(b)(1)(i)(A).

7. **Comment:** ABACT - it is not clear why this definition is needed or how it differs from the new definition of "nondischarge." It includes the phrase "preexisting stormwater" which doesn't appear to be defined elsewhere. In addition, it is unclear what it means to manage the "net change" in stormwater quality. (436, 650)

Response: Term ABACT is different than nondischarge alternative as both terms relate to the implementation of antidegradation requirements established in Chapter 93.4c. The term "pre-existing" has been deleted from the definition.

8. **Comment:** ABACT- The term "preexisting" should be replaced with "preconstruction" to be consistent with 102.8(f)(4), etc. "Preexisting" is ambiguous and does not accurately describe the condition of a site at the time immediately prior to application for the permit. (1129)

Response: The Department has deleted "preexisting" from the definition.

9. **Comment:** ABACT- Delete the phrase "manage the difference in the" from this definition. (1268)

Response: The Department disagrees. This phrase represents the basic premise in stormwater management and meeting antidegradation for wet weather applications.

10. **Comment:** PECO already manages stormwater during construction activities using best management practices ("BMP"). However, it is unclear which BMPs may now constitute anti-degradation best available combination of technologies ("ABACT"). The regulation must clearly indicate what BMPs constitute ABACT. (1301)

Response: The Department has revised Sections 102.4(b)(6)(iii) and 102.8(h) for clarity.

11. **Comment:** Add a definition for "Act of God" referred to in 102.32(b). Does this refer to an event in excess of the design storm frequencies cited as the basis for E&S BMP design? (1129)

Response: The Department uses this term as it is referenced in Section 316 of the Clean Streams Law.

12. **Comment:** *Animal heavy use area* Several commentators believe this definition needs to be clarified regarding entrances and pathways used by animals to access keeping areas. The EQB should review this definition to evaluate the areas it needs to include and amend the definition as appropriate. (1322-IRRC)

Response: DEP has revised the definition of *Animal Heavy Use Areas* to clarify those entrances, pathways and walkways between areas where animals are housed or kept in concentration are not included in this definition.

13. **Comment:** The Pa Farm Bureau (PFB) recommends that all references to Animal Heavy Use Areas should be removed from the proposed regulations. However, in the event that these areas are not removed from the regulations, the "Animal Heavy Use Area" definition should be more clearly defined. PFB request that this definition exclude entrances, pathways and walkways between areas where animals are housed or kept in concentration. The PFB supports the development of technical guidance. The technical guidance should be clear to limit the definitions scope to areas where animals are permanently kept in concentration or kept in concentration for extended periods of time where it is not possible to establish and maintain vegetative cover of a density capable of minimizing accelerated erosion and sedimentation by usual planting methods. (1166)

Response: Animal heavy use areas are a significant source of sediment and remains in the final rulemaking. This definition has been revised and now excludes entrances, pathways and walkways between areas where animals are housed or kept in concentration.

14. **Comment:** Section 102.1. Definitions. -Need; Reasonableness; Clarity. *Agricultural plowing or tilling activity* Subsection (ii) states the term includes "no-till cropping methods." What specifically are "no-till cropping methods"? Also, Subsection (ii) is confusing because it includes "no-tilling" under the defined term "tilling activity." Also, the term "agricultural plowing and tilling" is used to describe exemptions throughout the regulation, including for example, Section 102.4(b). Therefore, "no-tilling" should be grouped together with the other activities. However, the EQB should consider replacing the term "agricultural plowing and tilling activities" with another term that is clearer, but still encompasses the same activities. (1322-IRRC)

Response: DEP recognizes the potential confusion of including "no-till cropping methods" within a definition of "plowing and tilling." DEP considered replacing the term "plowing and tilling" during early regulation development, but rejected this change as the term "plowing and tilling" was commonly used and understood. No other commonly used or understood term was found to be reasonable. DEP has included additional language to modify "no-till cropping methods" to point out that even those tilling systems commonly known as "no-till" do often include some tillage in the planting of crops. There are multiple methods and practices that are commonly called "no-till" and, while less likely to cause soil erosion, soil erosion can occur when these "no-till" systems are in use. The intent of including "no-till" in the regulations was to clarify for farmers that those "no-till" systems still required an agricultural E&S plan.

15. **Comment:** Section 102.1 (Definitions) – The "Agricultural plowing or tilling activity" definition includes "no-till cropping methods"; what is the definition of a no-till cropping method? A large amount of cropland in Pennsylvania is maintained in permanent hay production or pasture. The grass crop grown on this land is limed, fertilized (with both chemical and manure nutrients) and harvested (either mechanically or by grazing) with no tillage ever taking place. Would this be a no-till cropping method? If this is a no-till cropping method then all residential lawns and other land use in Pennsylvania that are maintained in grass need to be included in the regulations. The regulations should include a definition of no-till cropping

methods. A suggested definition = No-till cropping methods are the practices of planting crops with the minimum mechanical tillage needed to properly plant seeds. (1201)

Response: DEP has included additional language in this definition to modify “no-till cropping methods” to point out that even those tilling systems commonly known as “no-till” do often include some tillage in the planting of crops. Farmers that use “no-till” methods are required to develop and agricultural E&S plan.

16. **Comment:** The Animal heavy use area definition should be more clearly defined that this chapter is only concerned with erosion and sediment control and not for control of discharges other than sedimentation. The Agricultural Advisory Board supports the development of technical guidance. The technical guidance should be clear to limit the definitions scope to areas where animals are permanently kept in concentration or kept in concentration for extended periods of time. The definition should not include entrances and pathways, used by animals, to access a keeping area. (14)

Response: Section 102.2(a) states that the purpose of this regulation is to minimize the potential for accelerated erosion and sedimentation, and does not need to be repeated in this definition. Animal heavy use areas are a significant source of sediment and remains in the final rulemaking. This definition has been revised and now excludes entrances, pathways and walkways between areas where animals are housed or kept in concentration.

17. **Comment:** Animal heavy use area – *Should be changed to read:* Barnyard, feedlot, loafing area, exercise lot, or other similar area on an agricultural operation where it is not possible to establish and maintain vegetative cover of a density capable of minimizing accelerated erosion and sedimentation by usual planting methods due to the concentration of animals.(1187)

Response: The Department appreciates the suggestion, but does not agree that the suggested revision provides clarity beyond the current definition.

18. **Comment:** Animal heavy use areas-the proposed definition should specifically exclude timber harvesting. A timber harvest operation using horses to skid logs is not a common practice, but still occurs in PA from time to time, particularly in the Amish communities. The log landing could possibly be confused with an animal heavy use area. We believe this is not the intent of the new definition and if spelled out now in the definition, will eliminate potential interpretation problems as the new regulations are implemented. (1170)

Response: The log landing area, as well as the parking lot of a business or meeting house frequented by the Amish community by way of further explanation would not meet the definition of an animal heavy use area because these locations are not agricultural operations.

19. **Comment:** Animal heavy use - operation where because of the concentration of **one or more animals** ... (693)

Response: This addition is not necessary as the thrust of the definition is to identify those areas where it is not possible to establish vegetative cover regardless of the number of animals. It is the intent of the Department to interpret this definition to mean any number of animals including a single animal.

20. **Comment:** Animal Heavy Use Area - definition needs to be more specific, focusing on where the animals are permanently kept in concentration for extended periods of time. The definition should not include entrances and pathways used by animals to access a keeping area. (640)

Response: The length of confinement is not the limiting factor, rather the thrust of the definition is to identify those areas where it is not possible to establish vegetative cover. This definition has been revised and now excludes entrances, pathways and walkways between areas where animals are housed or kept in concentration.

21. **Comment:** Animal Heavy Use Area definition should be more clearly defined as to reference that the intent of the regulation is to address Animal Heavy Use Areas that are within close proximity to a stream, river; lake, or other navigable body of water. The technical document should be clear to limit the definitions scope to areas where animals are permanently kept in concentration or kept in concentration for extended periods of time. The definition should not include entrances and pathways, used by animals, to access a keeping area unless said areas have the potential to discharge sediment and/or nutrients to jurisdictional waters of the Commonwealth. (643, 645)

Response: The scope of these regulations is to minimize the potential for accelerated erosion and sedimentation and to implement BMPs that protect water quality regardless of distance. This definition has been revised and now excludes entrances, pathways and walkways between areas where animals are housed or kept in concentration.

22. **Comment:** Section 102.1 Remove any reference to "animal heavy use areas" from the proposed rulemaking. (1148)

Response: Animal heavy use areas are a significant source of sediment and remains in the final rulemaking.

23. **Comment:** The Chapter 93 Regulations do not specifically define "antidegradation" nor list such requirements under a title or section by that name. DEP must provide a more definitive connection between Chapters 93 and 102 concerning specific requirements. (9)

Response: The Department agrees that Chapter 93 does not define antidegradation, however the definitions and substantive requirements in the final rulemaking is consistent with the requirements of Chapter 93.4c and its application as it relates to the requirements of this chapter.

24. **Comment:** BMPs - Best management practices The EQB has added the phrase "before, during, and after earth disturbance activities." The addition of the phrase "after the earth

disturbance activity" is open ended, particularly as it relates to earlier phrases such as "manage stormwater" and "reclaim and restore the quality of waters." The EQB should explain why and how long BMPs must continue after earth disturbance activities. (1322-IRRC)

Response: The operation and maintenance requirement is for the structural best management practices that are installed as part of the PCSM plan. In order for these BMPs to function efficiently, they must be maintained until either the PCSM Plan changes or until the land use changes.

25. **Comment:** BMPs - This is a good revision. (693)

Response: The Department appreciates the support.

26. **Comment:** The BMP definition has been expanded to include after disturbance. This modification will allow the Department or local conservation districts to go after a party years later when the original permit and party may or may not still be responsible. (1289)

Response: Because Section 102.8(m) includes a procedure to revise the designation of responsible party, it should be a simple matter to keep the responsible party designation current.

27. **Comment:** BMPs - Best Management Practices - I suggest dividing the definition into two (2) parts, the first being specific to erosion and sediment control and the second being specific to post construction stormwater management because the best management practices for each have different requirements and purposes. (1218)\

Response: The distinction between the various BMPs can be found in Section 104.4 for E&S and Section 102.8 for post construction stormwater management.

28. **Comment:** BMP 's- Best Management Practices -- A person involved in earth disturbance activities should be obligated to protect and maintain the quality and existing and designated uses of waters of the Commonwealth during the activity (but not before) and be obligated to implement BMPs to protect and maintain the water quality after the activities. The restoration and reclamation of the waters in the project area that have not been degraded by the current project should not become the responsibility of the current project. There is, furthermore, no measure or metric in the implementing regulation that defines whether the current project has restored or reclaimed the water quality of the waterbody in the project area. (691, 1124, 1250)

Response: The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 et. seq.

29. **Comment:** In defining BMPs, the use of the term "restore" raises issues of extreme concern to utilities. Restoration implies attaining a pre-defined standard and presumes water quality testing to determine what the current standard is relative to this pre-defined standard or benchmark. For any particular stream segment at issue, there is generally no benchmark for the quality of the water entering that stream segment. Additionally, utilities do not have control over what is occurring upstream. This leaves utilities in a precarious position and allows anyone

to insist that the utility bring a stream segment up to standard simply because it crosses a ROW even though the degraded water quality is due to some other upstream source. These concerns are only enhanced by the inclusion of temperature in determining whether a water segment has been degraded. (1301)

Response: The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 et. seq., and have been part of the regulation that was adopted in January, 2000. BMPs that reclaim and restore would not typically be required for those activities such as pipeline or utility crossings that generally involve full restoration after earth disturbance activities. Section 102.8(n) has been revised to state that timber harvesting activities, pipelines or other similar utility infrastructure that require site restoration or reclamation may use the portion of the site reclamation or restoration plan that identifies PCSM BMPs to meet regulatory requirements.

30. **Comment:** BMPs - The BMP definition in Chapter 102 and Chapter 92 should be identical or more consistent. (947)

Response: These definitions are consistent, however the BMP definition in Chapter 102 refers to both point and nonpoint sources, as well as storm water management.

31. **Comment:** We request that the Department add the words "to the extent practicable" to the definition of BMP. (1115, 1267)

Response: This phrase is more appropriately included in Section 102.4

32. **Comment:** Expansion of existing requirements for E&S control -Existing definitions have been revised in a way that would greatly expand the scope of Chapter 102. The definition of BMP's is proposed to add stormwater management requirements, before, during *and* after earth disturbance. There is no need for these additional controls for restored well sites given the lack of impervious areas on these sites. (1261)

Response: These stormwater terms "before, during and after" were added to the BMP definition so that the term clearly applies to all stages of disturbance. As the commentator identified, restoration activities are included as a BMP for after earth disturbance.

33. **Comment:** The term "clean fill" should be defined and consistent with other laws and regulations. (947)

Response: The term "clean fill" is not used in this regulation, and therefore does not need to be defined.

34. **Comment:** The term "Collector" need not be defined in this Section, as it would no longer be used in the Chapter once Section 102.4(b)(6)(ii) has been deleted. (946, 1191)

Response: The Department agrees, and the term "collector" has been deleted.

35. **Comment:** Collector – Should read: A channel, dike or other conveyance, constructed downslope of an earth disturbance activity for the purpose of collecting stormwater runoff from an area and conveying it to BMP's for sediment retention and/or removal. .(1187)

Response: The term "collector" has been deleted because it is no longer used in this regulation.

36. **Comment:** The Conservation District definition has been expanded to include a provision to administer and enforce stormwater management. If the Department wants local conservation districts to review stormwater, then steps need to be taken to be the sole reviewer and remove municipalities from that function. (1289)

Response: The Department disagrees. The municipality retains this authority under the Municipalities Planning Code and the Stormwater Management Act. The conservation district's role in the review of stormwater relates to the implementation of this chapter.

37. **Comment:** The term "Conservation district": ". . . the erosion and sediment control and stormwater management programs. . ." (693, 946, 1191, 1208)

Response: The Department disagrees, the revision was made for readability.

38. **Comment:** The term "Conservation Plan" should retain the statement "which minimize the potential for accelerated erosion and sedimentation from" (693)

Response: This requirement remains, however the phrase has been moved from the definition to Section 102.4(a)(4)(iii).

39. **Comment:** The term "Conservation Plan" should retain the requirement that "The Conservation Plan shall include a schedule for the implementation of the BMPs." (693, 946, 1191)

Response: This requirement remains, however the phrase has been moved from the definition to Section 102.4(a)(6).

40. **Comment:** Conservation Plan definition should read as follows: "A plan that identifies conservation practices and includes site-specific BMPs, **including a schedule for implementation, that minimize the potential for accelerated erosion and sedimentation from agricultural plowing** (1208)

Response: This requirement remains, and can be found in Section 102.4(a)(6).

41. **Comment:** Conservation Plan - Should specifically say: A plan is "written" and identifies conservation practices that include site specific BMP's for agricultural plowing or tilling activities and animal heavy use areas. (640)

Response: This requirement can be found in Section 102.4(a)(2).

42. **Comment: Conservation Plan** - The conservation plan should be a written plan. The Conservation Plan shall include a schedule for the implementation of the BMPs. The length of time that one has to implement the plan should be defined. If one has a schedule of BMPs to be implemented and a pollution event occurs, would the person be in or out of compliance? (947)

Response: The requirement for a written plan can be found in Section 102.4(a)(2), and including an implementation plan (Section 102.4(a)(2)). Section 102.32(b) requires that plan to be fully implemented. If one has a schedule of BMPs to be implemented and a pollution event occurs, the person would be out of compliance because the plan had not been fully implemented and maintained.

43. **Comment:** The term "**critical stages of construction**" used in 102.5(e) and 102.8(k) needs to be defined. (947)

Response: The permit requirements in 102.5(e) have been clarified, and examples are already included in 102.8(k).

44. **Comment:** Insert definition for **the Department**. (1268)

Response: The Pennsylvania Legislative Reference Bureau has instructed Commonwealth agencies to not include a definition of "department" within their regulations.

45. **Comment: Diversion** The word "offsite" may not be needed and would limit "diversions" to waters "offsite." There may be instances when the clean runoff water comes from onsite. The EQB should explain the need for the word "offsite." (1322-IRRC)

Response: This definition has been deleted since the term is not used in the rulemaking.

46. **Comment: Diversion** – Should read: A facility, such as, a channel or a conveyance, constructed up-slope of the disturbed area. (1187)

Response: This definition has been deleted since the term is not used in the rulemaking.

47. **Comment:** The definition of **Diversion** should be revised to delete the work "off-site". The purpose of a diversion is to divert any clean runoff away from the disturbed area regardless of whether that runoff is from onsite or offsite. (708, 1114)

Response: This definition has been deleted since the term is not used in the rulemaking.

48. **Comment:** Diversion--A facility, including a channel, [terrace or dike] or a conveyance constructed up-slope of [an earth disturbance activity for the purpose of diverting] the disturbed area to divert clean offsite runoff away from [an existing or proposed disturbed area] the earth disturbance activity ADD: to an appropriate discharge area (i.e. existing or constructed stabilized swales, waters of the Commonwealth, or approved alternatives). (1315)

Response: This definition has been deleted since the term is not used in the rulemaking.

49. **Comment:** Earth disturbance activity – should be made to include industrial wind activities. (6)

Response: The Department disagrees, these activities when conducted as part of a land development are already included in that definition.

50. **Comment:** Earth Disturbance Activity - it appears the definition is being amended to specifically include activities that the public now finds controversial (e.g., animal heavy use areas, oil and gas activities and well drilling) the definition is being amended to address activities that the public now finds disturbing. *The existing definition which states “..or other human activity which disturbs the surface of the land...” should suffice to define any earth disturbance.* (944, 1204)

Response: These additions were made for clarity.

51. **Comment:** If the proposed definition for Earth disturbance activity remains, *please define well drilling.* (944, 1204)

Response: Well drilling is used as in common usage.

52. **Comment:** Is earth disturbance activities from ATV activities considered earth disturbance and regulated under chapter 102 regulations? (218)

Response: No, these activities are not included in the definition of earth disturbance activity.

53. **Comment:** The definition of earth disturbance activity in the Department's model stormwater management ordinance is different from that found in the proposed Chapter 102. (1264, 1291)

Response: The Department will assure these definitions do not conflict.

54. **Comment:** The term "Earth disturbance activity" should retain the " but not limited to," clause. (693, 946, 1191, 1208)

Response: This is a stylistic change and does impact the definition. Further the phrase “ but not limited to,” clause is inferred.

55. **Comment:** E&S Permit - defined only as a permit required for disturbance activities associated with timber, road maintenance, or oil and gas. What about all the other types of activities that trigger the need for a permit? (436, 650)

Response: Currently these are the only activities that require an E&S permit under this Chapter.

56. **Comment:** E&S Permit: Should the size requirement remain in the definition? (1268)

Response: No, the size requirement is more appropriately included in Section 102.5.

57. **Comment:** The definition of **E&S Permit** has been changed to remove the applicability threshold of 25 acres or more and different thresholds have been defined for the activities covered by this permit as described in §102.5 - Permit requirements. Since oil and gas activities have been added to both of these definitions, as well as its own definition, it may be concluded that these activities may, in some cases, require both an NPDES permit and an E&SC permit (Refer to comment regarding §102.5(a)(1)). We strongly suggest that any requirement, or hint of a requirement, that an NPDES permit be obtained for E&S activities be deleted from this proposal (691, 1124, 1152, 1250)

Response: This definition does not impact substantive requirements of when a particular activity needs permit coverage under this Chapter. Permit conditions are further defined in Section 102.5.

58. **Comment:** **E & S Plan - Erosion and Sediment Control Plan** The wording is amended from "identifying" BMPs to requiring "both drawings and a narrative that identifies" BMPs. Are drawings and a narrative needed for all plans? The EQB should explain the intent of this change and how the regulated community is expected to comply with it. (1322-IRRC)

Response: Drawings and a narrative are needed for all plans. This not a new requirement and is spelled out 102.4(b)(5). The regulated community is familiar with this requirement as evidenced in the thousands of plans that are successfully submitted and approved each year.

59. **Comment:** Additionally, the amended **[E & S Plan]** definition ends with "before, during and after earth disturbance activities." Given the definition of "earth disturbance activities" why is it necessary to include the word "before"? (1322-IRRC)

Response: The term "before" is necessary for the BMP definition so that the term clearly applies to all stages of disturbance. BMPs include identification of preexisting site conditions and the installation of access and perimeter E&S control measures prior to proceeding with the bulk of earth disturbance activities.

60. **Comment:** Also, given the requirements under Post Construction Stormwater Plans, why is it necessary for the **E & S Plan** to address erosion and sediment after earth disturbance activities, particularly after the soil is stabilized? How long after the earth disturbance must the plan address? (1322-IRRC)

Response: After earth disturbance is completed all E & S BMPs must remain in place until the site achieves permanent site stabilization (see Section 102.22).

61. **Comment:** **Erosion and Sediment Control Plan** - It should not be necessary to mandate the inclusion of both drawings and narrative, especially for very small earth disturbances, where either one or the other would be appropriate and could adequately satisfy the purpose and need.

The rule must clarify that BMPs required in E&S plan should be limited those that are required until the site is permanently stabilized. (691, 1124, 1250, 1267)

Response: The regulations specify that an E&S plan consists of both drawings and a narrative. It may be appropriate that the narrative could be part of the plan drawing especially for very small earth disturbance activities..

62. **Comment:** The definition of E&S Plan should be limited to before and during earth disturbance activities. Including the requirement of after earth disturbance activities makes the E&S Plan duplicative of what is required in the PCSM. This is particularly important since there will now be a PCSM Plan and 102.8(d) requires that the PCSM Plan be separate from the E&S Plan. (708, 1114)

Response: The Department disagrees. The intent of the requirement is to ensure consistency between these two plans. As a result, plans may contain duplicative information.

63. **Comment:** In the definition of "E&S Plan," DEP has added the words, "consisting of both drawings and a narrative that identifies." The Chamber assumes that the intent of these words is to make clear that the E&S Plan (which a regulated entity must implement) encompasses both the elements on the drawings and the elements described in any accompanying narrative, and that the "narrative" portion of this definition is referring to current E&S submission practices and deliverables, and not a new type or format of narrative deliverable. Currently, the scope of E&S narratives vary to as simple as an E&S construction sequence contained within the E&S drawings for small projects, up to more extensive or distinct narrative plans, calculations, and sequences for larger projects. The Chamber requests DEP's clarification and concurrence. (1241)

Response: The commentator is correct. The intent was to clarify that the plan must consist of both drawings and a narrative, which is the current standard. The Department agrees that the scope of E&S narratives may vary from simple to more extensive depending on the scope of the project and the potential risk of pollution to the waters of the Commonwealth.

64. **Comment:** In the definition of "E&S Plan," DEP has added the words "before, during, and after construction." These added words make no sense from a practical perspective. Specifically, there is no need or requirement for E&S controls prior to commencement of construction because there is no earth disturbance. Construction officially "begins" when installation of the E&S control measures start. That's not a "before" period, but "during" construction. (1241, 1278)

Response: These stormwater terms "before, during and after" were added to the BMP definition so that the term clearly applies to all stages of disturbance. BMPs include identification of preexisting site conditions and the installation of access and perimeter E&S control measures prior to proceeding with the bulk of earth disturbance activities.

65. **Comment:** It makes absolutely no sense that a construction erosion and sedimentation plan would contain a description of BMPs to prevent post-construction E&S other than a construction sequence discussion of permanent stabilization measures. At the post-construction point, when stabilization is completed and erosion and sedimentation control measures have been

removed, and the E&S plan is not longer relevant. Rather, post construction pollution control measures are more appropriate for the Post Construction Stormwater Management (PCSM) plan. (1241, 1278)

Response: Installation of PCSM BMPs are part of the earth disturbance activity and must be consistent and integrated with the BMPs identified in the E&S plan

66. **Comment:** The Chamber recommends DEP change the definition to read, "A site-specific plan, which may consist of both drawings and narrative that identifies BMPs to minimize accelerated erosion and sedimentation during earth disturbance activities, up to and including permanent stabilization." (1241, 1278)

Response: The Department disagrees. The term "before" is necessary for the BMP definition so that the term clearly applies to all stages of disturbance. BMPs include identification of preexisting site conditions and the installation of access and perimeter E&S control measures prior to proceeding with the bulk of earth disturbance activities.

67. **Comment:** E & S Plan - This plan should also be written. Does an E& S plan need to be approved by a District or by DEP? (947)

Response: No, an E& S plan does not need to be approved for every project. Typically E&S plans are reviewed and approved as a result of a permit application, inspection or complaint investigation or agreement with a municipality.

68. **Comment:** E & S Plan : An E&S Plan will not be approved without an approved Post-Construction Stormwater Management Plan. (1268)

Response: Not all E&S projects require a PCSM plan, specifically those projects that do not require a permit.

69. **Comment:** Add a definition for Extent Practicable - This, like minimize is a very subjective term. (947, 1129) Add a definition for Greatest Extent Practicable as used in 102.4.b.4, 102.8.b and 102.8.f. (1129)

Response: No definitions are needed for these terms as they are used in their common usage.

70. **Comment:** Forest Stewardship Plan- is one that describes prescriptions of activities that will manage all goods, benefits, and values that can be sustained for present and future generations. (1170)

Response: Reference to the Forest Stewardship Plan has been deleted from the rulemaking. All other references refer to Riparian Forest Buffer Management Plan which is described in 102.14(b)(4).

71. **Comment:** Change the definition and term "**Forest Stewardship Plan**," to "Forest Management Plan" to one of the following options: a. "A plan written by a forestry professional with a four-year degree in forestry from an institution accredited by the Society of American Foresters (SAF) or a two-year degree in forestry from an institution recognized by the SAF that provides.. ." or b. "A plan written by a DCNR-trained Stewardship Plan Writer that provides..." As a point of information, Stewardship Plan Writers are natural resource professionals that have received training from the Bureau of Forestry and Penn State in the writing of Stewardship Plans. Training for Plan Writers is free and takes place yearly, so professionals who are interested in taking the training can sign up to get on the list. (1275)

Response: Reference to the Forest Stewardship Plan has been deleted from the rulemaking. All other references refer to Riparian Forest Buffer Management Plan which is described in 102.14(b)(4).

72. **Comment:** With all the language in the proposed changes regarding streams, waters, ponds, etc., and forests associated with these waters, I find that **forestry professionals** are not mentioned in these rule changes. This is an oversight, possibly deliberate, and one that should be corrected before these changes become law. If the intent of these changes is to protect the waters of the Commonwealth from excessive erosion and sedimentation and to control storm water, then professional foresters, as the natural resource managers, should be included in the current legislation. (1215, 1294)

Response: Forestry professionals can be included as persons who have the training and experience necessary to develop and PCSM or E&S plan applicable to the size and scope of the project. In addition, the Department is not aware of any current licensing or certification as a professional Department of State Licensing Board designation. The EQB heard from many forestry professionals during the public comment period for this rulemaking, and appreciate their input.

73. **Comment:** The proposed rule making definition concerning **licensed professionals** should be amended with a statement to the effect that it will include foresters in its application when Pennsylvania foresters are licensed as Registered Professional Foresters. (5, 1215, 1294)

Response: The Department is not aware of any current licensing or certification as a professional Department of State Licensing Board designation. If such licensure applies in the future, the Department may revisit this definition.

74. **Comment:** We would encourage the Department to define "the **immediate surrounding area**." As used in 102.8. (f) (1) (947)

Response: The Department utilized this word according to its common usage.

75. **Comment:** The terms "**Impaired waters**" and "Impaired Streams" are used at numerous locations in the proposed rule change. A definition for these terms should be added. It is our understanding that this definition would limit the impairments to sediment or stormwater impaired waterways since this chapter only addresses stormwater and erosion issues. If other

sources of stream impairment are included in the definition, please provide clarification and an explanation of why these impairments should be included or considered here. (1255)

Response: The term as used in this regulation refers to any waters failing to attain one or more of its designated uses, regardless of the source of the impairment.

76. **Comment:** The term "impervious," used throughout the Proposed Rulemaking, should be defined in this Section. (946, 1191)

Response: The Department utilized this word according to its common usage.

77. **Comment:** We recommend inclusion of a definition for impervious surface as follows since PCSM design is based on the areal extent of imperviousness: **A surface that prevents the percolation of water into the ground such as rooftops, pavement, sidewalks, driveways, gravel drives, roads and parking, and compacted fill, earth or turf to be used as such.** (693, 1208)

Response: The Department utilized this word according to its common usage.

78. **Comment:** Revise the definition of Infiltration to include **"For stormwater to pass through the soil from the surface"**. (693)

Response: This term is not defined in the current or proposed rulemaking and the Department does not believe it is necessary to be defined.

79. **Comment:** Industrial wind activities – Earth disturbance associated with exploration, construction, transportation, production, or transmission facilities. (6)

Response: These activities when conducted as part of a land development are already included in the earth disturbance activity definition.

80. **Comment:** Intermittent stream This definition is not clear. What specifically is the meaning of the phrase "composed primarily of substrates associated with flowing water"? What degree of composition does "primarily" imply? Are "substrates associated with flowing water" specific types of soil and rock? Also, could the flow come from surface runoff and not groundwater discharges? The EQB should review this definition for clarity. (1322-IRRC)

Response: The definition currently exists in Chapter 92 and is repeated in this Chapter to provide clarity for those using this regulation.

81. **Comment:** The determination of intermittent streams and their banks are subjective, and the impact of requiring riparian forested buffers for intermittent streams will impact substantial acreage across the typical forested ownership, create significant negative impact on a landowner's control of their property, and ability to conduct forestry activities in a cost effective manner. (1176, 1221)

Response: The Department disagrees. The term “intermittent stream” is consistent with the definition currently used in Chapter 92 and is repeated in this Chapter to provide clarity for those using this regulation.

82. **Comment:** The FSC uses USGS 7.5 Minute Series Quadrangle maps as a source to identify streams as perennial or intermittent – Solid blue line indicating perennial, broken/dashed blue line as intermittent. DEP should consider using such a simple, easily understood and accessible method. (1221)

Response: The Department agrees that these maps provide some information, however they do not depict all intermittent and perennial streams as defined in Chapter 92 and this chapter.

83. **Comment::** Intermittent Stream - I suggest revising "is below the local water table *and* obtains its flow from both..." *to* "is below the local water table *or* obtains its flow from both..." : (1218)

Response: The term “intermittent stream” is consistent with the definition currently used in Chapter 92, and no revision is appropriate. It is repeated in this Chapter to provide clarity for those using this regulation.

84. **Comment:** Definition of "intermittent stream"-What does the term "substrates" mean? This is vague and needs work. (1264, 1291)

Response: The Department utilized this word according to its common usage. Substrate is the area of the stream base on which an aquatic organism lives.

85. **Comment:** Revise the definition of intermittent stream to read- A body of water flowing in a channel or bed ~~composed primarily of substrates associated with flowing water~~ which, during periods of the year, ... *We suggest this deletion so that a stream which has been manipulated or enclosed is still defined as a stream.* (693)

Response: The term “intermittent stream” is consistent with the definition currently used in Chapter 92, and no revision is appropriate. It is repeated in this Chapter to provide clarity for those using this regulation.

86. **Comment:** I would like to see a clearer emphasis on the definitions of "perennial" and "intermittent" streams and examples of each type clearly represented. (1)

Response: The Department appreciates the suggestion, but does not believe such detail is appropriate in this rulemaking.

87. **Comment:** Intermittent stream - We would recommend deleting this definition and instead adding the existing definition of Waters of this Commonwealth as found in the existing 102 regulations. (947)

Response: The term “intermittent stream” is consistent with the definition currently used in Chapter 92, and no revision is appropriate. It is repeated in this Chapter to provide clarity for those using this regulation.

88. **Comment:** Tying the definition of an intermittent stream to the local water table may be in agreement with certain theories of groundwater surface water interaction but does nothing to clarify what has become a largely inconsistent and judgmental process for local regulators. It typically amounts to assuming the conclusion, that is, because a stream is observed to flow only at certain times of the year it is, therefore, below the water table. (1223)

Response: The term “intermittent stream” is consistent with the definition currently used in Chapter 92, and no revision is appropriate.

89. **Comment:** K factor - I suggest revising the definition to "The soil factor which is the rate of soil loss per rainfall erosion index unit. The K factor describes the ease with which soil is detached by splash from rainfall and/or surface runoff." : (1218)

Response: The use of this term, and the definition have been removed from this rulemaking.

90. **Comment:** Licensed Professionals We question the general description of "professional engineer" in that professional engineers cover a broad range of specialties, including electrical and mechanical engineers. We recommend limiting professional engineers to those who have the appropriate expertise. (1322-IRRC)

Response: The PA Department of State Licensing Board requires licensed professionals to practice only within their area of expertise.

91. **Comment:** Licensed professional--Professional engineers, landscape architects, geologists and land surveyors licensed to practice in this Commonwealth. We believe that Professional Land Surveyors are an appropriate professional to seal E&S plans as the Professional Engineer, Land Surveyor and Geologist Registration law specifically grants engineers and land surveyors the authority to prepare E&S surveys through the definition of Engineering Land Survey. (1214)

Response: The Department agrees, and land surveyors are included in the definition of licensed professionals. Section 102.15, the Permit-by-Rule section contained a requirement that E&S and PCSM plans be sealed by a licensed professional identified as professional engineer, geologist, or landscape architect. The entire 102.15 section has been deleted in its entirety and therefore this requirement no longer exists.

92. **Comment:** Licensed professional First Energy requests that the Department expand this category of professionals to include persons who are certified professionals in erosion and sediment control (CPESC), certified professionals in stormwater quality (CPSWQ), or certified arborists (1115, 1267)

Response: The Department acknowledges these certified professionals throughout the regulations including E&S and PCSM plan development, however the term “licensed professional” is utilized specifically for those professions responsible for oversight of critical stages and completion of certification requirements.

93. **Comment:** Licensed professional - Should not include licensed professionals who are not experts in erosion and sedimentation control. (640)

Response: The Department appreciates the comment; however, there is currently no certification program in Pennsylvania for erosion and sediment control. Licensed professionals are expected to attend appropriate training sessions hosted by conservation district and the department to ensure they have obtained the proper training and experience to design E&S and PCSM plans.

94. **Comment:** Permit-by-rule for low impact projects with riparian forest buffers does not use the defined term Licensed Professional but rather states that these plans must be prepared by professional engineers, geologists and landscape architects, excluding the professional land surveyor. We believe that the land surveyor has been excluded inadvertently or inappropriately and request that all licensed professionals be permitted to seal these plans in accordance with the appropriate licensing act. (1141, 1214)

Response: Permit-by-rule has been deleted from the final rulemaking.

95. **Comment:** The selective application of involvement by “licensed professional” in these revisions represents an illegal interpretation of the provisions of Act 367 of 1945, P.L. 913. No. 367, as amended. Either the work of preparing E&S and PCSM plans meets the Act 367 definition of “Practice of Engineering” or it does not. If, as I strongly believe, it does, then all such plans must be prepared by a licensed professional engineer. The same requirement would apply to site inspections and completion certifications. Other definitions in Act 367 specifically prohibit geologists and land surveyors from engaging in engineering work. These two professionals are included in the 102 revisions’ definition of “licensed professional” and must be removed. If, by some legal determination, it is decided that this work does not meet the “Practice of Engineering” definition, it remains that no licensed engineer that I know of will accept the liability for inspecting or certifying work designed by persons “trained and experienced”, a term not defined in the regulations and for which no screening criteria exists. (9)

Response: The Department has not selectively imposed requirements under the Engineer, Land Surveyor and Geologist Registration Law. “Licensed professional” is utilized specifically for those professions responsible for oversight of critical stages and completion of certification requirements that include engineering application.

96. **Comment:** Professional foresters should also be named as a qualified professional to design forest buffers for any non-permit or permit need. This only makes sense, if the forest buffer needs to be incorporated in a forest stewardship plan that a qualified forester is the author. (1170)

Response: The Department acknowledges these professionals in general can participate in E&S and PCSM plan development, however they are not included in the group professionals licensed to practice in the Commonwealth by the Department of State.

97. **Comment:** The proposed rulemaking definition concerning licensed professional should be amended with a statement to the effect that it will include forester in its application when Pennsylvania foresters are licensed as registered professionals. (5, 947, 1305)

Response: The Department acknowledges these professionals in general can participate in E&S and PCSM plan development, if they have been trained and have experience in E&S and PCSM control methods and techniques, however they are not included in the group professionals licensed to practice in the Commonwealth by the Department of State.

98. **Comment:** The terms low impact project and low impact development are not defined in the proposed Chapter 102. This has the potential to create a great deal of confusion, as the Department is often referred to the applicability of a proposed permit-by-rule to low impact or low risk projects. (1264, 1291)

Response: The terms "low impact project and low impact development" are no longer included in the rulemaking and no definition is needed.

99. **Comment:** Add a definition for Low Impact Development (as used in 102.15). We suggest " An environmentally sensitive approach to stormwater management that seeks to manage rainfall using decentralized, small -scale controls that are integrated into a site's landscape features, and which mimic a site's predevelopment hydrology by infiltrating, filtering, storing, evaporating and detaining runoff close to its source." (947)

Response: The terms "low impact project and low impact development" are no longer included in the rulemaking and no definition is needed.

100. **Comment:** Add a definition for Minimize (102.8) (b) - Presently, this term is not defined and so it is very subjective if and when one minimizes stormwater runoff or volume etc.. . Perhaps the term needs to be quantified although we admit that this will be difficult to do. (947)

Response: The Department utilized this word according to its common usage and to provide flexibility to the applicant when designing how to meet the provisions of these regulations.

101. **Comment:** The term minimize is used throughout the regulation. Who determines when this is met? Minimized impervious is no impervious. It is only a matter of time until staff is using this as another reason to deny permits. We recommend that numerical numbers be established. (1289)

Response: The Department utilized this word according to its common usage and to provide flexibility to the applicant when designing how to meet the provisions of these regulations.

102. **Comment:** NOI – Notice of Intent – *Should read:* A request, on a form provided by the Department, for coverage under a General NPDES or Individual NPDES Permit....(1187)

Response: The Department has clarified that the NOI is used with a General NPDES permit. It is not appropriate to include Individual NPDES permit.

103. **Comment:** The Notice of Intent definition should include reference to an Individual NPDES Permit. This form is required for submittal of an Individual as well as a General NPDES permit application. (1208)

Response: The NOI and permit application are the same form. When applying for an NPDES general permit, it is an NOI as the person is notifying the Department of their intent to use a permit which has already been issued statewide. When applying for an NPDES individual permit, it is an application since the person is actually applying for the issuance of an individual permit.

104. **Comment:** The Notice of Intent - Delete "or conservation district" as the NOI is a DEP form. (947)

Response: The Department agrees and the definition has been revised as suggested.

105. **Comment:** Nondischarge alternative There are two vague phrases in this definition. First, the phrase "preexisting stormwater volume" is not clear. Why is the word "preexisting" needed and what does it imply? Second, it is not clear what standard is imposed by the phrase "environmentally sound and cost-effective." The definition should clearly describe what constitutes a nondischarge alternative. (1322-IRRC)

Response: "Preexisting stormwater volume" is that volume that occurs on the site prior to the earth disturbance activity. This information is an importance element in a properly designed stormwater management plan. The licensed professional has a variety of BMPS to utilize and selects those that best match the site and the proposed development while still being able to develop a profitable site.

106. **Comment:** Non-discharge alternative, the term and the definition promote confusion. It does not eliminate a discharge according to the definition. It seems to better reflect exactly what C.G. 1. attempts to accomplish. A better term might be No-Impact Discharge Alternative. (2)

Response: The Department uses the term to be consistent with the antidegradation requirements in Chapter 93.4c. Further the Department agrees the term does not include the elimination of all discharges, but rather replicates natural hydrologic conditions by eliminating the net change in stormwater volume rate and quality for storm events up to and including the 2-year/24 hour storm when compared to stormwater conditions prior to the earth disturbance activity.

107. **Comment:** Non-discharge alternative: Replace "preexisting" with "preconstruction". (1129)

Response: The Department has deleted "preexisting" from the definition, and provided further clarification.

108. **Comment:** Nondischarge alternative - This definition *needs additional clarification*. The post-construction storm event *should be identified to determine the extent of the net change to the preexisting storm event*. The type of the 2-year/24-hour storm event *should be clarified*, such as the NRCS Type 2 storm distribution by the soil-cover complex method, *or* the VTPSUHM modified rational rainfall distribution, *or* the DeKalb modified rational distribution, another well defined and utilized hydrologic methodology. *Additionally, "preexisting" and "non-discharge" also require definitions.* : (1218)

Response: The Department is not establishing any specific storm water event criteria in the definition. The Department has deleted "preexisting" from the definition, and provided further clarification. The Department doesn't believe "non-discharge" should be defined separately.

109. **Comment:** Nondischarge alternative - This definition is too subjective-the terms "environmentally sound and cost-effective" may be interpreted differently by different observers. (1264, 1291) Will lead to confusion and uncertainty. (947)

Response: "Environmentally sound and cost-effective" are terms currently used in Chapter 93.

110. **Comment:** Clarify definition of non-discharge alternative to be clear that "nondischarge" does not mean "zero discharge". (1123)

Response: The Department uses the term to be consistent with the antidegradation requirements in Chapter 93.4c. Further the Department agrees term does not include the elimination of all discharges, but rather replicate natural hydrologic conditions by eliminating the net change in stormwater volume rate and quality for storm events up to and including the 2-year/24 hour storm when compared to stormwater conditions prior to the earth disturbance activity.

111. **Comment:** Clarify definition of non-discharge alternative: Clarification is requested as follows: it is our understanding that a "Nondischarge alternative" when applied to a stormwater BMP implies no increase in discharge. Our experience has been that some regulators interpret this to mean zero discharge up to the 100-year event. (1255)

Response: The Department uses the term to be consistent with the antidegradation requirements in Chapter 93.4c. Further the Department agrees term does not include the elimination of all discharges, but rather replicate natural hydrologic conditions by eliminating the net change in stormwater volume rate and quality for storm events up to and including the 2-year/24 hour storm when compared to stormwater conditions prior to the earth disturbance activity.

112. **Comment:** Revise the term "**Nondischarge alternative**" to include: "Environmentally sound-and cost effective. . ." (693, 946, 1191)

Response: The suggested phrase is included in the definition.

113. **Comment:** **Non-discharge alternative** definition should be revised to read as follows: Environmentally sound and cost-effective **E&S and PCSM** BMPs . (1208)

Response: The Department does not think the suggested revision is necessary.

114. **Comment:** **Non-discharge alternative** - what constitutes an "environmentally sound" BMP? Can the applicant's engineer make that professional judgment? (695, 1245)

Response: The Department has determined that the BMPs and their design standards provided in the various BMP manuals identified in Section 102.11 are considered to be environmentally sound and cost effective in meeting the requirements of this chapter. If an applicant's engineer chooses to utilize alternative BMPs or design standards, they must demonstrate to the Department's satisfaction that they achieve the same regulatory standard as noted in 102.11(b).

115. **Comment:** "**non discharge alternative**" should use the Chapter 93 definition (946)

Response: "Non discharge alternative" is not defined in Chapter 93.

116. **Comment:** The definition of "**Nondischarge alternative**" is inconsistent with the interpretation of that term as used in the Antidegradation regulations. (1191)

Response: The Department disagrees that this term is inconsistent as used in Chapter 93.

117. **Comment:** PennDOT is in support of including a definition for "**non-discharge alternative**" for purposes of stormwater management especially in light of the recent decision by the Environmental Hearing Board in Crum Creek Neighbors v. DEP and Pulte Homes of PA, docket # 2007-287-L, October 22, 2009. PennDOT also supports defining the nondischarge alternative in terms of storm events up to and including the 2 year/24 hour storm. Including storms events larger than the 2 year/24 hour storm in the definition would require additional analysis which cumulatively will result in significant costs to PennDOT's program. PennDOT is requesting a slight clarification of the definition. The definition of "Nondischarge alternative" includes the phrase "pre-existing stormwater" which is open to interpretation. The definition should be revised to "Environmentally sound and cost-effective BMPs that individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2 year/24-hour storm when compared to the stormwater volume, rate, and quality prior to the earth disturbance activity". (708, 1114)

Response: The Department appreciates the support and has revised the definition as suggested.

118. **Comment:** Nondischarge alternative - Why must they be "cost-effective?" "Preexisting" is used in this definition while "preconstruction" is used in several other places. How is nondischarge different than ABACT? (436, 650)

Response: "Cost-effective" is a term currently used in Chapter 93 and is used to provide a level of reasonableness when applying the requirement. The Department has deleted "preexisting" from the definition, and provided further clarification. Nondischarge is different than ABACT in that Chapter 93.4c(b)(1)(i) requires the evaluation and use of a nondischarge alternative in evaluating whether this approach can achieve the regulatory standard prior to consideration of ABACT.

119. **Comment:** The reference is made to "no-till cropping methods," however no definition is offered. The definition of no-till needs to be clearly delineated. Suggested language to include would be "No-Till Cropping Methods = propagating/planting of seed with minimum tillage". If not listed in the regulations. This definition needs to be included within the Technical Document. (645)

Response: Definition of plowing and tilling was revised to add clarifying language regarding no-till cropping methods.

120. **Comment:** Normal pool elevation - (ii) We do not know what "structurally regulated bodies of water" are. If this term is from Chapter 105 regulations, than it should be defined as such. (947)

Response: This term is consistent with the definition in Chapter 105 and therefore does not require any additional clarification.

121. **Comment:** The definition of NPDES Permit for Stormwater Discharges Associated with Construction Activities should be reworded to make it clearer. Break it into two sentences or bullets - one for each situation. Also, reword (i) and (ii) to say "plan of sale or development" to make it more clear to the lay reader. (708, 1114)

Response: The Department has revised the definition for clarity.

122. **Comment:** "NPDES Permit for Stormwater Discharges Associated With Construction Activities", sub-section (i) – This section stipulates that NPDES permits are only required for earth disturbances of one to five acres where a point source discharge to surface water exists. Later in the Definitions section, a "Point Source" excludes sheet flow. We seek confirmation that projects of one to five acres without a point source discharge do not need to seek an NPDES permit. Or perhaps, the Department can offer situations where a permit on a one to five acre site would be required, and what would constitute a "point source". In the Southeast, applicants have been required to seek NPDES permits for projects that would not seem to qualify. (1245)

Response: The Department has revised this definition to provide consistency with federal regulations that require a person proposing to conduct one (1) acre or more of earth disturbance activities to apply for an NPDES Permit for Stormwater Discharges Associated with Construction Activities. This change will provide uniformity with the federal NPDES permitting program. Also, references to "less than 5 acres" and a "point source discharge" have been deleted based on public comment.

123. **Comment:** NPDES Permit for Stormwater Discharges associated with Construction Activities definition should retain **into waters of this Commonwealth**. In subsection (i), both references to surface waters of this Commonwealth should be changed to **waters of this Commonwealth**. (1208)

Response: The Department has incorporated the revision as recommended into the final rulemaking.

124. **Comment:** NPDES Permit for Stormwater Discharges Associated With Construction Activities - (i) Delete "surface waters of this Commonwealth" and replace it with "Waters of this Commonwealth." (ii) The term a "common plan of development" needs to be defined. (947)

Response: The Department has incorporated the revision "Waters of this Commonwealth" as recommended into the final rulemaking. The Department however does not agree that the term "common plan of development" needs to be defined

125. **Comment:** Revise definition of NPDES Permit for Stormwater Discharges Associated with Construction Activities to- A permit required for the discharge or potential discharge of stormwater **into waters of this Commonwealth**, or ... (i) Equal to or greater than 1 acre and less than 5 acres (0.4 to 2 hectares) of earth disturbance with a point source discharge ~~to surface waters of this Commonwealth~~ or... *Remove surface waters of this Commonwealth in both instances. Up until this point, permits were required for discharges to non surface waters such as roadside swales. Because discharges to non surface waters will flow to surface waters and have the potential to cause degradation, or permit should be required.* (693)

Response: The Department has incorporated the revision "Waters of this Commonwealth" as recommended into the final rulemaking.

126. **Comment:** NPDES Permit for Stormwater Discharges, permit required for projects (i) "...with a point discharge to surface waters ..." This does not appear to be how the NPDES permit program has been applied in PA and indicates that if a project does not have a point source discharge then it does not need a NPDES permit. It also seems to indicate that a project that discharges to other than surface waters (swales, the ground surface, groundwater, etc.) would not require a permit. (436, 650)

Response: The Department has revised this definition to provide consistency with federal regulations that require a person proposing to conduct one (1) acre or more of earth disturbance activities to apply for an NPDES Permit for Stormwater Discharges Associated with Construction Activities. This change will provide uniformity with the federal NPDES permitting

program. Also, references to “less than 5 acres” and a “point source discharge” have been deleted based on public comment.

127. **Comment:** The term “point source” should be deleted from the definition of **NPDES Permit** for Stormwater Discharges. (1268)

Response: The Department has deleted the term point source from the final rulemaking.

128. **Comment:** The Draft Regulations sweep into the definition of **"Oil and gas activities"** transmission facilities when it appears that the intention was to regulate oil and gas drilling and not pipelines. FERC regulated natural gas pipeline construction should be excluded from the "oil and gas activities" requirements. (1272)

Response: The Department disagrees. The terms used in the definition "oil and gas activities" is consistent with the terms as referenced in the federal Energy Act of 2005 and the subsequent regulations promulgated by the EPA.

129. **Comment:** **Operator**- Add the term "Conservation Plan" to the definition. (3)

Response: The Department disagrees that this term is appropriate for use related to agricultural activities as used in this rulemaking.

130. **Comment:** revise the definition of **operator** to- ...(i) who has the ability to ~~make~~ **propose** modifications to the E & S Plan, ... *Most modifications to E&S and PCSM Plans on permitted sites require review; this section implies otherwise.* (693)

Response: The term as used is consistent with the requirements contained in the federal regulations pertaining to NPDES permits for stormwater discharges.

131. **Comment:** **Compliance with the Preparedness, Prevention, and Contingency (PPC) plan** should be included within the **Operator** definition. (1208)

Response: The Department disagrees. The term operator as used in this regulation is consistent with the requirements contained in the federal regulations pertaining to NPDES permits for stormwater discharges.

132. **Comment:** The term **"Passive recreational activities,"** used in Section 102.14(e)(5)(v), should be defined in this Section. (946, 1191)

Response: The Department does not agree that this term needs defined; Section 102.14 as referenced by the commentator includes examples of passive recreational activities for clarity.

133. **Comment:** **PCSM Plan** – “changes in” *should be taken out.* Sometimes there is no net change. (1187)

Response: A PCSM plan could demonstrate no net change through BMP implementation. The Department does not agree with the suggested deletion.

134. **Comment:** Permanent Pool - I do not believe it is essential that a permanent pool be inundated at all times to qualify as a permanent pool. If you have a drought, or an excellent infiltration basin it would still qualify. We wouldn't want the permittee to add water. (2)

Response: Permanent Pool is no longer included in the rulemaking and the definition has been deleted.

135. **Comment:** Please include a definition of Permit-by-Rule (6)

Response: Permit-by-Rule has been deleted from the rulemaking.

136. **Comment:** Perennial stream What specifically is the meaning of the phrase "composed primarily of substrates associated with flowing waters"? What degree of composition does "primarily" imply? Are "substrates associated with flowing waters" specific types of soil and rock? The EQB should review this definition for clarity. (1322-IRRC)

Response: The term Perennial Stream as used in this rulemaking is consistent with the definition in Chapter 92.

137. **Comment:** Perennial Stream-This definition needs to be explained further, it has more ambiguity than previous definitions. It potentially defines roadside swales and Perennial Streams. . (8)

Response: The term Perennial Stream as used in this rulemaking is consistent with the definition in Chapter 92.

138. **Comment:** Perennial Stream - Describes a standard #30 sieve as having 28 meshes per inch, 0.595 mm openings. ASTM (E 11-04) Standard Specifications for Wire Cloth and Sieves for Testing Purposes, when describing a #30 screen, refer to it as a 600 micron...or 0.600 mm opening. *I believe it is best defined using a nationally recognized standard. There also appears to be no benefit to describing the number of meshes per inch. Recommendation is to drop that in favor of the nominal dimensions and/or reference the ASTM standard when describing the #30 screen.* .(1187)

Response: The term Perennial Stream as used in this rulemaking is consistent with the definition in Chapter 92.

139. **Comment:** Perennial Stream Please see the preceding point regarding the definition of the term "substrates." This could also be what is shown on the USGS. The definition is specific, but there will then be a need for a biologist at times. (1264, 1291)

Response: The term Perennial Stream as used in this rulemaking is consistent with the definition in Chapter 92.

140. **Comment:** The proposed definition for perennial stream has no utility. After reviewing the use of perennial stream in the regulations, we feel that the following definition will suffice: **A stream or river that has continuous flow in parts of its bed all year round during years of normal rainfall.** (693)

Response: The term Perennial Stream as used in this rulemaking is consistent with the definition in Chapter 92.

141. **Comment:** Perennial Stream - this definition is not consistent with other definitions from US Army Corp of Engineers, PA DEP, etc. (436, 650)

Response: The term Perennial Stream as used in this rulemaking is consistent with the definition in Chapter 92.

142. **Comment:** Perennial Stream - Delete this definition and use the definition for "Waters of this Commonwealth" throughout these proposed regulations. (947)

Response: The term Perennial Stream as used in this rulemaking is consistent with the definition in Chapter 92.

143. **Comment:** Perennial Stream - this definition is too complicated to understand or to realistically implement. We propose a simpler definition "A stream that flows 12 months per year during an average year." (1123)

Response: The term Perennial Stream as used in this rulemaking is consistent with the definition in Chapter 92.

144. **Comment:** What does the definition of perennial stream intend to exclude? (1268)

Response: The term does not include ephemeral and intermittent streams.

145. **Comment:** Perennial Stream/Intermittent Stream - The Energy Association of PA seeks clarification with respect to the source for and intended use of these definitions. Be defining these terms, does the Department seek to have permittees classify a stream as perennial or intermittent? (1267)

Response: The terms "intermittent stream" and "perennial stream" are consistent with the definitions currently used in Chapter 92 and are repeated in this Chapter to provide clarity for those using this regulation.

146. **Comment:** Permanent Site stabilization (as used in 102.22). Add the definition of permanent site stabilization to the definitions section. Language should be added that requires a time frame component such as the determination for attaining stabilization should not be done until at least one growing season has occurred. (947)

Response: The Department disagrees with the need for a definition. Section 102.22 provides adequate requirements for permanent site stabilization.

147. **Comment:** There should there be a definition of "permit holder" to include long term operation of storm water maintenance. (640)

Response: The term "permit holder" is not used in this regulation.

148. **Comment:** Person – Should add "owner". (1187)

Response: The Department disagrees. The term "owner" is not used in this regulation.

149. **Comment:** Person – Remove "operator" from the definition. (1268)

Response: The Department disagrees. This term needs to be included so there is a clear understanding that operators also have obligations under these regulations.

150. **Comment:** Point source The Environmental Protection Agency (EPA) commented on concern with Subsection (iii), which excludes sheet flow. The EQB should review and comply with EPA's concern. (1322-IRRC)

Response: The Department agrees. The definition of "Point source" has been revised to exclude sheet flow.

151. **Comment:** Point Source definition needs clarification that this chapter only deals with soil erosion control and sedimentation. Since Concentrated Animal Feeding Operations (CAFO's) are in this definition, the additional language is needed to clarify that this chapter only regulates soil erosion and sedimentation and not nutrients or other suspended solids, which are covered under Chapters 91 and 93. The Agricultural Advisory Board supports the development of technical guidance. The technical guidance should be clear that the point source definition is for construction activities. (14, 645)

Response: The term "point source" has been deleted from this rulemaking.

152. **Comment:** Point Source - "sheet flow" in paragraph (iii) requires a definition in coordination with the hydrologic methodology utilized. : (1218)

Response: The term "point source" has been deleted from this rulemaking.

153. **Comment:** Point Source – The term "point source should also exclude diversions used for the purpose of diverting clean water originating from undisturbed areas. Do level spreaders and compost soxx constitute a point source discharge. (218)

Response: The term "point source" has been deleted from this rulemaking.

154. **Comment:** The “point source” definition needs to be made clear that this rulemaking applies only to soil erosion control, sedimentation and stormwater management. (1148)

Response: The term “point source” has been deleted from this rulemaking.

155. **Comment:** The definition of a point source does not include sheet flow associated with stormwater. However, sheet flow is defined as a relatively thin and uniform depth of runoff, which is considered to be less than 0.1 ft in depth and generally less than 1/4”. Most concentrated discharges will not remain as sheet flow regardless if level spreaders, etc. are employed. The sheet flow concept has been problematic where designers use level spreaders at the end of concentrated flows, especially when discharged to wooded areas. (944, 1204)

Response: The term “point source” has been deleted from this rulemaking.

156. **Comment:** Section 102.1 (Definitions) – “Point Source” definition needs clarification that this chapter only deals with soil erosion control, sedimentation and stormwater. Since Concentrated Animal Feeding Operations (CAFO’s) are in this definition, the additional language is needed to clarify that this chapter only regulates soil erosion, sedimentation and stormwater and not nutrients or other suspended solids, which are covered under Chapters 91 and 93 regulations. The PFB supports the development of technical guidance. The technical guidance should state that the definition only applies with respect to construction activities regulated under this chapter. (1166)

Response: The term “point source” has been deleted from this rulemaking.

157. **Comment:** Would the definition of point source include a roof drain (section (i))? Also, the term includes "concentrated" flow associated with stormwater-clarification is needed to ensure that it excludes sheet flow, and that the definition recognizes that this may be the historical condition of the property. (1264, 1291)

Response: The term “point source” has been deleted from this rulemaking.

158. **Comment:** Revise the definition of point source to —(i)—**Concentrated flow from any discernible, confined and discrete conveyance, including any concentrated or channelized flow associated with stormwater, pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, or vessel or other floating craft, from which pollutants are or may be discharged.**

~~(ii) The term includes concentrated or channelized flow associated with stormwater.~~

~~(iii) The term does not include sheet flow associated with stormwater.~~ (693)

Response: The term “point source” has been deleted from this rulemaking.

159. **Comment:** Point Source - due to the definition of NPDES Permit above, this definition is critical to determine who might require a permit. "The term does not include sheet flow.. .," therefore any project with less than 5 acres of disturbance could simply use a level spreader with sheet flow discharge to alleviate the need for a NPDES permit. (436, 650)

Response: References to point source, as well as the definition have been deleted from the rulemaking.

160. **Comment:** **Point Source** – revise definition to read “... conveyance, including but not limited to, any pipe...” (1268)

Response: References to point source, as well as the definition have been deleted from the rulemaking.

161. **Comment:** **Point Source (iii)** Sheet flow is construction-related runoff resulting in a point source discharge. Sheet flow should not be excluded from the definition of point source. EPA requests that the sentence be clarified by adding, "except at construction sites" or it be deleted in its entirety. The definition for point source is found in both the Pennsylvania Code (25 PA Code §92.1) and the Code of Federal Regulations (40 CFR 5122.2) and does not exclude sheet flow. Likewise, the definition of stormwater as found at 40 CFR 122.26(b)(13) includes "storm water runoff, snow melt runoff, and surface runoff and drainage." It is not the discretion of PADEP to alter a regulatory definition to exclude an entire category of discharges. (1268)

Response: References to point source, as well as the definition have been deleted from the rulemaking.

162. **Comment:** **Post construction stormwater and PCSM – and Post construction stormwater management** -*Should be consistent (capitalization, spacing, etc.)* .(1187)

Response: The Department appreciates the suggestion and has made several revisions throughout the rulemaking.

163. **Comment:** **Post construction stormwater** - The definition is needed. (947)

Response: The Department agrees and has retained the current definition.

164. **Comment:** **PCSM** - Postconstruction stormwater management - This term needs to be defined. (947)

Response: The Department disagrees. The term means the management of post construction stormwater

165. **Comment:** **Post construction stormwater** definition should include a clarifier to include instances where portions of the project site are completed but other portions still have active earth disturbance activities. Revise to read as follows: Stormwater associated with a project site after the earth disturbance activity, **or any phase of the earth disturbance activity**, has been completed and the project site, **or any phase of the project site**, is permanently stabilized. (1208)

Response: The Department disagrees that the suggested clarification is necessary.

166. **Comment:** PCSM Plan definition should be revised to read as follows: A site-specific plan, **consisting of both drawings and a narrative**, identifying BMPs... . This is consistent with the proposed revisions to the E&S Plan definition. (1208)

Response: The Department agrees and the suggested revision has been made.

167. **Comment:** PCSM Plan Is this plan required for all earth disturbing activities or just those over 1 acre which require a permit? (1268)

Response: A PCSM plan is required only for those earth disturbance activities that require a permit under this Chapter.

168. **Comment:** PPC Plan - *Preparedness, Prevention and Contingency Plan* What degree of "external factors" must a PPC plan accommodate? (1322-IRRC)

Response: More details are provided in Section 102.6(a)(3) as well as the Department *Guidelines for the Development and Implementation of Environmental Emergency Response*, Commonwealth of PA DEP #400-2200-001 (April 2001) as amended and updated

169. **Comment:** PPC Plan contains the phrase "security and external factors". PennDOT requests clarification on what constitutes an "external factor" and whether it is associated with security, or is it a stand alone consideration. Does DEP consider "external factor" to be limited to vandalism? (708, 1114)

Response: The phrase "security and external factors" is used in its broadest sense, including vandalism.

170. **Comment:** PPC Plan Revise to read "A written plan required for fueling, vehicle maintenance, concrete curing and storing of curing compounds, form release activities and storage of form release oils, in addition to storage and/or use of any other materials on site that can contribute contaminants to stormwater runoff if spilled or left exposed to the elements that identifies..." (1268)

Response: The recommended language has not been added because it is too limiting in scope.

171. **Comment:** Add definition for Practicable - **Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.** (693)

Response: This term is intended to be understood according to its common usage. The Department agrees that "consideration cost, existing technology, and logistics" would be part of the demonstration that a BMP is practicable.

172. **Comment:** Add definition for **Pre-Construction Hydrologic Regime** - The hydrologic cycle or balance that sustains quality and quantity of stormwater, base flow, storage, and groundwater supplies under pre-development conditions. (693)

Response: This term is intended to be understood according to its common scientific usage.

173. **Comment:** Standards for **professional judgment** also need to be incorporated into the regulations. As previously noted, the professional community is consistently told to do things because they are in the manual. These sites are the ones that with failing facilities because the professional community is told that they have to warp sites into meeting a general checklist, not professionally designing them. Checklist might be the Department's answers to not having professionally trained and licensed staff review submissions, however, the checklist and manuals are also the reason for failing facilities. (1289)

Response: The Department does not agree that standards for professional judgment should be incorporated into the regulations. It is the Department's experience that failed facilities are more often the result of improper installation, operation and maintenance, rather than poor design.

174. **Comment:** **Project Site** - the *definition appears to be missing information after the colon.* : (947, 1218)

Response: This is a publication standard set by the Legislative Reference Bureau to indicate existing text that is not proposed for revision.

175. **Comment:** Add a definition for **reclaim and restore** as used in 102.4(b)(4)(v) and 102.8(b)(4), etc. (1129)

Response: The Department disagrees. The phrase "reclaim and restore" is consistent with the Clean Streams Law.

176. **Comment:** Definitions should be added for the term **Record Drawings**. Also the term **redline drawings** needs to be defined. (2, 3)

Response: These terms are commonly used in the industry, and are intended to be understood according to their common usage.

177. **Comment:** Add definition for **Record Drawings** - Original documents revised by a licensed professional to reflect the as-built conditions. These drawings shall be based on the contractor's notes and a field survey. (#693)

Response: This term is commonly used in the industry, and is intended to be understood according to their common usage.

178. **Comment:** I believe that a specific definition for "**re-development**" should be adopted. As currently enforced, it seems as though the definition of re-development rests with the individual plan reviewer, or their office's "policy". (938)

Response: This term is commonly used in the industry, and is intended to be understood according to their common usage.

179. **Comment:** Define "Registrant". (1268)

Response: Use of the term, as well as the definition have been deleted from the rulemaking.

180. **Comment:** several key terms in the permit-by-rule section such as **registration of coverage** and **registering** should be defined. (947, 1264, 1291)

Response: Use of the term, as well as the definition have been deleted from the rulemaking.

181. **Comment:** It appears that the Department is attempting to bring multiple parties into the "**registration of coverage**" in order to make every party, be they a builder, developer, licensed professional, or landowner, involved with a project responsible for long-term operation and maintenance of PCSM BMPs. If this is the case, those parties whose connection to a project will end once their given function is completed need to have a mechanism to terminate such responsibility once that connection ceases. (1264, 1291)

Response: Use of the term, as well as the definition have been deleted from the rulemaking.

182. **Comment:** Expand definition of "**ROC**" (registration of coverage). (1123)

Response: Use of the term, as well as the definition have been deleted from the rulemaking.

183. **Comment:** Include definition of "**ROC**" (registration of coverage). (1268)

Response: Use of the terms, as well as the definition have been deleted from the rulemaking.

184. **Comment:** ***Riparian forest buffer*** There are four clarity concerns in this definition. First, it is not clear how the phrase "permanent vegetation" can be consistent with the phrase "natural state." Natural acts, such as fires, floods and wildlife activities, destroy vegetation. Would the phrase "permanent area for natural vegetation" be clearer and sufficient? Second, how can the standard of "predominantly native trees, shrubs and forbs" be measured? Third, what is meant by the phrase "maintained in a natural state"? A "natural state" implies an area that is not "maintained." Should the word "protected" be used rather than "maintained"? Finally, the definition is vague because it does not specify what is meant by the alternative phrase "or

sustainably managed." If riparian forest buffers include management in anything other than a natural state, the regulation should clearly state what BMPs meet the alternative to "sustainably manage" a riparian forest buffer. (1322-IRRC)

Response: The Department has revised the definition of "riparian forest buffer" for clarity. The Department agrees that "permanent vegetation" may be destroyed by "natural acts" as defined by the commentator. This topic will be addressed in the guidance for the establishment of riparian forest buffers that will be published concurrently with the final rulemaking. Information on how to determine "predominant" trees, shrubs and forbs along with information on sustainable management will also be addressed in the guidance for on riparian forest buffers.

185. **Comment: Riparian Forest Buffer** - I suggest adding to the definition that a forest buffer requires a ground surface layer of leaves, needles, other tree debris, decomposing vegetative material, and humus over the topsoil layer to provide the surface erosion resistance, ground water infiltration, and evapo-transpiration capabilities of this type of ecosystem. (1218)

Response: The Department appreciates the comment. This topic will be addressed in the guidance for the establishment of riparian forest buffers that will be published concurrently with the final rulemaking.

186. **Comment: Riparian forest buffer** - This definition appears to be vague and written to allow for a wide range of future interpretations. The definition does not supply any quantitative standards to which permanent vegetation needs managed. At a minimum, this definition should supply an acceptable scientific reference that clearly describes an acceptable method to identify this buffer. (944, 1204)

Response: This topic will be addressed in the guidance for the establishment of riparian forest buffers that will be published concurrently with the final rulemaking.

187. **Comment: Riparian forest buffer** -This definition includes "native trees, shrubs and forbs"-the assumption is that the Department is using the E&S program to advance native trees, meaning that non-native trees are being removed and kept out. We question the appropriateness of using the E&S program to establish a preference for native plants. (1264, 1291)

Response: Native trees, shrubs and forbs are preferred in riparian forest buffers. This is due to the fact that locally evolved species have better vigor and hardiness and are better able to compete. These "natives" also provide food to aquatic insects, some of which have mouths adapted to feed only on these local species of plant materials. Aquatic insects are vital to instream processing of pollutants. In recognition of the merits of native material, many nurseries now stock native plants. Where available, this stock should be used. A professional preparing the planting plan for the riparian forest buffer will assess any non- native trees and shrubs that may already be established on the site and make the decision to retain some of this vegetation if it is providing some function such as streambank stabilization.

188. **Comment:** Riparian forest buffer uses "forbs" which requires most readers to consult a dictionary. The DEP SWM BMP manual states riparian forest buffer is a managed area of trees, usually accompanied by shrubs and other vegetation. PennDOT requests that "forbs" be replaced by "other vegetation". (708, 1114)

Response: This term is commonly used biological term, and is intended to be understood according to that usage.

189. **Comment:** Riparian forest buffer - "...along surface waters.. " This implies that buffers can be found around springs and seeps as they are included in the definition of Surface Waters. (436, 650)

Response: The Department encourages the use of riparian forest buffers in those locations, however riparian forest buffers are not required around springs and seeps.

190. **Comment:** Revise Riparian forest buffer - A BMP that is an area of permanent vegetation consisting of predominantly native trees, shrubs and forbs along **rivers, streams, creeks, wetlands, lakes, ponds, or reservoirs** that is maintained in its **pre-development state, or enhanced and** sustainably managed to protect and enhance water quality, stabilize stream channels and banks, and buffer land use activities ~~from surface waters~~. (693)

Response: The Department has added a definition for riparian buffer and revised the definition of riparian forest buffer. The Department disagrees with the recommended language.

191. **Comment:** Riparian forest buffer - The terms "predominantly" and "maintained" both need to be defined. (947)

Response: The Department disagrees, these terms have common definitions, which is how the Department intends their application in this regulation.

192. **Comment:** Riparian Forest Buffer Will the BMP be incorporated anywhere or just along the stream? How will this be practically defined? (1268)

Response: A riparian forest buffer is located along the stream, river, pond, lake or reservoir. "Along" is defined in 102.1 (definitions) as "touching or contiguous; to be in contact with; to abut upon".

193. **Comment:** Road Maintenance activities This term is defined in existing regulation as "Earth disturbance activities within the existing road cross-section, such as grading and repairing existing unpaved road surfaces, cutting road banks, cleaning or clearing drainage ditches and other similar activities." The term is used in the proposed regulation throughout Section 102.5. The Department of Transportation believes this definition is too vague and requests clarification. The EQB should review this definition for clarity. (1322-IRRC)

Response: This definition has been revised after discussion with the Department of Transportation.

194. **Comment:** PennDOT requests that the definition of "road maintenance activities" be revised as follows to clarify the definition by incorporating these traditional road maintenance activities and by defining "existing road cross-section": Earth disturbance activities within the existing road cross-section such as shaping or re-stabilizing unpaved roads; shoulder grading and repaving; slope stabilization; cutting of existing cut slopes; inlet/endwall cleaning; reshaping and cleaning drainage ditches/swales; pipe cleaning; pipe replacement; resurfacing activities including minor vertical adjustment to meet grade of resurfaced area; and other similar activities. The existing road cross-section consists of the area between the existing toes of fill slopes and tops of cut slopes on either side of the road and any associated roadway drainage features. (708, 1114)

Response: The Department agrees, and the definition has been revised as recommended.

195. **Comment:** We would encourage a definition of "sensitive area" (as used in 102.15 (g) (1) to reduce confusion and subjectivity. (947)

Response: Section 102.15 has been deleted from the rulemaking.

196. **Comment:** A definition of sheet flow should be provided to further clarify the point source discharge definition. (1208)

Response: This term is commonly used technical term, and is intended to be understood according to that usage.

197. **Comment:** "Soil loss tolerance (T) definition needs some additional clarification. The language of the proposed rulemaking should change to note that if an operation meet the "T" standard at the time of E&S plan development, that the E&S plan should not have to be updated, if a change in the "T" standard was made. The Agricultural Advisory Board supports the development of technical guidance that will clarify this point. (14)

Response: The Department agrees with the Agricultural Advisory Board recommendation and will develop a technical guidance to clarify this point. If the "T" standard (used at the time of E&S plan development) changes, the E&S plan must be updated as required in 102.4(a)(5) to reflect the current conditions on the agricultural operation.

198. **Comment:** Section 102.1 (Definitions) – "Soil loss tolerance (T)" definition needs additional clarification. The language of the proposed rulemaking should be changed to note that if an operation meets the "T" standard at the time the E&S plan is developed and implemented, the E&S plan is not required to be updated in the event of a change in the "T" standard. The PFB supports the development of technical guidance that will clarify this point. (645, 1166)

Response: The Department agrees with the Agricultural Advisory Board recommendation and will develop a technical guidance to clarify this point. If the "T" standard (used at the time of E&S plan development) changes, the E&S plan must be updated as required in 102.4(a)(5) to reflect the current conditions on the agricultural operation.

199. **Comment:** Remove the definition of "soil loss tolerance" as this is an immeasurable and unenforceable standard which implies that agricultural plowing and tilling operations may pollute commonwealth waterways. (9)

Response: Please refer to the PA Soil and Water Conservation Technical Guide to determine the calculation method of soil loss tolerance. An agricultural E&S plan, which would include this standard, is enforceable under this regulation.

200. **Comment:** Stormwater - delete the first "and" from the definition. : (1218)

Response: The Department agrees and the suggested revision has been made.

201. **Comment:** Stormwater – runoff from precipitation, snowmelt runoff and surface runoff and drainage. This definition allows for any type of drainage not only water from storm events. For example, through this definition a leaky hose could be considered a stormwater event and require documentation on the weekly inspection report. (8)

Response: If the runoff is of sufficient quantity, it would have to be addressed in the weekly inspection reports. Runoff of any kind on a project site with exposed soils due to earth disturbance activities has the potential to cause accelerated erosion. In an isolated situation such as this example, the Department would expect the permittee to inspect the area and the BMPs that were effected by the runoff to ensure the BMPs are continuing to function properly (e.g. silt fence was not undermined) and no sediment pollution has occurred.

202. **Comment:** The term "stormwater" should be revised to read: " . . . snowmelt, _and . . . " (1191)

Response: The Department has deleted the word "and" in the final rulemaking.

203. **Comment:** Section 102.4(b)(5)(x) states that the approved E&S Plan shall include a maintenance program that provides for "*...the inspection of BMPs on a weekly basis and after each stormwater event ...* " Although it is true that not every term or phrase in the regulations can have its own definition, the lack of a definition for the defining phrase "stormwater event" raises a concern, in particular because that phrase replaces the former language "after each measurable rainfall event." A misting or light rainfall that totals no more than 1/16-inch precipitation (or less) could be considered a stormwater event in the eyes of a regulatory official, resulting in unnecessary and unfair enforcement activities against a permittee. If such language is going to be added to the regulations, I strongly urge the addition of a clear, objective, measurable definition of "stormwater event." (1279)

Response: The term is self explanatory. Department intends that a stormwater event means runoff from a storm event.

204. **Comment:** Surface waters Why is this definition needed in addition to the existing definition of "waters of this Commonwealth"? Having two very similar definitions can be

confusing. The EQB should explain why both are needed and the difference that is intended between them. (1322-IRRC)

Response: Separate terms are needed because "waters of this Commonwealth" includes all waters, both surface and non-surface.

205. **Comment:** Revise the "surface waters" definition to include "watercourses" and delete all other terms that are contained in the definition of this word. (9)

Response: The definition of "surface waters" is consistent with the existing definition in Chapter 92.

206. **Comment:** Stormwater and E&S features should be excluded from the definition of "surface waters" similarly to the exclusion for wastewater facilities. (1190)

Response: The definition of "surface waters" is consistent with the existing definition in Chapter 92.

207. **Comment:** Is it necessary to include definitions for both "surface waters" and "waters of this Commonwealth?" Could the definition of "waters of this Commonwealth" be construed to include swimming pools? The term "natural" should be added between the words "underground" and "water," and the following should be excluded: roof drains, all storm pipes, and street underdrains. (1264, 1291)

Response: Yes, both definitions are needed. The Department does not agree that the suggested revisions are necessary.

208. **Comment:** Surface waters-Perennial and intermittent streams, rivers, [*creeks*], lakes, reservoirs, ponds, wetlands, springs, natural seeps, and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds, and constructed wetlands used as part of a wastewater treatment process. (Existing natural/artificial channels/swales are not considered surface waters (they are not considered intermittent streams due to the fact that it is not flowing in a bed composed primarily of substrates associated with flowing water (i.e. grass lined channel?)) Will these now be considered off-site discharge to non-surface waters; storm sewers would also fall into this category; NPDES permits are required for point source discharges to 'surface waters' according to 102.5, so for an example, a permit will not be required for a basin discharge to an existing grass-lined drainage swale or direct connection to storm sewer?) (1315)

Response: This definition is consistent with the definition in chapter 92.

209. **Comment:** The proposed regulations have incorporated new definitions for surface waters and water bodies. These definitions are not consistent with the Army Corps of Engineers, the US Fish and Wildlife Service or other federal agencies. In addition, they are not consistent with PA DEP's own regulations. (436, 650)

Response: The surface water definition is consistent with the definition in Chapter 92. The term “water bodies” is not used in this regulation.

210. **Comment:** The addition of springs and seeps into the definitions for surface waters and water bodies, would have a tremendous negative impact on landowners, and more importantly the development of critical utility and transportation infrastructure that the future of the Commonwealth depends upon. (436, 650)

Response: The surface water definition is consistent with the definition in Chapter 92. The term “water bodies” is not used in this regulation.

211. **Comment:** surface waters and water bodies The regulations should clarify which of these features would require the proposed riparian buffer. (650)

Response: The surface water definition is consistent with the definition in Chapter 92. The term “water bodies” is not used in this regulation.

212. **Comment:** Surface waters -Delete this definition and replace it with "Waters of this Commonwealth." (947)

Response: The Department disagrees. The term “Waters of this Commonwealth” is too broad because it includes underground as well as surface waters.

213. **Comment:** Surface waters Add “creeks” to the definition. (1268)

Response: The surface water definition is consistent with the definition in Chapter 92. The term “creeks” is not used in this regulation

214. **Comment:** You might want to consider adding a definition about a Technical Service Provider (TSP) as used in 102.32(b) as some TSPs are now developing conservation plans in addition to Districts and NRCS. (947)

Response: The Department did not include “TSP”, because the term is not used in the regulation. In addition, the language in Section 102.32(b) is consistent with the language Section 316 of the Clean Streams Law.

215. **Comment:** Timber harvesting activities are defined in the existing Chapter 102 definitions as having a much more expansive application to timber harvesting, and forestry, than the existing Timber Harvesting Packet (which includes the Erosion and Sediment Control Plan for a Timber Harvesting Operation (3930- FM-WM0155 Rev. 7/2004) and the Timber Harvest Operations Field Guide For Waterways, Wetlands and Erosion Control) presently provides. (1215)

Response: The Department appreciates the comment. The existing definition in Chapter 102 relates to timber harvesting activities that cause earth disturbance and have the ability to degrade receiving waters.

216. **Comment:** Timber harvesting -is an intermediate or final cutting that extracts salable trees (1170)

Response: The Department appreciates the comment. The existing definition in Chapter 102 relates to timber harvesting activities that cause earth disturbance and have the ability to degrade receiving waters.

217. **Comment:** We offer that all timber harvesting be further defined as intermediate or final cutting to extract salable trees. Timber harvesting is an essential tool to and essential to healthy forests. (1294, 1305)

Response: The Department appreciates the comment. The existing definition in Chapter 102 relates to timber harvesting activities that cause earth disturbance and have the ability to degrade receiving waters.

218. **Comment:** It must be recognized that while timber harvesting is defined as an earth disturbance activity, along with many earth disturbance activities that change the land use and that create major concerns for water quality, the application of scientific forestry does not impair the forest's ability to provide high quality water. Scientific forestry nurtures, enhances and protects the forest's ability to provide high quality water. Scientific forestry, hereinafter referred to as forestry, does not constitute a land use change. (1305)

Response: The Department appreciates the comment. The existing definition in Chapter 102 relates to timber harvesting activities that cause earth disturbance and have the ability to degrade receiving waters.

219. **Comment:** definition of "top of streambank"-Not all streams have this, especially intermittent streams. (1264, 1291)

Response: The Department disagrees; most streams including intermittent streams have a discernable change or break in slope which would be considered top of streambank.

220. **Comment:** The definition of top of streambank should read edge of the bank not edge of the bed. The channel bed normally refers to that portion roughly parallel to the ground, and the first substantial break at the edge of bed would be the bottom of streambank, not the top of streambank. (708, 1114)

Response: The Department disagrees. The definition states the "first substantial break in slope between the edge of the bed of the stream and the surrounding terrain".

221. **Comment:** Top of streambank definition should be revised to read as follows: First substantial break in slope between **the normal high water mark** of the stream und the surrounding terrain ... (1208)

Response: The Department disagrees.

222. **Comment:** Top of Stream Bank definition should be revised to read - First substantial break in slope between the edge of bed of the stream **as defined by the normal high water mark** and the surrounding terrain ... (693)

Response: The Department disagrees. This is a term commonly used in that technical field.

223. **Comment:** A definition for “watercourse” matching that provided under the Chapter 105 regulations should be added and the term used throughout the 102 regulations instead of stream, creek, river, etc. (9)

Response: A definition in this Chapter is not necessary.

224. **Comment:** Substitute “watercourse” and “body of water” for river, creek, lake, pond and reservoir, making sure that both terms are included in Section 102.1 and match the definitions provided in Chapter 105. (9)

Response: The Department does not agree that substituting these definitions in this Chapter are appropriate.

225. **Comment:** The term “watershed” used throughout the Proposed Rulemaking should be defined in this Section. (946, 1191)

Response: This term is commonly used technical term, and is intended to be understood according to that usage.

226. **Comment:** Waters of this Commonwealth Add “perennial and intermittent streams to this definition. Other than groundwater, is there any reason why the definition of “Waters of the Commonwealth” and Surface Waters” are not the same? (1268)

Response: Both terms are defined in Chapter 92. “Waters of the Commonwealth” includes subsurface waters, while “Surface Waters” does not.

227. **Comment:** Units should be used consistently throughout the document. For instance, Section 102.1’s definition of NPDES Permit for Stormwater Discharges Associated with Construction Activities uses acres and hectares, while Section 102.4(b)(1) uses square feet and square meters. (1257)

Response: The Department uses the appropriate unit and includes the US Standard and metric equivalent.

228. **Comment:** We recommend adding the following terms to the definitions, avoid, conveyance, guidance, manage, minimize, mitigate, recommend, sale and suggested. In the context that they are used in the regulations, all of these are extremely subjective. Guidance, recommended and suggested are also used throughout Department literature and are interpreted

as regulations by Department staff. The terms extent practical and utilize other measures that minimize and prevent have also been added throughout the document. This is very vague and open to interpretation. Who decides when these have been met based on what criteria? There are many pitfalls with this. A reviewer specifying that only a certain brand meets the requirements or an open-ended requirement that a reviewer can say has never been met. (1289)

Response: These terms are commonly used in the industry, and are intended to be understood according to their common usage.

229. **Comment:** There are a number of issues in the proposed regulation concerning inconsistent or non-existent definitions. For example, the definition of "earth disturbance activity" in the Department's model stormwater management ordinance is different than that found in the proposed Chapter 102. At the same time, no definition exists in the proposed Chapter 102 for the terms "permittee," "registrant," "registration of coverage," and "registered professional"-all of which are used on multiple occasions and should be formally defined. (1264, 1291)

Response: Commentators 1264 and 1291 are referred to the specific responses to the individual terms throughout this section of the Comment/response Document.

230. **Comment:** As with all new regulations, we urge the EQB to require all definitions listed in this proposed regulation be consistent with other related regulations such as the nutrient management regulations and federal NRCS regulations. (640)

Response: Where appropriate definitions in this regulation are the same as definitions in other regulations.

231. **Comment:** The definitions in the Draft Regulations are inconsistent with the definitions in other provisions of the law and ought to be reconciled so that they are the same as similar regulatory terms. (1272)

Response: Where appropriate definitions in this regulation have been reconciled as suggested.

232. **Comment:** The Pennsylvania Council of Professional Foresters would like to assist with and see the proposed rule making expand and clarify its definitions and issues pertaining to timber harvesting, forest stewardship, sustainably managed riparian forest buffers and licensed professional foresters. (5)

Response: The Department appreciates the offer of assistance, and has considered all the comments received during the public comment period.

102.2 Scope and Purpose.

1. **Comment:** Section 102.2. Scope and purpose. - Clarity; Reasonableness. The Pennsylvania Chamber of Business and Industry, along with other commentators, asked for clarification regarding the scope of post construction stormwater management where the project is restored to preconstruction conditions. The EQB should add language to this section describing when an entity has satisfied the requirements of Chapter 102. (1322-IRRC)

Response: The Department disagrees since the specific requirements are inconsistent with the goal of this section, and refers IRRC to Section 102.8 for specific requirements.

2. **Comment:** The Pennsylvania Coal Association commented with its interpretation that "mining activities permitted under the Pennsylvania Department of Environmental Protection, Bureau of Mining and Reclamation need not obtain an Erosion and Sediment Control Permit...." If this is the EQB's intent, we recommend adding language to this section explaining that intent. (1322-IRRC)

Response: The Pennsylvania Coal Association lists their comment regarding mining activities that need to obtain an E&S Control permit as pertaining to Section 102.5(g), not Section 102.2 as IRRC listed. Regardless, if the mining activity has been approved under a Department permit and complies with Chapters 92 and 102 then no additional permit under this Chapter is needed.

3. **Comment:** The proposed erosion and sediment control requirements would impose inspection, monitoring and reporting requirements that would be infeasible for lengthy linear projects and would be inconsistent with EPA's new Federal regulations and the FERC's construction requirements for interstate natural gas pipelines. (1272)

Response: The Department disagrees as the final regulations are consistent with federal requirements for erosion and sediment control related to construction activities.

4. **Comment:** Another issue directly related to Chapter 102 regulations that has just come into play are the requirements of the proposed EPA "Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category," Docket ID No. EPA-HQ-OW-2008-0465, which were published on November 23, 2009. When will these effluent standards be addressed in Chapter 102? (1129, 1152)

Response: These Guidelines and Standards have been incorporated by reference into the final rulemaking in 102.11(c).

5. **Comment:** As currently drafted, the proposed regulations facially appear to apply to rail projects and activities without any recognition of the unique linear nature of rail facilities (including main line tracks, sidings, spur lines, switches, terminals, depots and rail yards) and the impermissible burdens on interstate commerce that such regulations will impose if applied to rail projects. If the proposed regulatory amendments are finalized without significant changes, the reach of Pennsylvania's erosion and sedimentation control program will expand dramatically

with respect to rail projects, not only in terms of the universe of activities subject to regulation but in terms of the scope and duration of various requirements, such as proposed regulatory amendments imposing post-construction stormwater management obligations in perpetuity. Railroads are different from virtually every other sector of the regulated community in that they provide transportation services vital to interstate commerce over a network of privately-owned and maintained linear facilities that stretch across the Commonwealth. Because of the critically important and unique role that railroads play in facilitating interstate commerce, the federal government has recognized and implemented longstanding policies to promote uniform federal regulation of the railroads to enable the railroads to serve the citizens of multiples states and local jurisdictions without being subjected to layers of competing state and local requirements. To that end, the federal Surface Transportation Board ("STB") is vested under the Interstate Commerce Commission Termination Act ("ICCTA") with exclusive jurisdiction over transportation by rail carriers, including the construction, acquisition, operation, abandonment and discontinuance of tracks and facilities as discussed in more detail in Section II of these comments. As such, states and local governmental entities are generally precluded from imposing requirements that intrude on transportation by railroads, including construction and operation of tracks and facilities. Because the proposed regulations contain various requirements that impinge on the ability of the Railroads to proceed with rail projects, certain provisions of the proposed regulations run afoul of the express provisions of ICCTA. The express terms of ICCTA establish that the STB has exclusive jurisdiction over the construction, acquisition, operation, abandonment or discontinuance of tracks and facilities related to rail transportation. Attempts to regulate such activities under state law are preempted. Moreover, it is clear under ICCTA that the scope of the STB's exclusive jurisdiction extends not only to the manner in which railroads operate but to the tracks and facilities that support such rail operations. The proposed amendments to 25 Pa. Code Chapter 102 establishes broad permitting and approval requirements that apply, on their face, to rail projects. As such, the proposed amendments run afoul of the federal mandates under ICCTA. We request that prior to finalizing the proposed amendments to 25 Pa. Code Chapter 102, those amendments be clarified to expressly recognize the preemptive effect of ICCTA by including a provision that specifies that requirements otherwise applicable to earth disturbance activities do not apply to earth disturbance activities associated with rail projects. (1256)

Response: Railroad maintenance activities have been added to the revised definition of "road maintenance activities" in 25 Pa. Code § 102.1. "Road maintenance activities" remains in 25 Pa. Code § 102.5(b). Whether some activities regulated under this Chapter may be preempted and fall within the jurisdiction of the STB when undertaken by a railroad, will be determined on a case-by-case basis and does not require further revision of the regulation.

6. **Comment:** 102.2 - expands the scope of E&S Plans to "manage post construction stormwater." Dominion requests that this requirement not be broadly applied to each and every earth disturbance activity, as this section implies. (1152)

Response: The Department recognizes the diversity of Pennsylvania's economic makeup, as well as its geography, and has built in flexibility in the final form rulemaking that will continue to protect water quality and also support the economy. Flexibility has been built into these requirements in several areas, for example 102.8(g) and (n) allows for the applicant to

propose alternative PCSM approaches. Section 102.14(d) and (e) also includes a variety of exempted activities and availability of trading or offsetting credits to address specific unusual site situations. Further, this section does not specifically require that E&S plans manage postconstruction stormwater, but rather is intended to integrate E&S as a consideration for PCSM

7. **Comment:** Remove duplicate reporting of area by acres and hectares by deleting all references to hectares. No one uses hectares. (1123)

Response: The Department disagrees, and has retained references to the metric equivalents.

8. **Comment:** Little or no consideration of the issues involved in the transmission and distribution of electrical energy by the utility industry is evident in the proposed regulations, thereby mandating application of requirements, which are impractical, antithetical to sound environmental and conservation principles, and lacking in procedures for allowing variances when circumstances favor such an approach. (1262)

Response: The Department has clarified the final rulemaking by incorporating special provisions and references to linear projects and utility lines.

9. **Comment:** E & S Plans ought to be consistent from Conservation District to Conservation District which can be accomplished either by mandating uniform E & S Plans or allowing for statewide E & S Plans for linear projects such as pipelines. (1272)

Response: The Department's requirements contained in this rulemaking define that E&S plans need to be specific and represent actual site conditions. The plan requirements are consistent throughout the Commonwealth for consistency with this Chapter, but plans must be designed to address individual site characteristics.

10. **Comment:** Section 102.2 (Scope and Purpose) a clarifying statement should be added to this section to recognize the scope of regulation of agricultural operations under Chapter 102 only applies with respect to practices for accelerated soil erosion and sedimentation control and stormwater management, and does not include measures for management of manure or control of discharges regulated under Chapters 91 and 93. (14, 645, 1148)

Response: The Department believes no additional clarification is needed because Section 102.2(a) states that "this chapter requires persons proposing or conducting earth disturbance activities to develop, implement and maintain BMPs to minimize the potential for accelerated erosion and sedimentation and to manage postconstruction stormwater." The management of manure or control of discharges regulated under Chapters 91 and 93 is not specifically mentioned in this section, which is related to "scope and purpose" and therefore is not covered by the proposed regulations.

11. **Comment:** As an electric and gas utility, PECO's concerns are largely centered on the aspects of the unique issues of transmission and distribution utilities and is requesting the opportunity to work with the Department and other electric and gas utilities to develop a utility-specific Soil Erosion and Sediment Control Plan that marries the regulatory/environmental needs with the constraints imposed by FERC, NERC, and the PAPUC. Such a program design would include accelerated permitting and could also allow for variances and programmatic permits. This type of program would easily fit within the proposed regulatory framework, allowing the utilities the ability to maintain electrical reliability throughout their service territories while continuing to manage their operations in an environmentally responsible manner (1301)

Response: The Department has incorporated permitting requirements and programmatic variances within our authority and where that authority is not superseded by federal requirements.

12. **Comment:** § 102.2- Scope and Purpose The Chamber requests additional clarification and discussion from DEP regarding the scope of post construction stormwater management for projects where the project site is restored to pre-construction conditions. This is specifically germane to utility industry and certain oil and gas activities, where following construction activities (e.g., underground pipelines), the site is restored to its original condition. In such a situation, there are no new or specific PCSM BMPs because the post construction site is restored to its condition prior to earth disturbance. (1241, 1278)

Response: If the person conducting the earth disturbance activity for pipelines or other utilities that restore or reclaim a site back to natural conditions would meet the requirements of a post construction stormwater management plan under this Chapter.

13. **Comment:** We find the overall organization of the proposed regulation to be very confusing and cumbersome, with E&S, PCSM and permitting information scattered throughout in non-contiguous sections lacking a logical order. For example, 102.11 General Requirements (for E&S and PCSM BMPs) appears late in the document, after E&S requirements (102.4) and PCSM requirements (102.8). Site Stabilization (102.22), an integral component of E&S control, is inserted at the end of the document rather than being included with the E&S requirements in 102.4. While it may seem insignificant given the scope of the proposed revisions, we believe that better organizing the document will greatly improve the utility of the regulation for the people attempting to meet the requirements. (1208)

Response: The Department appreciated the suggestion and has reformatted the final rule to the extent possible. The Department has limited ability to structure the organization of the final rule since many of the sections are existing requirements.

14. **Comment:** Section 102.2(a) should be revised to read as follows: This chapter requires persons proposing or conducting earth disturbance activities to develop, implement and maintain BMPs to minimize the potential for accelerated erosion und sedimentation and to manage stormwater runoff during and post-construction. (1208)

Response: The Department disagrees with the recommended language as it is not necessary since the management of stormwater during construction is the function of erosion and sediment control.

15. **Comment:** Section 102.2a: Why has the Department decided to implement and enforce post construction stormwater management regulations in Chapter 102 when there are other Department and local programs that already have stormwater regulations? There needs to be one comprehensive set of stormwater regulations instead of the confusing/conflicting current federal MS-4 program, Act 167 program, DEP model ordinance, municipal ordinances, and DEP BMP Manual compounded by the now proposed Chapter 102 revisions. Which one takes precedence? In reality, engineers need to design to the most restrictive of all which leads to over design and increased design/construction costs. (1123)

Response: The Federal NPDES program requires that post construction stormwater be addressed for construction activities. It was determined that Chapter 102 would be the appropriate place for these requirements. An approved and current Act 167 Plan can be used for the stormwater analysis as noted in 102.8(g)(2).

16. **Comment:** 102.2(a)(1) and (2)). The proposed amendments must be revised to exclude "rail maintenance activities" from any requirements to obtain a NPDES permit. Rail maintenance activities must be free from the restrictions that the proposed amendments potentially would otherwise impose in terms of requiring permits as predicates to proceeding with rail maintenance activities. In regulations promulgated by the United States Environmental Protection Agency ("EPA") to implement the Clean Water Act, maintenance activities are expressly excluded from the universe of stormwater discharges that trigger NPDES permitting requirements. Specifically, 40 C.F.R. 122.26(b)(15)(i) provides that "[s]mall construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility." This exclusion should be included in the proposed amendments to 25 Pa. Code Chapter 102. Accordingly, it is appropriate that the proposed amendments be modified to explicitly exempt railroad maintenance activities from permitting requirements even if they involve earth disturbances of 25 acres or more. (1256)

Response: Railroad maintenance activities have been added to the revised definition of "road maintenance activities" in 25 Pa. Code § 102.1. "Road maintenance activities" remains in 25 Pa. Code § 102.5(b). Whether some activities regulated under this Chapter may be preempted and fall within the jurisdiction of the federal Surface Transportation Board when undertaken by a railroad, will be determined on a case-by-case basis and does not require further revision of the regulation.

17. **Comment:** Section 102.2(b)--The requirement to "restore" water quality using BMPs is a problem. It makes the applicant responsible for historical conditions on a project site, and also for runoff from the entire site. The applicant would also have to provide for the rate and volume of runoff from adjoining lands. (1264, 1291)

Response: The Department disagrees. The term "restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* The Department agrees that historical

conditions and runoff from the project site need to be considered however the rulemaking does not extend responsibility for mitigating changes in volume and rate from the adjoining lands.

18. **Comment:** Several times in the draft regulations, the phrase "...after consultation with the Department.. ." is made in reference to additional information being required or revisions made to plans. This requirement should be removed from the regulations, as it will add a significant amount of time to plan reviews and necessary field revisions to the plans. Lengthy delays are already apparent in the Individual NPDES Permit process. With the proposed language, additional delays will be added to all aspects of the 102 program. (3)

Response: The requirement that conservation districts "consult with the department" was added to ensure that conservation districts are implementing the program consistently and not requesting additional information beyond what the Department has established as necessary to complete the permit application package review in a timely manner and to avoid unnecessary delays. This requirement was used in strategic places to ensure the Department's participation for alternate criteria, standards, or other requirements not specified in the regulation, policy or guidance established by the Department.

19. **Comment:** §102.2 Scope and purpose. This chapter requires persons proposing or conducting earth disturbance activities to develop, implement, and maintain BMPs to minimize the potential for accelerated erosion and sedimentation and to manage post construction stormwater. We urge that the requirement to "manage post construction stormwater" be deleted. Earth disturbance activity where the site is restored to pre-construction runoff regime should not be subject to post construction stormwater management requirements. (691, 1124, 1250)

Response: The federal Clean Water Act and the state Clean Streams Law require management of post construction stormwater. The Department has made accommodations for those instances where the site is restored to pre-construction runoff regime in Section 102.8(n).

20. **Comment:** Integrating Chapter 102 Regulations into the Storm Water Management Regulations will inevitably result in a more restrictive level of enforcement (which the Proposed Rule Making illustrates.) It is not appropriate for any one to state or believe that the proposed rule making will result in business as usual. The regulated community should clearly understand that the proposed rule making is not business as usual. The total possible impacts of the proposed rule making must be the basis for evaluating potential impacts on the regulated community. (1215)

Response: The Department acknowledges the comment. The rulemaking includes specific PCSM requirements as a codification of existing practices in this Commonwealth. Since 2002, the Department has included PCSM requirements in the NPDES stormwater permitting program in response to the need for enhanced water quality protection, long-term stormwater management, streambed and streambank protection and as a flood control measure. The inclusion of PCSM requirements in this program is driven by the federal NPDES stormwater construction requirements, Environmental Hearing Board decisions, and is necessary to support implementation of stormwater management planning requirements for the Municipal Separate

Storm Sewer System (MS4) NPDES program and the Pennsylvania Stormwater Management Act (32 P. S. §§ 680.1--680.17).

21. **Comment:** The imposition of overreaching standards to the management of constantly changing forest ecological systems will benefit no one. Professional forest managers are vital in the continuation and improvement of our state's water quality. I aver that there is probably not another profession in Pennsylvania that provides for the protection and promotion of water quality than forester's provide right now. (1202)

Response: The Department agrees that professional forest managers can contribute to the improvement of Commonwealth waters.

22. **Comment:** I commend the EQB and DEP for being vigilant protectors of Pennsylvania's water resources. However the proposed changes need more input from forest professionals and should not be accepted in their present form given the broad scope and regulatory expansion they provide. The potential devastating effects these changes will have on Pennsylvania's forest health and economy are far too great given the undocumented evidence of benefit. (1202)

Response: The Department received and considered comments from over 1300 commentators, including many foresters. This has resulted in changes to the final rulemaking in section 102.14 including the requirement for a management plan for riparian forest buffers and allowing for timber harvest activities in accordance with the riparian forest buffer management plan.

23. **Comment:** I ask the Environmental Quality Board to provide forestry with the same exemption from permitting, forested riparian buffers and E&S plan requirements, as is currently provided to agricultural activities. Like agriculture, forestry related earth disturbance is temporary and in many cases, an even shorter timeframe of disturbance than many agricultural activities. (1176, 1202)

Response: The Department does not agree that forestry and agricultural activities should be regulated in a similar fashion. All agriculture activities do not have an exemption from the E&S permit requirements of this Chapter. Agricultural plowing and tilling operations do not require a permit, but do require an agricultural E&S plan. A conservation plan that meets the requirements of an agricultural E&S plan may be used to meet these planning requirements. In addition, language has been added to 102.8(n) to add timber harvesting activities to the regulatory standards for PCSM requirements for activities that require site restoration or reclamation.

24. **Comment:** It is very well established by DEP's Integrated Water Quality Monitoring and Assessment Report that Silviculture and logging roads account for only two-tenths of one percent of the state's impaired stream miles. Forestry, Silviculture and associated logging most often does not change the use and only imposes minor and temporary earth disturbance, when Best Management Practices (BMP) are implemented under the required Erosion and Sediment Control plans currently in place. Current Chapter 102 regulations adequately address this issue

through requirements for the use of BMP's, erosion and sediment control plans, and permitting of earth disturbance activities. (1202)

Response: This rulemaking is primarily a codification of existing requirements. Forestry and timber harvesting that disturb 25 acres or greater and require an E&S permit would require a PCSM plan to compensate for any change in stormwater runoff as a result of the activity.

25. **Comment:** Some of the language in the proposed regulation reinforces the Department's ability to demand information on unrelated project sites. (1264, 1291)

Response: In order to appropriately review the impact from an earth disturbance activity and determine if the measures proposed are adequate, the Department and conservation districts have the responsibility to request all the information necessary to make that determination.

26. **Comment:** The scope of the proposed regulation has been expanded beyond its original intent of addressing erosion and sediment control and now includes the promotion of "low-impact development." Such requirements could affect every subdivision and land development ordinance, and they are problematic with traditional neighborhood developments, as many developers are walking away from such projects due to their cost. Pursuing this objective eliminates choice, and many municipalities are not doing low-impact development because they see it as a conduit to higher density. The Department needs to guard against trying to dictate a land-use template for sovereign townships, as townships do have the ability to do low-impact development if they so choose. (1264, 1291)

Response: The Department recognizes local land use control authority, and encourages the use of low impact development, environmental site design and other similar approaches.

27. **Comment:** Regarding funding requirements, the executive summary states that the revision should not result in significant increase compliance costs and further states that there should be a cost savings to developers and the general public. While we agree that outdated requirements have been removed, new requirements have been added. A couple of these items of increase costs are additional inspections, long term O&M monitoring, record keeping, interpretation of definitions such as restoring water quality, and measurements during construction. How can the Department justify that there will be a reduction in costs? An analysis of the true projected cost should be provided to the public. An ongoing problem is the disparity between the Department's own regional offices and likewise the Department's local conservation district. Each office has their own sets of rules that they play by. (1289)

Response: The Department has completed an analysis of all the costs associated with this rulemaking and included that information in the Order and Regulatory Analysis Form for this rulemaking.

28. **Comment:** Under the Board's issuance of this proposed rulemaking, the section "Compliance Costs" states that "These regulatory revisions should not result in significant increased compliance costs for persons proposing or conducting disturbance activities". This statement is only true for the agricultural community which has been stripped of any

responsibility whatsoever in preventing sediment pollution or stormwater control. For all other sections of the regulated community, the proposed revisions will result in very significant compliance costs. Just the requirements under sections 102.5(e), 102.8(k) & (l) and 102.15 will add thousands of dollars to project costs due to the newly required involvement of licensed engineers in project inspection and final certifications. It can be argued that Permit by Rule participation is voluntary. True, but only large projects where such increased costs represent a small portion of the overall project cost will benefit from this format availability. The Permit by Rule option is simply not available for small and medium sized projects since the high costs involved will represent a too large percentage of the overall project costs. What is truly shocking, but again is a further indication of the lack of program understanding by DEP, are the proposed new permit fees under section 102.6(b)(2). Again noting that the proposed \$2,500 fee for Permit by Rule applications will be easily absorbed by large projects, the \$2,500/5,000 fees for General and Individual NPDES applications are ridiculous. Not only do these amounts not recognize the difference in processing and review fees between small and large projects, but any argument on DEP's part to justify them as averages or to state that there is not much difference between the processing and review of large versus small projects represents a huge admission that small projects are being seriously over regulated. Even county conservation districts, in establishing E&S plan review fees, provide a graduated schedule starting with a base fee and then adding set amounts for each separate development unit or acre of disturbance. Currently, the PCSM plan submitted as part of General NPDES permit applications are not reviewed by conservation districts. If the intent of the new fees is to allow districts to hire staff to perform such reviews this should be clearly stated in the reasons for such stiff fee increases. It then becomes necessary for DEP to provide documentation that the fees are necessary for such review costs. However, the real underlying problem is that the permit applications are unfairly cumbersome for small projects where the time of earth disturbance exposure, size of disturbance and actual threat to water resources are significantly less than for large projects. DEP remains unable or unwilling to recognize this problem and the new regulation requirements and fees will very likely be the proverbial "straw that broke the camel's back" as far as small to medium sized development is concerned. New residential and commercial construction for the rural single lot and small (10 units or less) will cease to exist in Pennsylvania. Coupled with recent additions of nitrate studies and enhanced on lot nitrate removal systems within special protection watersheds, the combined new additional costs to a perspective home owner are estimated to be: \$1,000 for nitrate study, \$14,000 for new nitrate removal systems and \$5,000 for a NPDES permit application, totaling \$ 20,000 of completely new development costs. And, this does not include the other engineering costs mentioned previously. One has to truly wonder if these actions by DEP represent a specific effort to impose so many restrictive regulations and costs to rural land owners and perspective home owners that rural development will simply cease. What better way to preserve statewide water quality. A taking of land by regulation that hopefully won't be recognized as such. (9)

Response: The Department has completed an analysis of all the costs associated with this rulemaking and included that information in the Order and Regulatory Analysis Form for this rulemaking.

29. **Comment:** The current (existing) regulations are already more than adequate to minimize Erosion from land use activities, in fact, a detailed review should be made to determine how they

could be streamlined. The way to enhance and enforce existing regulations is to improve the understanding of current program standards through stakeholder education. The proposed revisions add unnecessary cost and additional regulatory burden on the average citizen and business community. Here are but a few specifics of the proposed revisions and problems related thereto; Preamble Benefits, Costs, and Compliance It is stated that there is a benefit by increasing permit fees; however there are no numbers that justify this statement. Nor is there an evaluation of improving the efficiency of program operations to help control costs. It is stated that there is a benefit by enhancing delegation of E&S and Storm water management to local districts, however local districts have never been consistent in enforcement, and these added regulations will make those inconsistencies more pronounced. It is stated that these regulatory revisions "should" not result in "significant" increased compliance costs. It only predicts "moderate" cost increases for 1) application fees, 2) PCSM plan licensed professional oversight, 3) and long term O&M operation and maintenance. As Erosion and Sediment Control Specialists, we can attest that the increased costs for these added tasks will more than double fixed costs of plan preparation and permitting, and add a long term floating cost to every project. As an example, current costs per single family home for preparing an E&S and PCSM plan are in the range of \$4000-\$6000 in Central PA. Doubling this cost (minimum) is significant for the average single family homeowner, and does not include the added permit fees nor the new long term O&M costs they will be incurring. Paperwork Requirements It is stated that this will result in only minor changes to forms and fact sheets. In fact, over the years the changes to forms and fact sheets have increased the paperwork from approximately 3 pages to present day 25 pages, not counting PCSM and E&S narratives. This trend has not abated and we believe the paperwork will substantially increase as a result of these revisions. RHS ENGINEERING, INC. October 23, 2009 *Civil Engineering & Project Management Services* Page 2 of 3 Chapter 102 Revision Comments (8)

Response: The Department has completed an analysis of all the costs associated with this rulemaking and included that information in the Order and Regulatory Analysis Form for this rulemaking.

30. **Comment:** Regarding funding requirements: Revision should not result in significant increase compliance costs; should be a cost savings to developers and the general public; new requirements that increase costs are additional inspections, long term O&M monitoring, record keeping, interpretation of definitions such as restoring water quality, and measurements during construction; how can the Department justify that there will be a reduction in costs; an analysis of the true projected cost should be provided to the public. (1234)

Response: The Department has completed an analysis of all the costs associated with this rulemaking and included that information in the Order and Regulatory Analysis Form for this rulemaking.

31. **Comment:** While it is important to understand the utility of BMPs and where they work best, there is significant discrepancy between various county conservation districts on which BMPs they prefer. The Department should provide more stringent and prescribed guidelines on the applicability of each BMP. Moreover, the concept of restoration implies a pre-defined starting point or baseline. We strongly recommend the department establish baselines for the

State's regulated waterbodies, rather than placing the burden of establishing a baseline on the permittees, then having this baseline accepted by the Department and conservations districts. (1301)

Response: Designated use based on water quality criteria has been established for the Commonwealth's waters as found in Chapter 93. Both, the Erosion and Sediment Control Program Manual (PADEP # 363-2134-008) and Stormwater Best Management Practices Manual (PADEP # 363-0300-002) provide guidelines on the applicability of a variety of BMPs. Also, Antidegradation Best Available Control Technologies (ABACTs) and non-discharge alternatives provide prescriptive guidelines in special protection waters.

32. **Comment:** These are certainly challenging times for all of us. While we support DEP's goal of protecting our environment, we certainly hope they will support the need for economic vitality. Permit extension requirements which mandate the implementation of current regulations for projects already fully approved and under construction and rigid riparian buffers certainly make it difficult for businesses to be successful. These new requirements will have a serious ripple effect across every industry and will result in greater and continued stress on the citizens and governments of Pennsylvania. I hope that you would consider alternative methods to achieve a common goal for all. (1185)

Response: The Department has included language in Section 102.8(a) as a "grandfathering" provision for NPDES permit renewals for permits issued before the effective date of the regulations and renewals prior to June 1, 2013.

33. **Comment:** Prior to the final - prior to finalizing the regulations, there are multiple revisions that need to be completed to remove some of the guesswork and interpretation. All of the vague references need to either be removed or numerically quantified. (1234, 1289)

Response: The Department has reviewed and clarified the final rulemaking while still allowing enough flexibility for professionals to use their best judgment.

34. **Comment:** Please consider the ramifications of these proposed changes relative to forestry and timber harvesting and their consequential impacts on forest landowners and forest health. Is it really necessary and beneficial to impose greater restrictions when the current regulations, given the many years of experience they demonstrate with forest landowners, seem to be totally adequate? What about forest health? Are you looking to fix one problem by imposing limits which have the potential to create other, perhaps more serious situations? I urge you to take a more comprehensive look at these areas to more accurately assess whether your proposed changes affecting them are indeed the best way to go. (1237)

Response: The Department acknowledges this comment. The Department considers proper forest management a key to protecting the Commonwealth's waters. This rulemaking codifies many existing practices.

35. **Comment:** There is a continuing gap in our enforcement and analytical efforts in that we fail to address the cumulative impacts of different actions in given areas. The current regulations

and everything tend to focus on point sources, even if it's so many acres or so many linear feet, but the fact is the cumulative impact of all these things is not being recognized. (1253, 1307)

Response: The Department agrees that addressing point and nonpoint sources is important. The Department is continuing to analyze the cumulative impacts and its relationship to the decision-making process.

36. **Comment:** To help the clean water you must limit the parking lots with the amount of black top that is used and the private homes that are over done with black top. The water must get into the ground instead of run off on the neighbor or down the street. (925)

Response: In Section 102.8(b), the Department has established general PCSM planning and design requirements which includes a provision for minimizing impervious areas.

37. **Comment:** There are a number of provisions in Chapter 102 for Department review and approval of alternate design, BMPs, or strategies for stormwater management. We have added throughout the regulation provisions for conservation district review and approval consistent with their delegated authorities and responsibilities per agreement. This would allow delegated districts to perform all of the duties under their delegation agreement. For example, a PCSM engineering review delegated District would not necessarily seek guidance from the Department on an engineering issue as in 102.4(b)(4). Additional examples would be 102.4(b)(6), 102.(b)(7) 102.6(c)(2) 102.8(d), 102.8(f)(16), 102.8 (g)(6), 102.8 (k), 102.8(m). (693) The staff of many Conservation Districts is well qualified to review and approve all types of BMP's. Especially with severe budget cuts at DEP, our offices must retain the professional flexibility to make these adjustments. (941)

Response: The Department has retained sole authority to act in those instances that have statewide implication so that there will be consistency of application.

38. **Comment:** Is 102.3 still being reserved and if so, for what? (947)

Response: Yes, a reserved section in the regulation identifies a section that previously included regulatory requirements but has since been eliminated from the regulations. Such sections are not used again, and therefore "reserved", to ensure that citations to previous provisions are retained for future reference.

102.4 Erosion & Sediment Control Requirements

1. **Comment:** Section 102.4. Erosion and sediment control requirements. - Reasonableness; Need; Implementation procedures; Clarity. *Animal heavy use area* The phrase "animal heavy use area" is added throughout Subsections (a) and (b). The EQB should explain the need to regulate animal heavy use areas and the reasonableness of the requirements. (1322-IRRC)

Response: Agricultural animal heavy use areas are a significant source of sediment. In addition, they affect the aesthetic and downstream uses. These requirements would apply to all farms as opposed to the existing Chapter 83 Nutrient Management Program, which only applies to approximately 2000 farms statewide. This proposed rulemaking is complimentary to the current nutrient regulations by addressing the sediment component, which will assist agricultural operators in meeting their nutrient requirements. The Chapter 83 and Chapter 102 regulations are implemented by the same local agency, conservation districts.

2. **Comment:** *Implementation procedures* Paragraph 102.4(b)(4) specifies requirements using the words "maximize" and "minimize" for requirements. These provisions are subjective. We question how these vague requirements can be met or implemented consistently by conservation districts. How can a conservation district discern at what point it must seek DEP approval of the proposed activity? We recommend that the EQB review this provision and amend it so that the requirements can be discerned from the regulation. (1322-IRRC)

Response: The Department utilized this terminology to provide flexibility to the applicant when designing and implementing an E&S plan since project site features, site conditions and schedule vary considerably.

3. **Comment:** *Reclaim and restore* Subparagraph (b)(4)(v) requires an earth disturbance activity, to the extent practicable, to "protect, maintain, reclaim and restore the quality of water...." A commentator believes this could be read to place responsibility for water quality restoration on a project that did not cause the degradation. We agree that the words "reclaim and restore" imply either that the earth disturbance was allowed to be conducted incorrectly or that a higher duty is placed on the permit holder than may be reasonable. The same concern applies to Sections 102.8(b)(9) and 102.11(a)(2). The EQB should amend these provisions or explain why they are reasonable. (1322-IRRC)

Response: The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* However, in order to avoid confusion 102.4(b)(4)(v) and 102.8(b)(9) have been deleted in the final rulemaking. No revision was made to 102.11(a)(2).

4. **Comment:** *Volume and rate of runoff* Clause (b)(5)(iv) requires an E & S Plan to include the volume and rate of runoff. Since volume and rate are relative to rainfall, the regulation should include what rainfall parameters are to be used in this determination. (1322-IRRC)

Response: The Department acknowledges the comment, and refers the commentator to the Erosion and Sediment Control Program Manual (PADEP # 363-2134-008) referenced in 102.11(a) lists detailed volume and rate requirements for different BMPs. Typically the volume and rate of runoff are established based on the BMP that is used. In addition, the antidegradation provisions and the inclusion of the reference to the federal effluent limitation guideline includes the 2 year-24 hour event as the design storm.

5. **Comment:** *Measurable rainfall* Clause 102.4(b)(5)(x) deletes the phrase "measurable rainfall event" and replaces it with "stormwater event." Commentators believe that "measurable rainfall event" is clearly understood and should be retained. The EQB should explain the need for the amendment. (1322-IRRC)

Response: The Department made this change in response to industry concerns raised prior to the proposed rulemaking that measurable rainfall event (which is currently reference in the existing regulations) does not result in runoff conditions that may have an effect on BMP performance or the need for BMP inspection or maintenance. The Department, in response to this concern has replaced measurable rainfall with stormwater event. Stormwater event provides a more accurate, objective, and measurable representation of conditions when runoff occurs after precipitation or other weather related runoff condition, such as snow melt. This will provide the clarity that the industry requested. For example a light rainfall such as a 1/16-inch or trace of precipitation could be considered a measurable rainfall event, which may result in an unnecessary burden of monitoring or inspection to the regulated community.

6. **Comment:** The Energy Association of Pennsylvania requests that the EQB consider the nature of its multi-mile linear projects in relation to storms and inspections. The Department of Transportation has similar projects. We agree that inspection on a weekly basis after each stormwater event may be impractical in relation to these "linear" projects that may cover many miles, but only be several feet wide. The EQB should consider amending this provision to accommodate the types of projects described by the commentators. In addition, a commentator questions the need for the requirement to complete a "written report documenting each inspection." Would only requiring documentation of the inspections be sufficient? (1322-IRRC)

Response: BMP inspections are an important aspect to ensure that there are no impacts on water quality from the earth disturbance activity whether linear or some other configuration. Since linear projects transverse a large area of varying site conditions including stream crossings, wetlands and other waters where risks for discharge are increased. Documentation of the inspections is required, electronic copies available on-site are acceptable.

7. **Comment:** *Thermal impacts* Clause 102.4(b)(5)(xiii) requires an evaluation of the potential for thermal impacts to surface waters from earth disturbance activities. Commentators state there is no guidance on how to meet this requirement. One commentator believes that rather than an evaluation they should only be required to identify the potential for thermal impacts. We recommend that the regulation clearly state what evaluation of thermal impacts will be acceptable to DEP. (1322-IRRC)

Response: The Department agrees and we have revised and clarified the final regulation and will provide guidance. Further, since each site is different, the Department believes the applicant and the design professional should have flexibility to develop an appropriate response to thermal impact concerns. In addition to identifying the potential for thermal impacts, appropriate BMPs should be designed to mitigate those impacts.

8. **Comment:** *Reports and records available at the site* In relation to Paragraph (b)(7), the Energy Association of Pennsylvania commented asking for flexibility on maintaining the E & S Plan, inspection reports and monitoring records onsite. It requests that the records be allowed to be kept electronically at a remote office. There is a similar requirement for agricultural operations in Paragraph (a)(8). The EQB should explain why records are needed onsite and consider allowing electronic records offsite. (1322-IRRC)

Response: Records are needed onsite to be consistent with the necessity to implement federal requirements of routine monitoring and reporting. From a practical standpoint, the Department or conservation district must adequately determine that the permittee implemented or maintained the BMPs as identified in the plans. Documentation of the inspections on reports and monitoring records is required, however the Department has not established a preferred format in the regulations, therefore, electronic copies available on-site are acceptable by the Department.

9. **Comment:** The York County Conservation District welcomes the addition of erosion and sedimentation control requirements for animal heavy use areas. (218) We do acknowledge and appreciate the additional language of 102.4 especially with Animal Concentration Areas as we feel this will be an improvement in our ability to address agricultural E and S problems. (947)

Response: The Department agrees, and appreciates the support.

10. **Comment:** Several people in the Bureau and in the forestry community were confused as to whether the NPDES requirements applied to forestry activities. If the NPDES does apply to forestry activities, it could eliminate their economic viability, given the high fees quoted in the proposed regulations. This would provide a disincentive for landowners to either maintain a working forest or to leave their land in forest at all. (1275)

Response: Earth disturbances related to siculture and timber harvesting are activities that do not require an NPDES construction permit. Although an NPDES construction permit is not required, an E&S permit is required for earth disturbances of 25 acres or greater related to forestry activities.

11. **Comment:** Certain sections of the regs seem to suggest that a Conservation District would get an E&S plan for a site after complaints were received or after site visit were made. (102.4(b)(7) and (8) for example). We believe that E&S plans should always be reviewed by the Conservation District before any earthwork takes place on a site. Far too often we have encountered serious pollution violations on sites which did not have our plan review or approval prior to commencing earthwork. Any section of this reg which would allow for work to begin prior to the District's approval is misguided and should be stricken. (941)

Response: The existing requirement in 102.4(b)(7) requires that an E&S plan is requested to be submitted to the Department or conservation district as a result of a complaint or inspection the Department or district may conduct a review for compliance.

12. **Comment:** It is illegal to place farmers in double jeopardy with the inclusion of the language about heavy use areas, starting at § 102.4. This concern is already addressed in § 92.5a. CAFOs or § 91.36. Pollution control and prevention at agricultural operations. This means that farmers could be cited for violations for the same situation under duplicate provisions of the regulations, which is double jeopardy, which is illegal. Agriculture and Erosion Control should be handled separately. (941)

Response: It is not uncommon for an unlawful action to be in violation of multiple regulations but this is not double jeopardy. There is a need for specific regulatory requirements for erosion and sedimentation from Animal Heavy Use Areas which this final form regulation addresses. Animal heavy use areas are a significant source of sediment and are included in the final rulemaking. This regulation is consistent with Chapters 83, 91 and 93.

13. **Comment:** 102.4 Keep “agricultural plowing, tilling activities, or animal heavy use areas” consistent throughout entire section. (1187)

Response: The Department appreciates the suggestion however the Department and has used the terms appropriately and as they are defined.

14. **Comment:** Section 102.4 Remove reference to animal heavy use areas since these activities are already covered by Chapters 83, 91 and 93. (1148)

Response: Animal heavy use areas are a significant source of sediment and remains in the final rulemaking. There is a need for specific regulatory requirements for erosion and sedimentation from Animal Heavy Use Areas which this final form regulation addresses. This regulation is consistent with Chapters 83, 91 and 93.

15. **Comment:** Act 38 allows ACA's (Animal Concentrated Areas) or animal heavy use areas. Specialist are trained to identify, limit area of ACA, locate ACA to a suitable area and manage the greater area to minimize accelerated erosion and sedimentation with such BMP's outlined in this section. The ACA will most probably have runoff and sedimentation, but when ideally situated and treated, there are no surface water pollution concerns. This section may be seen as even limiting this strategy to deal with these ACA's. (3)

Response: The Department agrees that if an ACA is ideally situated and treated, there should be no surface water pollution concerns. This final rulemaking should not impose any additional requirements on ACAs regulated under Act 38.

16. **Comment:** We support the proposed language requiring erosion and sediment control plans for animal heavy use areas and also requiring temporary stabilization of construction sites.

Open construction sites in animal heavy use areas can both result in serious impacts on water quality and activities to reduce EMS erosion and sedimentation from these sites should be required. (833, 1302)

Response: The Department agrees that these activities have the potential for serious water quality impacts and appreciates the support.

17. **Comment:** Define the time frame for which the 25% cover is required. When will "25% cover" be measured? Is 25% cover 365 days per year? One could work a field after corn silage to have less than 25% cover, drill a cover crop of rye and in 3-4 weeks have greater than 25% cover. Please define 25% cover. (3)

Response: Cover includes vegetation and crop residue. "25% cover" is intended to mean at least 25% cover over the entire field at any given time. The use of 25% cover is also found in the setbacks and buffer requirements in Chapter 83 regulations (Chapter 83.294(f)(5)). The method of calculating cover is found in NRCS guidance (503.43) for estimating crop residue cover.

18. **Comment:** Percentage of coverage should be higher than 25% cover (256)

Response: The use of 25% cover is intended to be consistent with existing requirements currently in use in the setbacks and buffer requirements in Chapter 83 regulations (Chapter 83.294(f)(5)).

19. **Comment: Section 102.4 (Erosion and sediment control requirements) – 102.4 (a) inclusion of "Animal Heavy Use Areas":** *The inclusion of Animal Heavy Use Areas in a regulation traditionally used to control erosion from agricultural plowing or tilling activities presents a potential "double jeopardy" situation for many agricultural animal operations in Pennsylvania. The "Animal Heavy Use Areas" defined in this proposed regulation are virtually identical to Animal Concentration Areas (ACAs), which are already defined and regulated by the State Conservation Commission (SCC) through the existing Chapter 83 Nutrient Management Law regulation. While the Chapter 83 regulation are primarily specific to Concentrated Animal Operations (CAOs) and Volunteer Animal Operations (VAOs) under the Nutrient management Law, the Department of Environmental Protection (DEP) also uses this regulation as the nutrient management planning standard for Concentrated Animal Feeding Operations (CAFOs), which are permitted under Chapter 92. ACAs and ACA management are also described in the Manure Management Manual, the existing DEP guidance document for all farms, which is referred to in DEP's Chapter 91 regulation. Therefore, if this Animal Heavy Use Area inclusion in Chapter 102 is allowed to go forward, many Pennsylvania agricultural operations could be cited and penalized under Chapter 102 as well as one of three (3) other Pennsylvania regulations (Chapters 83, 91 or 92) for the very same incident. Additionally, including this specific reference to Animal Heavy Use Areas along with specific management requirements in the Chapter 102 regulation and future Chapter 102 Technical Manual, would allow for differing and possibly confusing requirements and standards (by different State and Federal Agencies) to address the same localized areas of concern on agricultural animal operations. Furthermore, erosion and sedimentation caused by outdoor animal activities, while extremely important, is generally*

thought to be a secondary concern. Nutrient pollution is generally considered to be the primary concern with outdoor animal activities. In solving these two types of problems, it is much more efficient to use conservation practices to solve the nutrient concerns presented by these types of areas because, in most if not all cases, if the nutrient concern is addressed and mitigated, the erosion concern will also be mitigated at the same time and with the same practice. These concerns are already addressed in the existing regulations and guidance cited above. The PA Farm Bureau feels that all references to Animal Heavy Use Areas should be removed from the proposed regulations. (1166)

Response: It is not uncommon for an unlawful action to be in violation of multiple regulations as this is not double jeopardy. There is a need for specific regulatory requirements for erosion and sedimentation from Animal Heavy Use Areas which this final form regulation addresses. Animal heavy use areas are a significant source of sediment and remains in the final rulemaking. This regulation is consistent with Chapters 83, 91 and 93. This final rulemaking should not impose any additional requirements on ACAs regulated under Act 38. Smaller animal operations not covered under Act 38 are addressed in this rulemaking.

20. Comment: Agricultural Plowing and Tilling Paragraph (6) requires written implementation schedules for plowing or tilling operations in addition to animal heavy use areas exceeding 5,000 square feet. Hiring a licensed consultant to prepare a plan, permitting these activities, and then monitoring, will add substantial cost to small farm operations and will drive many small farm operations out of business. Implementing the subsequent requirements in development of the E&S plan remove substantial acreage from production, adding another cost to the small farmers P&L statement. It will also have a major cost impact on large farming operations without necessarily improving water quality. (8)

Response: Requirement for a written agricultural E&S plan is consistent with current regulatory requirements that have been in place since 1972. The cost for these written plans has been an existing cost of operation for farms with plowed or tilled fields. There may be a cost to an operation if a conservation plan or agricultural E&S plan is needed for animal heavy use areas. Because a conservation plan can be used as an agricultural E&S plan, there may be no additional costs since such plans are often developed with technical assistance of conservation districts and NRCS. The costs associated with not implementing an E&S plan can be substantial potentially resulting in soil loss, productivity and nutrients.

21. Comment: Like agricultural plowing and tilling, animal heavy use areas can cause accelerated erosion and sedimentation. For that reason, PennFuture is pleased that the Proposed Rulemaking requires the development and implementation of Erosion and Sediment Control Plans (E&S plans) for animal heavy use areas. (1191)

Response: The Department agrees and appreciates the support.

22. Comment: Section 102.4 states that "additional BMPs shall be implemented to minimize accelerated erosion and sedimentation" for certain agricultural plowing or tilling activities "within 100 feet of a river or perennial or intermittent stream." First, this requirement should be extended to animal heavy use areas (as opposed to just agricultural plowing or tilling activities).

Second, this requirement should be extended to include all "waters of this Commonwealth" (as opposed to just rivers, or perennial or intermittent streams). Third, the Proposed Rulemaking should provide at least some guidance on what additional BMPs should be implemented. Finally, the Proposed Rulemaking should require implementation of additional BMPs for agricultural plowing or tilling activities or animal heavy use areas located in special protection watersheds and provide at least some guidance on what additional BMPs should be implemented there. (1191)

Response: These regulations require BMPs to minimize the potential for accelerated erosion and sedimentation for animal heavy use areas regardless of its location and no additional BMPs are necessary. Standards for special protection watersheds are covered through the definition of BMPs and E&S Plan requirements in Section 102.4(a)(4). The definition of BMPs incorporates standards that address special protection watersheds. BMPs are practices that are put into place "to protect, maintain, reclaim, and restore the quality of waters and the existing designated uses of waters within this Commonwealth before, during, and after earth disturbance activities." Additionally, Section 102.4(a)(4), requires for agricultural plowing or tilling activities, the E&S Plan to limit soil loss from accelerated erosion to the soil loss tolerance (T) over the planned crop rotation. For animal heavy use areas, the BMPs are current NRCS conservation practice standards.

23. **Comment:** District ag staff support proposed regulations for agricultural erosion and conservation plans. (218)

Response: The Department acknowledges the comment and appreciates the support.

24. **Comment: Earth Disturbance other than Agricultural Plowing, Tilling, or Animals Heavy Use Areas** This section implies that existing drainage features and vegetation shall be protected but does not say to what extent. (8)

Response: The Department's expectation is to the extent practical and reasonable based upon availability of information, data, and other factors.

25. **Comment:** Strike (project site during each stage of plowing and tilling activity) and add for review and inspection at [all times. The plan shall be located on site at the] agriculture operation. (3)

Response: This Department disagrees with the recommended change. The regulation is consistent with current practice and necessary to ensure that a plan is on-site and available for inspection or review by farm operator or conservation district or DEP staff.

26. **Comment:** We support enhanced E&S requirements for ag activities. (1317)

Response: The Department acknowledges the comment and appreciates the support.

27. **Comment:** The Proposed Rulemaking should expand on its additional best management practices requirements for agricultural activities near rivers and streams. (946, 1191)

Response: Except for riparian buffers, BMPs are not included in this regulation.

28. **Comment:** After all, the culprit here is “sediment” and the ability to keep it out of the streams, wetlands, and waterways. It is a simple thing that needs to be addressed on-the-ground and cannot be completely solved through design plans and new regulations. Enforcing existing regulations and providing field follow-up is the key. There is also again, no emphasis on bring into the equation the vast agricultural sites with limited or non-existent BMPs. They have produced, by the state’s own studies, over 50% of the sediment pollution in our waterways. (1)

Response: The Department agrees that compliance and enforcement are essential to reaching water quality goals.

29. **Comment:** For Agricultural plowing or tilling activities or for animal heavy use areas-failure to improve overall statewide water quality degraded by sediment pollution and other attached pollutants attributed to failure of DEP to effectively regulate the agricultural community. This community contributes between 60 and 80% of the total statewide amount of sediment releases into our waterways. the 30+ year failure to improve pollution levels in the Chesapeake Bay as proof of this statement. Accordingly, it defies description as to any rationale why the revised chapter 102 regulations seek to further lessen regulatory oversight of the agricultural community. Not only do agricultural operators not have to hire someone “trained and experienced” in E&S plan design and development, but any plan that is developed only has to “include cost effective and reasonable BMPs”. By these two regulatory standards alone (lack of standards is a better description) the agricultural community is stripped of any responsibility to minimize current high levels of sediment releases/pollution. E&S or NPDES permitting requirements do not exist for agricultural plowing and tilling activities (102.5(j)), and whatever written E&S plans are developed are not required to be reviewed or approved by DEP. The final insult is 102.4(a)(4)(ii) where, while every other segment of the regulated community is being encouraged or even required to implement “Riparian forest buffers” when earth disturbance activities approach a watercourse, this subsection relieves the agricultural community of any such obligations, mandatory or otherwise. Accordingly, farming up to the top of streambanks will continue to be an unofficial agricultural community “standard”. (9)

Response: Revisions to Chapter 102 regulations that address agriculture do not remove any E&S requirements on agriculture, as they maintain existing E&S requirements on plowed or tilled lands. The Chapter 102 also expands requirements on agriculture by including animal heavy use areas. Lastly, Chapter 102 includes revised requirements for additional BMPs within 100 feet of a stream on fields with 25% or less cover. These regulations address the two primary source of erosion on agricultural operations – crop fields and animal heavy use areas. These regulations clarify current practice by specifying that an NRCS conservation plan can be used to meet the requirements for an agricultural E&S plan. Utilizing the “cost effective and reasonable” standard in 102.4 is consistent with the antidegradation standard applicable to non-point sources under other DEP antidegradation regulations. Data from SRBC and EPA indicates significant reduction of nutrients and sediments within the Chesapeake Bay watershed that has been attributed to agricultural BMPs.

30. **Comment:** The paragraph under Section 102.4 states “The E&S Plan shall be/must include cost-effective and reasonable BMP’s designed to minimize the potential for accelerated erosion...”. *Who will determine the “cost-effective” and/or “reasonableness” of the Plan given these highly interpretative words?* (1159)

Response: The Department has determined that the BMPs established in the NRCS Conservation standards and Practices and in the Department’s BMP manual are cost effective and reasonable.

31. **Comment:** Section 102.4 (a)(1) Are there ag specific BMPs? If so, where can they be found? (1268)

Response: The regulations specifically identify several BMPs for animal heavy use areas listed in 102.4(a)(4)(iii), which also includes a reference to the NRCS Conservation practice standards. In addition, other technical standards and guidance documents for agricultural activities may be used when approved by the Department.

32. **Comment:** Section 102.4 (a)(3) says “ or operating and animal heavy use area”.. of what size? (a)(1) and (a)(2) have a specific area of disturbance defined while this paragraph does not. (1268)

Response: Section 102.4 (a)(3) relates to who is responsible for developing and implementing plan preparation and a specific reference to size is not appropriate.

33. **Comment:** Section 102.4 (a)(4) “cost effective and reasonable BMP” language should be changed to include the same qualifying language as prescribed in Chapter 83 (Nutrient Management) definitions. The language should read “effective and practicable (given technological, economic and institutional considerations). Paragraph (4) would read: “The E&S plan shall include effective and practicable (given technological, economic and institutional considerations) BMPs designed to minimize the potential for accelerated erosion and sedimentation from agricultural plowing and tilling activities and animal heavy use areas.” (14, 645, 1148, 1166, 1187, 1201)

Response: BMPs are not just “reasonable and cost effective”, they must minimize the potential for accelerated erosion and at a minimum, limit soil loss over planned crop rotation. The reasonable and cost effective phrase relates to the nonpoint source and antidegradation requirements found in Chapter 93, Section 93.4c.

34. **Comment:** Section 102.4 (a)(4) BMPs should also meet WQS, not just be reasonable and cost effective. (1268)

Response: BMPs are not just “reasonable and cost effective”, they must minimize the potential for accelerated erosion and at a minimum, limit soil loss over planned crop rotation. The reasonable and cost effective phrase relates to the nonpoint source and antidegradation requirements found in Chapter 93, Section 93.4c.

35. **Comment:** 102.4 (a) (4): "cost effective and reasonable BMPs" . There is really no definition for cost effective and reasonable BMPs, this is something that can be very subjective based on what part of the state you are working in or the experience of the reviewer. (1266)

Response: BMPs are not just "reasonable and cost effective", they must minimize the potential for accelerated erosion and at a minimum limit soil loss over planned crop rotation. The reasonable and cost effective phrase relates to the nonpoint source and antidegradation requirements found in Chapter 93, Section 93.4c.

36. **Comment:** Proposed rulemaking revisions for agricultural operations are a good update to the law to reflect the changes in agricultural technologies and management styles. Many standard practices that previously were inferred are now in writing. In general the most recent version of Chapter 102.4 (a), which addresses agricultural operations, has incorporated most of the comments that the Agricultural Advisory Board presented in April 2009. These were good comments that ask for consistency in the regulations. In our opinion, there will be some agricultural operations in Greene County that will be affected by these changes but not more severely than any other region of Pennsylvania. This will occur on a farm-by-farm basis not a watershed basis in Greene County. Most importantly we hope the law will leave room for in-field assessments and creative ways of dealing with challenging sites. (1266)

Response: The Department acknowledges the comment and appreciates the support. The Department agrees that individual site compliance and enforcement are essential to reaching water quality goals.

37. **Comment:** This may be redundant as (a) (4) (ii) has already required that "limit soil loss for accelerated erosion". This may not be redundant if your reason for (a) (4) (ii) is to reduce soil loss from accelerated erosion in these sensitive areas to the soil loss tolerance (T) each year. If this is so, just say so. (3)

Response: The Department acknowledges the comment, and notes the importance of providing additional protection and preventing soil loss in areas along stream channels.

38. **Comment:** Section 102.4(a)(4)(ii) The PA Farm Bureau thinks that this language is appropriate. (1166)

Response: The Department appreciates the support.

39. **Comment:**102.4 (a)(4) (ii) The 25 % cover is too low. We would suggest a 50% cover instead. (947)

Response: The use of 25% cover is also found in the setbacks and buffer requirements in Chapter 83 regulations (Chapter 83.294(f)(5))

40. **Comment:** Section 102.4 (a)(4)(iii) - The second sentence should be deleted. The Agricultural Advisory Board supports the development of technical guidance. The technical guidance should include a listing of Best Management Practices (BMPs). (14, 645, 1166)

Response: It is appropriate to reference BMPs listed by NRCS. The Department acknowledges that other technical standards and guidance documents for agricultural activities may be developed or otherwise approved by the Department.

41. **Comment:** Section 102.4(a)(4)(iii) The Agricultural Advisory Board thinks that the language in regards to additional BMPs needed if the area is within 100 feet of a stream and has less than 25% cover is appropriate. (14)

Response: The Department appreciates the comment and acknowledges the support.

42. **Comment:** 102.4(a)(4)(i) would create an E&S plan requirement that limits soil loss to T. Natural Resources Conservation Service (NRCS) conservation plans can allow for two times T within their alternative cropping system. This inconsistency should be addressed, preferably with the more protective option. (1208)

Response: To meet the requirements of this regulations an E&S plan must meet "T" over the rotation. An NRCS written plan allowing for two times "T" over the rotation would not meet the requirements of this regulation.

43. **Comment:** "Soil loss tolerance (T)" needs additional clarification (1148)

Response: The Department disagrees. Soil loss tolerance (T) is a well established standard that has been utilized by NRCS and in Department regulation since 2000. The Department would also refer the commentator to the PA Soil and Water Conservation Technical Guide to determine the calculation method of soil loss tolerance.

44. **Comment:** 102.4(a)(4)(i) While most NRCS conservation plans meet or exceed T, there are approved alternative conservation systems that when run through the RUSLE model do not meet T but upon field inspection do not show accelerated erosion. (T is a tool not an absolute) (1266)

Response: An E&S plan must meet "T" over the rotation to meet the requirements of this regulation.

45. **Comment:** 102.4(a)(4)(ii). It is unclear in this section whether less than 25% cover refers to temporary cover (crop in season, such as corn) or permanent cover (permanent cover crop). (1208)

Response: The 25% cover requirement can be met with either temporary or permanent vegetation or residue.

46. **Comment:** Section 102.4(a)(4)(ii) requiring additional BMPs within 100 ft of a stream when there is *less than 25% cover negates the standard of T* established in 102.4(a)(4)(i). The regulations *should establish one standard for soil loss*. Where an E&S Plan demonstrates that plowing and tilling activities performed on a field will be at or below T over the planned crop rotation cycle, *no further measures for controlling soil loss near streams should be required*. (645, 1201)

Response: The E&S Plan must, at a minimum, limit soil loss from accelerated erosion to the soil loss tolerance, additional BMPs may be needed to achieve at least the minimum. Additional BMPs may be needed to achieve at least the minimum. The standard of T over the rotation is an acceptable planning tool for agriculture conservation planning, but this standard still provides for an acceptable soil loss. The additional BMPs when there is less than 25% cover does not negate the Standard of T, but provides for an additional level of protection for water quality in those years during the rotation when soil losses may be higher than in other years of the rotation. The BMPs will provide an additional level of protection for water quality.

47. **Comment:** 102.4 (a)(4) (ii) *25% cover is vague....*does it mean 25% uniform coverage over the entire field, or simply 25% of the field covered, or 100% coverage 25% of the time? Is the cover to be vegetated cover? Crop residue cover? Perhaps this should be more descriptive. After all, you have fairly detailed contractor guidelines for large riparian forested buffers, why not make the ag guidelines a bit more detailed? .(1187)

Response: Cover includes vegetation and crop residue. "25% cover" is intended to mean at least 25% cover over the entire field at any given time. The use of 25% cover is also found in the setbacks and buffer requirements in Chapter 83 regulations (Chapter 83.294(f)(5)) The method of calculating cover is found in NRCS guidance (503.43) for estimating crop residue cover.

48. **Comment:** 102.4 (a) (4) (ii) : " additional BMPs" These should also be defined as "cost effective and reasonable". (1266)

Response: The phrase "cost effective and reasonable" is included in 102.4 (a) (4) and does not need to be repeated within each subsection.

49. **Comment:** 102.4 (a)(4) (ii) - Requires additional BMP's to be implemented to minimize accelerated erosion and sedimentation. We question who determines what BMP's will become necessary and implemented to minimize accelerated erosion and sedimentation. Additionally, who determines the definition of "minimize accelerated" to reestablish a 25% cover. (640)

Response: The regulations require additional BMPs when the cover crop or crop residue is less than 25%. No further definition of minimizing accelerated erosion is necessary.

50. **Comment:** Revise 102.4 (a) (4) (iii) "*conservation*" to be capitalized.(1187, 1191)

Response: The Department acknowledges the comment, and Section 102.4 (a) (4) (iii) has been revised to capitalize "conservation".

51. **Comment:** 102.4(a)(5) should be reworded and scrutinized, particularly "...roads and crossroads, and BMPs; soils maps; and" (708, 1114)

Response: 102.4(a)(5) describes what should be included in an E&S plan for an agricultural operation. The language is appropriate and provides guidance for preparation of the E&S plan.

52. **Comment:** Section 102.4(a)(4)(iii) Reference to NRCS design standards should not be in the rulemaking. This should be in a guidance document. A Department Guidance document for agricultural activities is recommended. (1148)

Response: The existing regulations currently reference NRCS design standards and the Department believes that it is still appropriate to reference the BMPs listed by NRCS. The Department may develop or approve other technical standards and guidance documents as appropriate.

53. **Comment:** 102.4 (a) (5) should be revised to read "E&S Plan shall contain drawings and a narrative which describe the following drainage patterns, pipes and collection systems, field and property boundaries..." (1268)

Response: The Department appreciates the suggestions. Section 102.4(a)(5) was not revised as suggested because it is possible to provide the information in (a)(5) with or without a narrative. In addition, the section already requires the E&S plan to include the location of all BMPs, which would include pipes and collection systems.

54. **Comment:** 102.4 (a) (6) Not very detailed. Perhaps the plan should contain an adequate implementation schedule to minimize the potential for accelerated erosion and sedimentation. If the plan is implemented and found not to have the desired results of minimizing the potential for accelerated erosion and sedimentation, the plan must be immediately improved. (1187)

Response: The Department agrees that if the E&S plan is not effective, it must be revised. The section as written provides flexibility for the variation of different types of schedules.

55. **Comment:** 102.4 (a) (6) Delete "and" between "operated and maintained". The E&S Plan should also require maintaining documentation of all O&M activities and who is responsible for maintaining the BMPs. (1268)

Response: The Department disagrees with the suggested deletion. 102.4(b)(5)(x) requires a maintenance program with written documentation of each inspection and all BMP repair and maintenance activities.

56. **Comment:** The 102.4 (b) Dominion requests that these requirements to "minimize the increased stormwater" and "to reclaim and restore the quality of water." be removed from the list of requirements for planning of earth disturbance activities, particularly those under the permitting threshold. (1152)

Response: The terms “reclaim and restore,” mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* However, in order to avoid confusion, 102.4(b)(4)(v) and 102.8(b)(9) have been deleted in the final rulemaking. No revision was made to 102.11(a)(2).

57. **Comment:** 102.4 (b) (1) *take out the word “for” between “including” and “those”.* (693, 1187)

Response: The Department agrees and, Section 102.4 (b) (1) has been revised to remove the word “for” between “including” and “those”.

58. **Comment:** 102.4 (b) (1) “E & S BMPs are required..., for those activities which disturb less than 5,000 square feet.” Is there a lower limit that doesn't require BMPs? (436, 650)

Response: No, there is no lower limit.

59. **Comment:** 102.4 (b) (1) Maintenance by whom? (1268)

Response: Responsibility for maintenance activities rests with the person(s) responsible for the earth disturbance activity.

60. **Comment:** An additional subsection should be added to Section 102.4(b)(4) to ensure that disturbance to native topsoil is minimized. Section 102.4(b)(4) sets forth the basic standards for planning and implementing earth disturbances under Section 102.4(b). A critical element to minimizing erosion and sedimentation and stormwater runoff is minimizing the disturbance of native soils. To ensure this practice is employed in design, planning, and implementing earth disturbance projects, a Section 102.4(b)(4)(vi) should be added stating “Minimize native topsoil disturbance.” (1257)

Response: The Department appreciates the suggestion, and notes that Section 102.4(b)(4)(i) already contains the requirement that earth disturbance activities be planned and implemented to minimize the extent of the earth disturbance.

61. **Comment:** §102.4(b)(2)(ii). Remove the word “under” and replace with the original “pursuant”. (693, 944, 1204) Take out the word “to” between “under” and “this”. (1187)

Response: The Department acknowledges the comment, but believes the existing wording is sufficient.

62. **Comment:** 102.4 (b) (2) (ii) keep “earth disturbance activities” and “an earth disturbance activity” consistent throughout entire section.(1187)

Response: The Department acknowledges the comment, but believes the existing wording is appropriate.

63. **Comment:** 102.4 (b) (2) (ii) This section is not clear with respect to the need for an E & S Plan pursuant to this chapter if an operator is currently using Best Management Practices under Department regulations other than those contained in this chapter. Will E & S Plans for road construction related to coal exploration activity disturbing greater than one acre but less than five acres be automatically required or will BMP's be utilized under other Department regulations? (1188)

Response: Section 102.4 (b) (2) (ii) applies to road construction related to coal exploration activity under this Chapter and other department regulations that reference this Chapter.

64. **Comment:** 102.4 (b) (3) states that an E&S plan shall be prepared by a person trained and experienced in E&S control methods and techniques. Engineers rarely if ever are trained in E&S and it's a safe bet they do not go to school with expectations of becoming an E&S designer. Perhaps if you really want people trained in E&S....*you should require a cpesc certification.* (1187)

Response: The Department appreciates the suggestion. An engineer or other licensed professional must work within their limits of training and experience. The Department and the conservation districts hold regular training sessions on E&S Control. At a recent annual conference of the PA Association of Conservation Districts, CPESC certification training was offered.

65. **Comment:** 102.4 (b) (3) Licensed professional? Engineer/Landscape architect/certified E&S designer? (1268)

Response: Development of an E&S plan is not required to be done by a licensed professional. The regulations cover a broad range of earth disturbance activities, therefore the requirements of person with training or experience is sufficient.

66. **Comment:** 102.4 (b) (3) - The program has struggled for years with the use of the terms "trained and experienced." Presently, neither the Chapter 102 regulations nor the PA Clean Streams Law seem to have any type of legal authority to require any sort of a certification program. Consequently, in Adams County, a large majority of submissions of E and S and PCSM plans and the NOIs are administratively incomplete. A tremendous amount of time and expense is wasted waiting for additional information even before a technical review can occur. Even though the statutory authority may not be there to require some type of certification program, we would encourage the Department to come up with some method of quantifying and defining one's competence relative to being "trained and experienced.". There are a number of existing nationwide certification programs including the NICET program as well as the CPESC program amongst others. We would suggest that in some fashion both the preparers of these plans as well as the reviewers of these plans need to be able to prove their competence. The lack of quality of submissions is a state wide issue which if properly addressed would greatly help to speed up and improve the reviews while also increasing the amount of time for District staff to be out in the field doing more field inspections. We would be happy to work with the Department on how to resolve this critical program inadequacy. (947)

Response: The Department acknowledges the comments and appreciates the offer of assistance.

67. **Comment:** Section 102.4(b)(4)(iv) Please provide examples. (1268)

Response: Examples can be found in the Erosion and Sediment Control Program Manual (PADEP # 363-2134-008) and the Stormwater Best Management Practices Manual (PADEP # 363-0300-002).

68. **Comment:** Section 102.4(b)(4)(v) Remove "reclaim and restore". Proposed construction projects should not have to correct bad stormwater decisions from past activities. (944, 1204)

Response: The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* which includes correction of impaired waters especially when a TMDL is established.

69. **Comment:** 102.4(b)(4)(v) A requirement has been added to, among other things, reclaim and restore water quality to the waters of the Commonwealth. Who is responsible for quantifying this requirement? If you have a property owner with three acres on the side of the Schuylkill River and he proposes to develop the land, the Department could justifiably tell him that he will only receive his permit when he restores the water quality of the Schuylkill River. (1289)

Response: The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* However, in order to avoid confusion 102.4(b)(4)(v) and 102.8(b)(9) have been deleted in the final rulemaking. No revision was made to 102.11(a)(2).

70. **Comment:** Section 102.4(b)(4)(v) states that "*...all earth disturbance activities shall be planned and implemented to.. . Protect, maintain, reclaim, and restore the quality of water and the existing and designated uses of waters within this Commonwealth.*" It is not clear why those who are proposing to undertake new land development activities are now going to be responsible to "reclaim and restore" the quality of the waters of the Commonwealth. While I believe most of us agree that improving the water quality for ourselves and future generations is a laudable and worthy goal, it is clear that the language as proposed in this subsection could be used to force a permittee to undertake costly measures to "reclaim and restore" the deteriorated quality of a local water body which was caused in no way by that landowner. I could see a more reasonable approach whereby the Commonwealth would offer to partner with the permittee and pay for said reclamation and restoration measures, but the specific wording of this section simply dumps those costs on the permittee, a private citizen, for the benefit of the entire public. My recommendation is to simply remove the words "reclaim" and "restore" and let the permittee be responsible to "protect" and "maintain" the existing water quality. (1279)

Response: The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* However, in order to avoid confusion 102.4(b)(4)(v) and 102.8(b)(9) have been deleted in the final rulemaking.

71. **Comment:** The entire section 102.4(b)(4) should be reformatted and rewritten to meet the intent as presented in the current Chapter 102 version, which is a high level strategic outcome or goal of storm water protection. The language should be revised to reference earth disturbance activities being “planned and implements **to the extent practicable** in accordance with the following ...”; to clarify this point. (1241, 1278)

Response: The Department appreciates the comment, and has revised the section for clarity.

72. **Comment:** 102.4 (b) (4) - Requires conservation districts to consult with DEP before each disturbance activity is planned and implemented. We question why conservation districts would consult with DEP if they have a delegated agreement with the Department. (640)

Response: The Department disagrees with this interpretation. The consultation is required when an applicant requests to deviate from the established requirements of this section. The consultation is important to maintain statewide program consistency.

73. **Comment:** 102.4(b)(4) should read as follows: Unless otherwise authorized by the Department or conservation district, earth disturbance activities.... Remove “after consultation with the Department” (693, 1208)

Response: The Department disagrees. The consultation is required when an applicant requests to deviate from the established requirements of this section. The consultation is important to maintain statewide program consistency.

74. **Comment:** 102.4(b)(4) A statement requiring conservation districts to consult with the Department has been added. While we appreciate the additional guidance, we also have concerns that this will become an excuse to extend permitting timeframes. (1289)

Response: The Department disagrees. The consultation is required when an applicant requests to deviate from the established requirements of this section. The consultation is important to maintain statewide program consistency.

75. **Comment:** 102.4(b). Add to the list of E&S Plan requirements identification of all off-site staging, borrow and waste areas and associated **E&S** BMPs. (1208)

Response: If these activities meet the definition of earth disturbance activities, they would be included in the regulation and need to be identified.

76. **Comment:** 102.4(b)4.iii. "Minimize soil compaction." This is only applicable to areas that are intended to remain pervious. (436, 650)

Response: Yes, Minimizing soil compaction is to maintain pervious conditions of the site. Areas that need to be compacted for structural reasons would be allowed.

77. **Comment:** 102.4 Erosion and sediment control requirements. Sub-section (b)(4)(v) requires the applicant to “[p]rotect, maintain, reclaim and restore the quality of water”. What precisely is the Department’s expectation? Reclaiming and restoring water quality to what previous level? This requirement seems to force the applicant to remedy conditions not only on the subject property, but also any stormwater that flows to it from neighboring properties. This provision seems open to considerable variation in interpretations and misuse. (1245)

Response: The regulations are consistent with the Clean Streams Law 35 P.S. § 691.1 *et. seq.*. However, in order to avoid confusion 102.4(b)(4)(v) and 102.8(b)(9) have been deleted in the final rulemaking.

78. **Comment:** §102.4(b)(4)(iv) and §102.4(b)(4)(v) - Minimizing increases in stormwater runoff and reclaiming and restoring water quality are outside the scope of erosion and sedimentation control and should not be included as a required element of planning for each and every earth disturbance activity, regardless of size. Improving water quality is outside the scope of minimizing accelerated erosion and sedimentation. CNX Gas urges the deletion of these requirements from the list of requirements for planning of earth disturbance activities, particularly those under the permitting threshold. (691, 1124, 1250)

Response: The Department disagrees that stormwater and improving water quality are not within the scope of this regulation. Sediment is the largest pollutant to streams in the Commonwealth and stormwater is the third leading source of impairment to Pennsylvania waters.

79. **Comment:** Revise 102.4 (b)(4)(iv) to Minimize earth disturbance on areas where soil erodibility and slope create a high potential for erosion. (693)

Response: Minimizing earth disturbance on areas where soil erodibility and slope are a component of 102.4(b)(5).

80. **Comment:** §102.4(b)(4)(v). The University recommends this requirement be changed to read: “Protect and maintain the quality of water and the existing and designated uses of waters within this Commonwealth.” The phrase “reclaim and restore” implies that a proposed construction project must correct all existing surrounding stormwater management deficiencies. The Commonwealth should not rely on future construction activities to correct inadequate stormwater management decisions from past activities. (1204)

Response: The Department disagrees. The terms “reclaim and restore,” mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* However, in order to avoid confusion 102.4(b)(4)(v) and 102.8(b)(9) have been deleted in the final rulemaking.

81. **Comment:** 102.4(b)(4)(v): This requirement is vague and open ended. Additional clarification and definition is needed. How is the need for restoration and reclamation going to be defined? Is this provision going to require that all new development discharging to stormwater impaired waterways be required to provide BMP's over and above that which would be required to provide mitigation for that individual project? And how are "reclaim and restore" to be

defined, and to what degree will individual property owners be responsible for restoration of impairments created by past generations? Since the benefits of restoration accrue to all citizens of the commonwealth, it is inappropriate to place the majority of the restoration burden on the development community including builders, developers, and future commercial or residential property owners. It is noted that the cost to provide "restoration and reclamation" as a part of new development will be passed on to the end users. Is it fair to have end users of new development shoulder the burden for "restoration and reclamation?" (1255)

Response: The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* However, in order to avoid confusion 102.4(b)(4)(v) and 102.8(b)(9) have been deleted in the final rulemaking.

82. **Comment:** First Energy and the Energy Association of PA agree that a person involved in earth disturbance activities should be obligated both to protect and maintain the quality and existing and designated uses of waters of the Commonwealth during the activity and to implement BMPs to protect and maintain the water quality after the activities. However, First Energy and the Energy Association of PA do not support the Department's position that the restoration and reclamation of the waters in the project area that have not been degraded by the current project should become the responsibility of the current permittee/developer. FirstEnergy and the Energy Association of PA request that the Department retain the words "to the extent practicable" in §102.4 (b)(4)(v) and 102.8(b)(9), and add it to the definition of BMP in §102.1, and to §102.11(a)(1) and (a) (2), to be consistent with the other sections using these terms. The words, "to the extent practicable" afford the permittee an opportunity to take a realistic position in restoring and reclaiming the water quality and existing and designated uses of the waters of the Commonwealth. (1115, 1267)

Response: The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* However, in order to avoid confusion 102.4(b)(4)(v) and 102.8(b)(9) have been deleted in the final rulemaking. No revision was made to 102.11(a)(2).

83. **Comment:** §102.4 (b)(4)(v) - Requires the applicant to "protect, maintain, reclaim and restore the quality of water". What precisely is the Department's expectation? Reclaiming and restoring water quality to what previous level? This requirement seems to force the applicant to remedy conditions not only on the subject property, but also any stormwater that flows to it from neighboring properties. This provision seems open to considerable variation in interpretations and misuse. (695)

Response: The Department disagrees. The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 *et. seq.* However, in order to avoid confusion 102.4(b)(4)(v) and 102.8(b)(9) have been deleted in the final rulemaking.

84. **Comment:** 102.4(b)(4)(v); 102.8(b)(9); 102.11(a)(1) includes language that all earth disturbance and management of post construction stormwater shall to the extent practicable "protect, maintain, reclaim, and restore the water quality". PennDOT would like DEP to clarify that the intent of the word "restore" will not give DEP and the conservation districts the authority to require BMPs for stormwater originating from existing impervious surfaces or to require

decreases in peak rates or volumes over the predevelopment conditions. For purposes of this Chapter, is restoration triggered only for surface waters determined to be impaired due to stormwater following a formal assessment process and/or for surface waters with a stormwater related TMDL? PennDOT requests that the following language be added to the end of Section 102.4(b)(4)(v), Section 102.8(b)(9), and the first sentence of Section 102.11(a)(1): "in accordance with the requirements in this Chapter." Also, when determining whether a surface water is impaired who determines what the previous condition of the stream was, and how far back in time is reasonable to use as the baseline (or undisturbed) condition? (708, 1114)

Response: The obligation to use BMPs to restore waters of the Commonwealth is not triggered unless the water is not attaining one or more of its uses or there is a TMDL.

85. **Comment:** We object to the removal of "county conservation districts" from 102.4(b)(4)(6)(v), relating to approval of alternative BMP's. (1178)

Response: The Department does not agree. The consultation is required when an applicant requests to deviate from the established requirements of this section. The purpose of this clause is to provide state-wide consistency in relation to new alternative BMPs.

86. **Comment:** Narrative and numeric turbidity limits must be included as discharge limits for earth disturbances under Section 102.4(b). At a minimum, the Chapter 102 regulations must include the numeric and other effluent limit standards as set forth in the federal Effluent Limitation Guidelines that include numeric turbidity limits for construction sites expressed in Nephelometric Turbidity Units (NTUs). We believe that the following additional regulations must be added to ensure that effluent limits for construction activities are protective of receiving water bodies. First, the regulations should require a "no visible off-site discharge" standard as a first line of defense for all construction sites returning an NDPES permit. Second, numeric turbidity standards for construction activities that are more stringent than the federal rule should be required. In addition, more stringent numeric turbidity standards should be required for construction activities in impaired watersheds, including the Chesapeake Bay watershed. We recommend the following numeric turbidity standards for all regulated construction activities under Chapter 102:

- 150 NTU as an instantaneous maximum limit for rainfall events of less than 1 inch for all regulated sites.
- 50 NTU as a monthly average limit for all regulated sites not in impaired watersheds.
- 13 NTU as a monthly average limit for all regulated sites in impaired watersheds, including all sites in the Chesapeake Bay watershed.

If these limits are exceeded, a detailed assessment of site conditions and remedial actions along with enforcement should be imposed. (1257)

Response: The Department is incorporating the requirements of the final effluent limit guidelines published by U.S. EPA by reference in Section 102.11(c).

87. **Comment:** 102.4 (b)(5) Add a requirement that dust control be implemented. (693)

Response: Dust as a result of earth disturbance activity is regulated as a fugitive emission under the air quality regulations, 25 PA Code Chapter 123.

88. **Comment:** 102.4(b)(5) The E & S Plan must contain drawings and narrative which describe the following: This section does not include environmental due diligence. All soil and groundwater samples that were analyzed as part of the applicant's environmental due diligence should be reflected on the E & S Plan drawing. (1227)

Response: The Department disagrees. Section 102.4(b)(5)(ii) and (iii) require the applicant to report on soil limitations and the characteristics of the earth disturbance activity, including past land uses in their E&S Plan.

89. **Comment:** Section 102.4(b)(5)(i)—Also include drainage patterns, storm pipes and collection systems. (1268)

Response: These activities are covered under the existing wording of 102.4(b)(5).

90. **Comment:** Section 102.4(b)(5)(iii)--The E&S plan is to contain drawings and narrative describing the characteristics of the past earth disturbance activity, including past land uses. This must define how far back into the past this requirement extends. (1264, 1291)

Response: The Department's permit application requires applicants to designate existing land uses for the project site for the preceding five years, and the previous land use for the past 50 years or longer if known.

91. **Comment:** Revise 102.4 (b)(5)(iii) to read ... and the proposed alteration to the project site as well as offsite fill, staging and borrow areas. (693)

Response: If these areas meet the definition of an earth disturbance activity, they must meet the requirements

92. **Comment:** Section (iv)--Why is it necessary for the E&S plan to contain drawings and narrative that describe the volume and rate of runoff from the project area site and its upstream watershed? This is not used for E&S design and will increase the time and resources needed. If this is done, it should not apply to the whole site, but to each BMP. (1264, 1291)

Response: The Department disagrees with the comment, upstream runoff is used to design channels, basin, traps and other BMPs.

93. **Comment:** 102.4(b)(5)(iv) states the E&S Plan shall describe "The volume and rate of runoff from the project site and its upstream watershed area." This provision should include which storm event to be described on the E&S plans. As it reads now, it also seems to indicate that stormwater runoff calculations for peak rate and volume must be provided for the E&S Plan. These types of computations belong in the PCSM Plan. PennDOT requests that this language be clarified. E&S runoff calculations should be limited to areas draining- into swales or ditches, or areas draining to a storm sewer discharges that requires outlet protection. (708, 1114)

Response: Different BMPs have different flow requirements and the calculations should be done appropriately.

94. **Comment:** Section 102.4(b)(5)(iv) ". The volume and rate of runoff..." Under what conditions/storm events? (436, 650)

Response: Different BMPs have different flow requirements and the calculations should be done appropriately.

95. **Comment:** Section 102.4(b)(5)(iv) Which storm event should the volume and rate of runoff from the project site and its upstream watershed area be presented? (1123)

Response: Different BMPs have different flow requirements and the calculations should be done appropriately.

96. **Comment:** Section 102.4(b)(5)(iv)—comparison or pre vs. post development? (1268)

Response: The volume and rate of runoff is a factor for evaluating BMP performance. This evaluation is conducted for runoff conditions before, during and after the earth disturbance activity.

97. **Comment:** Revise Section 102.4(b)(5)(v) to read: " . . . classification under [to] Chapter 93" (946, 1191)

Response: The Department agrees and Section 102.4(b)(5)(v) has been revised to read: " . . . classification under [to] Chapter 93".

98. **Comment:** 102.4(b)(5)(v) should read as follows: The location of all waters of this Commonwealth which may receive runoff.... and their classification pursuant to Chapter 93. (693, 1208)

Response: The Department agrees, and has revised this subsection to require identification or location of all surface waters of this Commonwealth.

99. **Comment:** 102.4(b)(5)(v) The requirement to show the location of all surface waters which may receive runoff from the project sited on the E&S Plans often requires a significant amount of surveying if the waters are not located in close proximity to the project site. We believe showing the location of the waters on a USGS or similar map should be adequate to address this plan information requirement. (1129)

Response: USGS or similar map could be a starting point, however these sources generally do not contain sufficient detail to identify all waters of the Commonwealth including wetlands, springs, seeps and other surface waters.

100. **Comment:** 102.4(b)(5)(vi) What about structural details for BMPs? (1268)

Response: The requirement to include structural details can be found in 102.4(b)(5).

101. **Comment:** Revise 102.4 (b)(5)(vii) to read: “A sequence of BMP installation and removal in relation to the scheduling of earth disturbance activities, prior to, during and after earth disturbance activities.” *The sequencing of the BMP installation and removal does not ensure that the BMP will function properly. The functioning of a BMP is related to its design, operation, and maintenance.* (693)

Response: It is important that a BMP be installed at the proper time and in the proper sequence with the earth disturbance and other BMPs for it to function properly. Sequencing is a component of the design, operation and maintenance.

102. **Comment:** 102.4(b)(5)(viii): Define what measurements are being implied here. (1255)

Response: Any measurement that is necessary to demonstrate and support the design of the E&S plan such as size and location of BMPs, is required.

103. **Comment:** Revise 102.4 (b)(5)(vii) to add sentence “The sequence shall require effective treatment of all stormwater runoff (within the appropriate design storm criteria) until all active construction is completed and prevent the elimination of active construction controls until post-construction controls are functioning. (1268)

Response: The Department does not agree, this additional wording is not necessary.

104. **Comment:** Revise 102.4 (b)(5)(viii) to read “Supporting calculations, documentation, and measurements. (693)

Response: The Department has not included the suggested revision as the existing wording is appropriate.

105. **Comment:** Revise 102.4 (b)(5)(viii) Add phrase “including any compaction /infiltration tests/studies, etc. (1268)

Response: The Department includes these testing requirements in Section 102.8(g)(1) regarding PCSM.

106. **Comment:** §102.4(b)(5)(viii). The document states: “Supporting calculations and measurements.” What is implied by the term measurements? The information contained in the plan drawings (Under §102.4(b)(5)(ix)) provide sufficient information to develop supporting calculations. The words “and measurements” should be removed. (944, 1204)

Response: The Department disagrees that the term “measurement” should be removed. The term “measurement” is a general term used for any dimensions to support calculations.

107. **Comment:** If a project must be designed to infiltrate an entire site, it must be recognized that some areas of a site are better than others for infiltration purposes. If the entire site is used, water discharges in every direction, and it is very difficult to infiltrate each individual discharge. (1264, 1291)

Response: One purpose of these regulations is to control increases of volume from earth disturbance activities. Extensively engineered infiltration BMPs are but one way to achieve the volume reductions to comply with the requirement.

108. **Comment:** §102.4(b)(5)(x) The requirement for written documentation and retention of the inspection reports should only be required for projects that require either an NPDES or an E&S permit. The proposed change would result in this requirement being extended to all projects that disturb greater than 5000 square feet, the threshold for requiring an E&S plan. We believe that this requirement is excessive and should be redefined to include only permitted projects, as it does not improve compliance on smaller projects. (691, 1124, 1152, 1250)

Response: The Department appreciates the comment, but disagrees that it does not improve compliance. All BMPs regardless of the project size need to be inspected and maintained periodically to ensure continued effectiveness.

109. **Comment:** §102.4(b)(5)(x) The document states: “... inspection of BMPs on a weekly basis and after each stormwater event, ...” The document should be written to clarify this inspection program is specific to E&S BMP’s employed during construction activities. This is excessive for PCSM requirements. The document should state inspection as required based on the size and type of PCSM BMP’s, so that engineering judgment can be used. (1204)

Response: Section 102.4 applies to erosion and sediment control requirements, and not PCSM BMPs..

110. **Comment:** Section 102.4(b)(5)(x) The inspection program for BMPs should be defined as E&S BMPs only and not PCSM BMPs. PCSM BMPs should be inspected as required based on the engineers judgment. (944, 1204)

Response: Weekly inspections and inspections following a stormwater event are required to ensure that all BMPs are functioning properly. PCSM BMPs should be inspected as identified in the PCSM maintenance plan.

111. **Comment:** 102.4 (b) (5) (x) Should read “The program shall require a written document of each inspection and all BMP maintenance and repair activities. (1187)

Response: The Department appreciates the suggestion and has revised this section to read “The program must provide for completion of a written report documenting each inspection and all BMP repair, or replacement and maintenance activities.”.

112. **Comment:** A requirement to inspect best management practices (BMPs) before predictable storm events should be added to the BMP maintenance program required by Section

102.4(b)(5)(x). While the requirements to inspect BMPs after storm events and repair malfunctioning BMPs is good, this provision does not necessarily ensure that BMPs are functioning appropriately prior to predicted rainfall events. If BMPs are failing onsite, it is of little ecological significance to require the inspection of BMPs after the fact. This provision should be expanded to require visual inspection of E&S BMPs one (1) business day prior to a predicted storm events reasonably expected to generate runoff.

Response: The Department disagrees. If a BMP is going to fail, it will more likely occur after a storm event. The inspection and monitoring will provide information on the effectiveness of treatment provided by the BMP, and if sediment needs to be removed from the BMP to ensure effectiveness for the next storm event. Therefore, limited resources and time are more effectively utilized monitoring and inspecting BMPs after a storm event.

113. **Comment:** 102.4(b)(5)(x) contains the phrase "completion of a written report documenting each inspection...". For E&S during construction by contractors, the inspection diaries document the-inspection, repair and maintenance of BMPs. A separate written report is not generated. *PennDOT requests that the language be changed to "documentation of each inspection..."*. (708, 1114)

Response: The inspection diaries document would suffice as written documentation, for general compliance with this section. The diary must detail the effective operation of all BMPs, any maintenance, repair or replacement of BMPs. However, permitted activities may require a specific report provided by the Department. The Department would like to note that copies of the documentation may be required to be submitted upon request.

114. **Comment:** The current language does not define the required timeframe in which inspection must occur after rain events. Importantly, it does not require the permit holder to report noncompliance findings to DEP or the conservation districts. Similar requirements are contained in the State of Washington's construction stormwater general permit. (reference provided). To that end, we recommend adding the following requirement: In the instance where E&S BMPs have failed, the permittee must report noncompliance findings to DEP or the conservation districts within one (1) business day. (1257)

Response: The requirement for written reports that document inspections, BMP repair and maintenance assist the applicant in maintaining compliance is general provisions of the regulations. Permit conditions may be established that are more specific, and require an inspection form provided by the Department.

115. **Comment:** Section 102.4(b)(5)(x)-The requirement that the maintenance program provide for completion of a written report documenting each inspection and all BMP repair and maintenance activities will require a large amount of additional paperwork. Also, what is meant by the term "stormwater event?" It is not defined. (1264, 1291)

Response: The Department disagrees. Weekly and post storm inspections are an existing requirement of Chapter 102. Written reports that document inspections, BMP repair and maintenance assist the applicant in maintaining compliance with the requirements of this

Chapter, and the effectiveness if the BMPs are critical. Stormwater is defined as runoff from precipitation, snow melt, surface runoff and drainage. Therefore, a stormwater event is when any of these conditions occur.

116. **Comment:** § 102.4(b)(5)(x) – Stormwater Event vs. Measurable Rainfall_In the proposed rule, DEP eliminated the words "measurable rainfall" from the requirements for inspection and maintenance of E&S BMPs. In the current version of Chapter 102, this requirement is interpreted in accordance with EPA guidance regarding a "measurable precipitation event," which is rainfall of 0.1 inches or greater. The proposed rule refers to "each stormwater event," a term which is undefined and could be read as implying any precipitation quantity – which would be unreasonable. We do not believe that the DEP desires to require a full, documented inspection of all project BMPs for a rainfall event that results in nothing more than sparse, distinct raindrops on a car windshield. However, absent a clear definition of "stormwater event," this provision creates a prospect for confusion and misunderstanding. The Chamber recommends DEP either re-insert the words "measurable rainfall," or clearly define a "stormwater event" as an event generating some measurable amount of runoff from the land, and more distinctly quantify this if different than the currently accepted EPA guidance. (1241, 1278)

Response: The Department chose to use the term stormwater event to address situations where there is no precipitation, but warmer temperatures cause a rapid melting of a previous snow event resulting in runoff conditions or precipitation events that result in runoff conditions. The Department did not define stormwater event since stormwater is defined.

117. **Comment:** § 102.4(b).5.x. "...after each stormwater event..." Is a stormwater event defined? (436, 650)

Response: No, the Department chose to use the term stormwater event to address situations where there is no precipitation, but warmer temperatures cause a rapid melting of a previous snow event resulting in runoff conditions or precipitation events that result in runoff conditions. The Department did not define stormwater event since stormwater is defined.

118. **Comment:** § 102.4(b)(5)(x.) With respect to the operation and maintenance of BMPs and documented post-event inspection reports after a "stormwater" event, First Energy requests that the Department consider the nature of multi-mile linear utility line projects and delete the words "stormwater event" and maintain the words, "measurable rainfall stormwater event". A clear definition of measurable rainfall stormwater event, such as 0.5 inches of rain in a 24-hour period, should be added to §102.1 of the proposed regulations to avoid uncertainty. In utility projects, a "stormwater event" or "measurable rainfall stormwater event" may be occurring in one section of the project and not in another. The "stormwater event" or "measurable rainfall" can occur in an inactive (disturbed, but stabilized) section of the project and not in the active construction section of the project. It is impossible for a site inspector to be in every location simultaneously where Erosion and Sediment (E&S) BMPs are installed in such a project. FirstEnergy and the Energy Association of PA request that the Department recognize the uniqueness of a linear in the implementation of the post-rain event inspection requirements of the proposed rulemaking and identify an endpoint for those requirements, such as once the site is restored and permanently stabilized. (1115, 1267)

Response: The Department chose to use the term stormwater event to address situations where there is no precipitation, but warmer temperatures cause a rapid melting of a previous snow event resulting in runoff conditions or precipitation events that result in runoff conditions. The Department did not define stormwater event since stormwater is defined.

119. **Comment:** 102.4(b)(5)(x.) BMPs include post construction BMPs. Is it necessary to inspect stabilized post construction BMPs weekly and after each stormwater event and document the inspection? Is it the Department's expectation that individual homeowners who purchase land with a post construction BMP on it have to do inspections and documentation? Are these homeowners educated and qualified to complete such inspections? (1123)

Response: 102.4 refers to E&S control requirements. Post construction BMP maintenance and inspection requirements are included in Section 102.8 (f)(10) and require an inspection and maintenance schedule to ensure effective and efficient operation of the BMPs. Also, as identified in Section 102.8(m), responsibility for long term operation and maintenance can be transferred to a different person other than the permittee or copermitttee including an individual homeowner if they have agreed to long term operation and maintenance after the PCSM BMPs.

120. **Comment:** Section 102.4 (b) (5) (x) This section needs clarified to exempt earth disturbance activities which are currently permitted under other Department regulations. In many cases the E & S controls are being routinely monitored and inspected by Department personnel. To impose additional monitoring and reporting requirement is unduly burdensome to industry. (1188)

Response: The Department disagrees. The purpose of the Department's and conservation district's inspection is to determine if the activity is in compliance. Routine monitoring and inspection is a function of the person(s) responsible for the earth disturbance to ensure that the BMPs are implemented, maintained and functioning properly.

121. **Comment:** Revise 102.4 (b)(5)(xii) to read: Identify **soil conditions** and naturally occurring geologic formations that may have the potential to cause pollution during earth disturbance activities and include BMPs to avoid or minimize potential pollution. (693)

Response: The Department appreciates the suggestion, however does not agree that the change is substantive. Pennsylvania has geologic formations, such as karst or acid forming conditions that are certain risks so it is important to require applicants to consider impacts from those formations in BMP planning and implementation.

122. **Comment:** Section 102.4 (b)(5)(xii) There is no guidance for evaluating thermal impacts (944, 1204)

Response: The Department believes that the design professional should have the flexibility to develop an appropriate response to thermal impact concerns, using current guidance. The Department will continue to evaluate and provide additional guidance as necessary.

123. **Comment:** Section 102.4(b)(5)(xii-xiii) Clarification is needed regarding these proposed requirements, specifically regarding criteria used to measure thermal impacts. Also, certain local jurisdictions in Pennsylvania will likely use these proposed requirements to restrict development in certain areas. (1264, 1291)

Response: The requirements specify that the applicant identify all geological formations, soil conditions, and thermal impacts that have the potential to cause pollution during earth disturbance activities and to avoid or minimize those potential impacts. Since each site is different, the Department believes the design professional should have the flexibility to develop an appropriate response to thermal impact concerns. In addition to identifying the potential for thermal impacts, appropriate BMPs should be designed to avoid, minimize or mitigate those impacts.

124. **Comment:** 102.4(b)(5)(xiii) requires the potential for "thermal impacts" to be evaluated as part of the E&S Plan. Potential thermal impacts construction are negligible; it is the long-term impact of reducing base flows and removal of riparian buffer that create potential. Therefore, an evaluation of potential thermal impacts should not be a requirement of the E&S Plan. If this condition is not removed from the regulations, it should be emphasized that the evaluation is qualitative rather than quantitative. The justification is that no current studies exist that provide an empirical relationship between temporary construction activities and thermal degradation in streams. The permit application should only require a narrative identifying where the potential for thermal impacts exist and how the potential impact will be addressed. PennDOT recommends the following modification: "Provide a qualitative evaluation of the potential for thermal impacts to surface waters from the earth disturbance activity and include BMPs to avoid, minimize, or mitigate potential pollution from thermal impacts when potential exists." (708, 1114)

Response: 102.4(b)(5)(xiii) has been revised to read "Identification of the potential..." as recommended by the commentator.

125. **Comment: Section 102.4(b)(5)(xiii)** Delete this requirement until such time as DEP fully explains this condition and provides technical data to show how to calculate these impacts and provides acceptable BMPs to mitigate such impacts. (9) *The document states: "Evaluate the potential for thermal impacts to surface waters..." However, no guidance is provided in how to do this and no wide spread accepted methods exist in practice. If required, the regulation should say how this is to be implemented.* (1204) Specific numerical requirements should be provided. (1289)

Response: The Department disagrees that specific numeric requirements should be provided as this section allows latitude for the applicant to select appropriate BMPs.

126. **Comment:** Evaluation of Thermal Impacts - §102.4(b)(5)(xiii) The Energy Association of PA suggest that this section should be eliminated from the E&SC plan as outside the scope of erosion and sedimentation control. This requirement has the potential to cost significant dollars and slow the permit approval time by months.

Response: The Department disagrees, thermal impacts are listed as a pollutant of concern in the Clean Streams Law. The inclusion of thermal requirements is in part a response to EHB decisions including *Blue Mountain Preservation Association v. DEP v Alpine Rose Resorts*, 2006 EHB 589. The Department has revised and clarified this section of the final regulation requiring the identification of potential thermal impacts. The Department will provide additional technical guidance through out reach efforts, training, and in technical guidance such as the BMP manuals. Further, since each site is different, the Department believes the applicant and the design professional should have flexibility to develop an appropriate response to thermal impact concerns.

127. **Comment:** Section 102.4 (b)(5)(xiii) -The PA Farm Bureau thinks that the word "Evaluate" should be changed to "Identify". Paragraph (xiii) should read: "Identify the potential for thermal impacts to surface waters from the earth disturbance activity and include BMPs to avoid, minimize or mitigate potential pollution from thermal impacts." The PA Farm Bureau supports the development of technical guidance that will clarify this point. (1166)

Response: 102.4(b)(5)(xiii) has been revised to read "Identification of the potential..." as recommended by the commentator.

128. **Comment:** 102.4(b)(5)(xiii): This requirement is still too vague to be a practical requirement. While it is acknowledged that thermal impacts are possible, there is insufficient scientific data available to adequately define the extent of any thermal impacts from the variety of site conditions that are possible in development proposals (relative size of site vs. size of tributary stream, etc). And likewise, there is less data available to document the actual impact of thermal impacts from development activities. More scientific data and analytic tools defining the real thermal impacts are necessary prior to codifying a thermal impact requirement. At a minimum, this rule should be qualified to recognize the lack of data, and explicitly state that only a simple qualitative type of analysis be presented. (1255)

Response: 102.4(b)(5)(xiii) has been revised to read "Identification of the potential...".

129. **Comment:** Section 102.4(b)(5)(xiii) "evaluate" should be replaced with "identify" (1148)

Response: 102.4(b)(5)(xiii) has been revised to read "Identification of the potential...".

130. **Comment:** 102.4(b)(5)(xiii) should read as follows: Evaluate the potential for thermal impacts to surface waters from the earth disturbance activity **during construction** and include BMPs. (693, 1208)

Response: The Department appreciates the comment, however it does not believe that it adds any clarity since Section 102.4 relates to E&S control during and after construction and thermal impacts need to be evaluated for this activity as well.

131. **Comment:** 102.4(b)(5)(xiii) Evaluate the potential for thermal impacts ..." It is not clear what an applicant must do for this. This also seems more applicable to PCSM. (436, 650)

Response: 102.4(b)(5)(xiii) has been revised to read "Identification of the potential...".

132. **Comment:** 102.4(b)(5)(xiii) Thermal impacts should be defined and it may be beneficial to provide guidance on the Department's expectation for the evaluation of potential thermal impacts. As currently written, thermal impacts are not defined and will result in court cases. How can you require an engineer to design to a standard that is not defined? (1123)

Response: 102.4(b)(5)(xiii) has been revised to read "Identification of the potential...". Information regarding thermal impact evaluation can be found in the Erosion and Sediment Control Program Manual (PADEP # 363-2134-008) and the Stormwater Best Management Practices Manual (PADEP # 363-0300-002). The design professional can utilize their professional judgment in utilizing BMPs that avoid, minimize or mitigate potential pollution from thermal impacts.

133. **Comment:** 102.4(b)(5)(xiii) This item requires that the E&S Plan "evaluate the potential for thermal impacts to surface waters from earth disturbing activity and include BMPs to avoid, minimize, or mitigate potential pollution from thermal impacts." We suggest that the erosion and sediment control measures required by the regulations are sufficient to insure that there would be no thermal pollution from activities covered by the E&S Plan. Consequently, the regulations could recognize this assumption. (1316)

Response: The Department has revised the final rulemaking to clarify that thermal impacts need to be identified and that BMPs are used to avoid, minimize or mitigate the thermal impact.

134. **Comment:** 102.4(b)(5)(xiii) Also, evaluate the potential to add new loading to impaired/TMDL waters should the pollutant of concern be discharged. (1268)

Response: This requirement is captured in the broader language in the regulation.

135. **Comment:** 102.4(b)(5)(xiv) should read as follows: .. . Unless otherwise approved by the Department **or conservation district**, the E&S Plan.. . . (1208)

Response: The Department does not anticipate many cases where this would occur and prefers that decision to remain with the Department for statewide consistency purposes.

136. **Comment:** Revise 102.4 (b)(5)(xiv) to read: **For those projects requiring a PCSM plan under §102.8 (relating to PCSM requirements), the E & S Plan shall be planned, designed and implemented to be consistent with the PCSM Plan and be the final plan for construction.** Unless otherwise approved by the *Department or conservation district*, the *E & S Plan* must be separate from the PCSM Plan and labeled "E & S" or "Erosion and Sediment Control Plan"..(693)

Response: The Department appreciates the suggestion but does not agree that the recommended revisions are necessary.

137. **Comment:** § 102.4(b)(5)(xiv) and 102.8(c) – Relationship Between E&S Plans and Post-Construction Stormwater Plans 102.4(b)(5)(xiv) should be worded to say, "The project should consider planning, designing, and implementing the E&S plan, to the extent practicable, to be consistent with the PCSM plan." 102.8(c) should also be reworded equivalently. This will ensure land planners and developers retain appropriate flexibility to adequately plan and implement a project, while recognizing the value of planning and designing BMPs that are consistent between the two project phases. (1241)

Response: The intent of this requirement is for the BMPs implemented as part of the E&S Plan during the temporary construction phase to easily transition with minimal disturbance into the BMPs that will be part of the PCSM Plan. Likewise, the E&S Plan should reflect consideration of the PCSM Plan. For example, areas to be utilized for infiltration should be protected from compaction during construction, which should be noted in the E&S Plan.

138. **Comment:** §102.4(b)(5)(xiv) and 102.8(c)- Relationship Between E&S Plans and Post-Construction Stormwater Plans - DEP has added language requiring the planning and implementation of erosion and sedimentation control measures during the construction period to be consistent with post-construction stormwater management measures. There may be a number of reasons why activities during the construction phase would be different than the post-construction phase, and establishing a "consistency" mandate is not always reasonable or practicable in all situations. An example of this are project areas that are ultimately designed for a post-construction stormwater BMP may need to be used during construction for material staging. At the WRAC meeting in April 2009, DEP stated in response to verbal comments on this issue that the developer should consider these requirements and their relationship to efficiencies. Therefore, the two above provisions should be rewritten to reflect an optional, efficiency-driven measure. For example, 102.4(b)(5)(xiv) could be rephrased as, "The project should consider planning, designing, and implementing the E&S plan, to the extent practicable, to be consistent with the PCSM plan." 102.8(c) should also be similarly reworded. This will ensure that appropriate flexibility is retained to adequately plan and implement a project, while recognizing the value of planning and designing BMPs that are consistent between the two phases of the project. (1278)

Response: The intent of this requirement is for the BMPs implemented as part of the E&S Plan during the temporary construction phase to easily transition with minimal disturbance into the BMPs that will be part of the PCSM Plan. Likewise, the E&S Plan should reflect consideration of the PCSM Plan. For example, areas to be utilized for infiltration should be protected from compaction during construction, which should be noted in the E&S Plan.

139. **Comment:** 102.4(b)(5)(xv). For clarity and flow, we suggest moving this section (Identify existing and proposed riparian buffers) ahead of section 102.4(b)(5)(xiii). (1208)

Response: The Department appreciates the suggestion but does not agree that the recommendation provides any additional clarity.

140. **Comment:** Revise 102.4 (b)(5)(xv) to read: Identify ~~existing and proposed~~ riparian forest buffers. (693)

Response: The Department appreciates the suggestion but does not agree that the recommendation is appropriate.

141. **Comment: Revise** 102.4 (b)(5)(xv) Does this protect existing vegetation other than along the stream? (1268)

Response: No, the term riparian refers to along the stream.

142. **Comment:** §102.4(b)(5)(xv) Identify existing and proposed riparian forest buffers. CNX Gas urges that this requirement be deleted from E&S plan requirements. Riparian forest buffers are associated with requirements of some NPDES and E&S permits, but should not be part of the E&S plan for earth disturbance activity. Many E&S plans are developed for small repair and maintenance projects as opposed to new developments where this may be an appropriate requirement; however, this should not be required for all plans regardless of the size and location of the project. Currently, the riparian forested buffer is only required in specific instances. (691, 1124, 1250)

Response: The requirement to identify riparian forest buffers is for the site only, and shouldn't be an extreme hardship if it is a small site that is required to obtain a permit under this Chapter.

143. **Comment:** § 102.4(b)(5)(xv) DEP has added a requirement to "identify existing and proposed riparian forest buffers" as part of an E&S plan. This is an inappropriate requirement for all E&S plans. The proposed riparian forest buffer requirement only applies to earth disturbance activities within a certain distance of an EV waterway, and earth disturbance activities proposing to use the proposed permit-by-rule that are within a certain distance of a waterway (§102.14). The Chamber does not understand the necessity or requirement for all earth disturbances in the Commonwealth to identify riparian forest buffers in their E&S plans when section 102.14 does not apply. The Chamber requests DEP change the wording of 102.4(b)(5)(xv) to read, "**For earth disturbance activities installing a riparian forest buffer** as a PCSM BMP (102.14), identify existing and proposed riparian forest buffers." (1241, 1278)

Response: The Department disagrees. The commentator is correct that a riparian forest buffer is required when the requirements of 102.14 apply, however, if a buffer is existing or proposed as a BMP it must be shown on the E&S plans as well as the PCSM plan.

144. **Comment:** Add an additional requirement in Section 102.4(b)(5) for Erosion and Sedimentation Control (E&S) Plan to include detailed drawings and narrative describing all natural features, particularly those important for managing stormwater. For example: Location and dominant species of significant vegetation patches, including tree stands, meadows, and riparian buffer, Soil type and structure, Prime farmland, unique farmland, or farmland of statewide importance, Locations of prime farmland soils, unique soils, and/or soils of statewide importance, Locations of undisturbed and previously disturbed soils, Direction of overland water flow on-site, predevelopment, Locations of water resources, Assessment and regulatory status of onsite waterbodies (i.e., unassessed, unimpaired, impaired)

and designated uses, protected (e.g., WWF, CWF, HQ, EV), Locations for all lay down and storage areas, haul roads and construction vehicle access, temporary utilities and construction trailers, and parking, Describe how areas of all soils will be protected from compaction (e.g., vehicle traffic or storage), Describe treatment details for soils requiring organic matter restoration, including the type, source, and expected volume of materials (e.g., compost amendments, mulch, topsoil, etc.), Outline the footprint of construction buildings, parking, storage areas, and roads. (1257)

Response: Section 102.4(b)(5) states what is required in an E&S Plan and includes many of the planning, site and natural features requested by the commentator.

145. **Comment:** The Board should amend the erosion and sediment control requirements in section 102.4(b)(6) and the post-construction stormwater management requirements in section 102.8(h) to categorically state that use of the nondischarge alternative and ABACT BMPs required by Chapter 102 to maintain and protect waters classified as High Quality or Exceptional Value under Chapter 93 constitutes compliance with the antidegradation requirements of sections 93.4a through 93.4c. (1250)

Response: The Department has revised the 102.4(b)(6) and 102.8(h) to clarify that compliance with these sections constitutes compliance with the antidegradation implementation requirements of 25 Pa. Code Section 93.4c(b).

146. **Comment:** 102.4(b)(6). There are important Special Protection E&S BMPs currently included in 102.4(b)(6)(i,ii,iii,iv) that have been removed from the revised regulation. Instead, the regulation refers to nondischarge alternatives and ABACT BMPs and their design standards listed in the Department's Erosion and Sediment Pollution Control Program Manual, which is currently under revision. We have some concern that these BMPs may be "lost" if they are not included in the final version of the Manual and feel that they should be retained in the regulation. Per previous comments, the last sentence of this section should be revised to read as follows: The Department or conservation district may approve alternative BMPs... (1208)

Response: Design requirements are more appropriately located in the Erosion and Sediment Control Program Manual (PADEP # 363-2134-008).

147. **Comment:** Section 102.4(b)(6) As defined previously, it does not seem that "ABACT BMPs and their design standards" would be found in the PA E&S Manual. (436, 650)

Response: E&S ABACT BMPs and design requirements are located in the Erosion and Sediment Control Program Manual (PADEP # 363-2134-008) as proposed for revision concurrent with this rulemaking.

148. **Comment:** Section 102.4(b)(6) states: "High Quality or Exceptional Value under Chapter 93, the person proposing the activity shall use nondischarge and ABACT (Antidegradation best available combination of technologies) BMPs to maintain and protect the water from degradation. Nondischarge alternatives and ABACT BMPs and their design standards are listed in the Pennsylvania Stormwater Best Management Practices Manual

Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300- 002 (December 2006), as amended and updated." The cited reference does not provide specifics or design standards for ABACT or nondischarge alternatives. (1223)

Response: The Department will provide information in the revised Erosion and Sediment Pollution Control Program Manual and revisions to the Pennsylvania Stormwater BMP Manual (363-0300-002) to be consistent with the final regulations. In the interim the Department has provided that information in the permit application.

149. **Comment:** Section 102.4(b)(6) This section should read: Persons proposing an earth disturbance activity located in watersheds containing waters of this Commonwealth that have a designated or existing use of exceptional value or high quality shall maintain and protect those waters as required by 25 Pa. Code *Section* 93.4a and follow the procedures set forth in 25 Pa. Code *Section* 93.4c. Without limiting the foregoing, the persons shall use the BMPs and design standards listed in the *Erosion and Sediment Pollution Control Program Manual*, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008 (April 2000), as amended and updated, with particular attention to paragraph 5 on pages 2 and 3, in satisfying these requirements and in following these procedures." (946, 1191)

Response: The Department has clarified the antidegradation implementation provisions in this section, but not as suggested by the commentator. Specifically, the Sections 102.4(b)(6) and 102.8(h) have been revised to clarify that compliance with these sections constitutes compliance with the antidegradation implementation requirements of 25 Pa. Code Section 93.4c(b).

150. **Comment:** Section 102.4(b)(6): The terms "nondischarge alternatives" and "ABACT" are defined in Section 102.1 as BMPs, so references to "nondischarge BMPs" and "ABACT BMPs" are redundant. These references appear elsewhere in the chapter (see Section 102.8(h)) and should be changed globally. (946, 1191)

Response: The Department agrees and has revised the regulation to eliminate the redundancy.

151. **Comment:** Section 102.4(b)(6) Describe what the technical criteria listed in (A)-(C) relate to. (1268)

Response: Section 102.4(b)(6) (A)-(C) has been deleted from the rulemaking.

152. **Comment:** §102.4(b)(6) and 102.8(h) - Relationship Between E&S Regulations and Chapter 93 Antidegradation Requirements - In promulgating these regulations updating the Chapter 102 rules governing erosion and sedimentation control requirements, the relationship should be clarified between the Chapter 102 requirements and antidegradation provisions in Chapter 93. In the absence of clear guidance from the language of the regulations or in the preambles to either chapter, several Environmental Hearing Board cases issued over the past several years have created considerable confusion and concern in the regulatory community in overturning DEP's long-standing management of the E&S program. In order for the E&S

program to function in a reasonable and practical manner, and in the process provide a reasonable level of protection to the Commonwealth's special protection watersheds, the Chapter 102 regulations need to clearly embrace a practical standard of performance, and specifically declare that meeting that standard satisfies the antidegradation requirements of Chapter 93. The approach which DEP has suggested in Chapter 102, of requiring management of stormwater in a 2-year, 24-hour storm, and defining ABACT best management practices in special protection watersheds, is reasonable. In order for that approach to be effective, however, the regulations and preamble need to clearly declare that satisfaction of the requirements found in §§102.4(b)(6) and 102.8(h) constitutes compliance with §§93.4a-93.4c.(1278)

Response: The Department agrees and has revised the final regulation to expressly relate compliance with Section 102.4(b)(6) and 102.8(h) to compliance with the antidegradation implementation requirements of Chapter 93.

153. **Comment:** Revise Section 102.4(b)(6): " . . . Exceptional Value [u]nder Chapter 93 . . . use nondischarge alternatives . . ." (1191)

Response: The spelling and spacing correction has been made in the final rulemaking.

154. **Comment:** Revise 102.4 (b)(6) to read: "Where an earth disturbance activity may result in a discharge to a water of this Commonwealth classified as High Quality or Exceptional Value pursuant to Chapter 93, the person proposing the activity shall, as applicable, use nondischarge alternatives and ABACT BMPs to maintain and protect the water from degradation[:]. Nondischarge alternatives and ABACT BMPs and their design standards are listed in *the Erosion and Sediment Pollution Control Program Manual*, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008 (April 2000), as amended and updated. The Department or conservation district may approve alternative BMPs which will maintain and protect existing water quality and existing and designated uses." Also, *the BMP Manual does not identify ABACT BMPs. How will designers know what to use to comply with this section?* (693)

Response: The Department has clarified the antidegradation implementation provisions in this section, but not specifically as suggested by the commentator. Sections 102.4(b)(6) and 102.8(h) have been revised to clarify that compliance with these sections constitutes compliance with the antidegradation implementation requirements of 25 Pa. Code Section 93.4c(b). These manuals will be updated to specifically include nondischarge and ABACT BMP sections.

155. **Comment:** In order for the E&S program to function in a reasonable and practical manner, and in the process provide a reasonable level of protection to the Commonwealth's special protection watersheds, the Chapter 102 regulations need to clearly embrace a practical standard of performance, and specifically declare that meeting that standard satisfies the antidegradation requirements of Ch. 93. The approach which DEP has suggested in Ch. 102, of requiring management of stormwater in a 2-year, 24-hour storm, and defining ABACT best management practices in special protection watersheds, makes sense. In order for that approach to be effective, however, the regulations and preamble need to clearly declare that satisfaction of the requirements found in §§102.4(b)(6) and 102.8(h) constitutes compliance with §§93.4a-93.4c. (1241)

Response: The Department agrees that the 2 year/24 hour standard is the appropriate performance standard, and has revised the related antidegradation implementation provisions. Specifically, Sections 102.4(b)(6) and 102.8(h) have been revised to clarify that compliance with these sections through use of nondischarge or ABACT BMPs based upon the 2 year, 24 hour storm event, constitutes compliance with the antidegradation implementation requirements of 25 Pa. Code Section 93.4c(b) and the recently finalized federal effluent limit guidelines. It is important to understand that the 2 year/24 hour storm event is the protective storm event and is related to instream water quality because this storm event represents the bank full or stream forming storm event. Greater storm events are “out of bank” and essentially flood condition. This is why greater storm events are required for rate control, but not for volume control.

156. **Comment:** 102.4(b)(6) & 102.8(h) describe the requirements for activities which may result in discharge to waters classified as High Quality or Exceptional Value. Please confirm that the SEJ provisions contained in 25 Pa. Code 93.4c(b) are still applicable. (708, 1114)

Response: SEJ or social economic justification for projects in high quality watersheds may be considered.

157. **Comment:** 102.4(b)(6): "Erosion and Sediment Pollution Control Program Manual" and associated references should be revised to the proposed document, "Erosion and Sediment Control Best Management Practice (BMP) Manual", etc. (1129)

Response: The Department acknowledges the comment, however PADEP Erosion and Sediment Control Program Manual is the correct title.

158. **Comment:** 102.4(b)(6)(iii) Does this apply during construction only? 5 year storm seems low for a permanent design criteria. (1268)

Response: 102.4(b)(6)(iii) has been deleted from the final rulemaking.

159. **Comment:** §102.4(b)(6)(v). Why was “or county conservation district” removed”? (1268)

Response: The Department removed the reference to county conservation district in order to assure state-wide consistency in relation to new or alternative BMPs, or BMP design standards.

160. **Comment:** §102.4(b)(6)(v). We recommend that the conservation district also be given authority to approve alternative BMP's. (695, 944, 1204, 1245)

Response: The Department appreciates the comment. The purpose of this clause is to provide state-wide consistency in relation to new alternative BMPs.

161. **Comment:** §102.4 (b) (7) Flexibility is needed in requiring inspection reports and monitoring records to be kept onsite during construction. Many small construction projects do

not have an onsite construction trailer or other place sufficient to keep these records. The inspection reports may be kept electronically at a remote office or in possession of an inspector who is not present on site at all times (such as a consultant or licensed professional). We suggest this requirement be changed to require records to be produced promptly (within 24 hours or one business day) upon request. (691, 1124, 1152, 1250)

Response: The Department appreciates the comment, and agrees with the need for flexibility. Inspection reports and monitoring records may be maintained electronically as long as a copy can be produced when requested by the Department or the conservation district.

162. **Comment:** Revise 102.4 (b)(7) to read: The E & S Plan, inspection reports and **self-monitoring** records shall be available for review and inspection by the Department or the conservation district at the project site during all stages of the earth disturbance activity. (693)

Response: The Department appreciates the suggestion, however the suggested revision is not appropriate because not all records would be "self-monitoring records".

163. **Comment:** 102.4 (b)(7) FirstEnergy and the Energy Association of PA request that the Department add the words "manned" to this section. ("... at the manned project site during all stages of the earth disturbance activity)." Flexibility is needed in requiring inspection reports and monitoring records to be kept onsite during construction. Many small construction projects do not have an onsite construction trailer or other suitable place to keep these records. The inspections may be done by and kept electronically at a remote office, or be in possession of an inspector who is not present on site at all times (such as a consultant or licensed professional). As long as the records can be produced promptly on request. (within 24 hours) - that should be sufficient to meet the intent of this requirement. (1115, 1267)

Response: The Department appreciates the comment and the need for flexibility. Inspection reports and monitoring records may be maintained electronically as long as a copy can be available upon request and be able to be produced upon request from the Department or conservation district.

164. **Comment:** §102.4(b)(7) Revise to read "The signed, stamped E&S Plan..." (1268)

Response: The Department disagrees. Some sites may have E&S plans that do not require review, and therefore would not be signed and stamped

165. **Comment:** §102.4 (b) (8) Is this a second review? Is the plan not reviewed unless a complaint is filed? (1268)

Response: No, this subsection provides the general authority for the Department or conservation district to request a plan for situations that do not require the plan to be submitted for review or approval, or situations where the plan was required to be submitted, but was not. These situations are often identified during the course of conducting a routine or complaint inspection.

166. **Comment:** Support for licensed professionals to be engaged throughout the development process. (1317)

Response: The Department agrees and appreciates the comment.

167. **Comment:** 102.4(c) - Erosion and Sediment Control Requirements Reference is made to "have Districts consult with the Department." We are assuming that this consultation is for structural E& S BMPs versus all BMPs. Districts routinely make decisions regarding E & S BMPs both in the field and in the office. We feel that this requirement would hinder our ability to administer the program in a timely and efficient manner. (947)

Response: This refers to information or BMPs not normally requested during the review, or for unusual circumstances and not routine reviews. This requirement for the Department to be involved will ensure consistency statewide.

168. **Comment:** 102.4(c) Why does the district need to consult with the Department to request more information? (1268)

Response: This requirement for the Department to be involved will ensure consistency statewide. This refers to information or BMPs not normally requested during the review, or for unusual circumstances and not routine reviews.

169. **Comment:** 102.4 (c). This implies the county conservation districts must consult with the department before requiring additional information to adequately review an E&S Plan. Districts should be able to make the request for additional information without consulting with the department. (1187)

Response: This refers to information or BMPs not normally requested during the review, or for unusual circumstances and not routine reviews. This requirement provides statewide consistency by giving guidance to conservation districts when asking for additional information above.

170. **Comment:** 102.4(c) has been changed to now require conservation districts to consult with the Department before requiring "other information necessary to adequately review a plan, or require additional BMPs, on a case-by-case basis, when necessary to ensure the maintenance and protection of water quality ..." Conservation Districts conduct inspections on a nearly daily basis where imperfect plans may necessitate additional BMPs to protect water quality prior to the next storm event. Where site conditions necessitate immediate interim BMPs to protect water quality, installation of these BMPs (discussed with and agreed upon by the responsible parties) should not require consultation with the understaffed Department as this will only delay installation of BMPs. In most cases Region DEP staff will defer to and rely on conservation district E&S staff who are on the ground. (218)

Response: The additional information requirement was included to prevent conservation districts from establishing their own standards, approving alternative BMPs that have not been evaluated by the Department, or requesting additional information in a plan review that goes

beyond what is included in the checklists or in the Erosion and Sediment Control Program Manual (PADEP # 363-2134-008). The Department must approve alternative BMPs, standards or designs to assure statewide consistency and application.

The Department agrees with the commentator that conservation district staff are the field presence for earth disturbance activities and conduct inspections on a nearly daily basis and find situations which may necessitate additional BMPs to protect water quality prior to the next storm event. Conservation district staff should continue to make the field decisions (discussed with and agreed upon by the responsible parties) where site conditions necessitate immediate interim BMPs (as contained in Department approved Guidance Documents) to protect water quality.

171. **Comment:** Section 102.4(c). What happens in a case in which the permitting agency requires an approved E&S plan before granting other necessary permits and authorizations? (1264, 1291)

Response: The Department works to coordinate the issuance of all permits and authorizations.

172. **Comment:** Add a requirement that an erosion and sediment control plan should develop and submit a Cut and Fill plan. Frequently earthmoving contractors need to make significant revisions to approved erosion and sediment controls, because cut and fill is not considered. This is a vital piece of information that should be prepared for the plan designer to develop an erosion and sediment control plan. A color version would be ideal.(2)

Response: The Department appreciates the comment and agrees that consideration should be given to cuts and fills, however it is up to the applicant to determine how they will allocate cut and fill to their projects. The Department recommends that applicants and their consultants coordinate their plans with contractors as early in the process as possible to avoid delays and revisions to plans.

173. **Comment:** 102.4(c) (4) (5, 6 and 7) - In (5 and 6) the term E and S Plan is used while in (7) the term conservation plan is used. If there is any way to simplify the language between an agricultural E and S plan and a conservation plan that would be beneficial. We still find these terms used interchangeably when they may have different definitions depending on their use. (947)

Response: An E&S Plan and a conservation plan do not have the same meaning. The proposed regulations define "E & S Plan" as a site-specific plan consisting of both drawings and a narrative that identifies BMPs to minimize accelerated erosion and sedimentation before, during, and after earth disturbance activities. Subsections 102.4(a)(2) requires an E&S Plan for agricultural plowing or tilling activities or animal heavy use areas of a designated size. However, Subsection 102.4(a)(7) clarifies that the E&S Plan requirements may be satisfied by the portion of a conservation plan that identifies BMPs to minimize accelerated erosion and sedimentation from agricultural plowing or tilling activities, or from operation of animal heavy use areas.

174. **Comment:**102.4(c) (4) (4) Delete.. ."or conservation district after consultation with the Department," This would cause unnecessary delays to program implementation. (947)

Response: The Department believes that the comment is in reference to 102.4(c). The requirement in 102.4(c) provides statewide consistency by giving guidance to conservation districts when asking for additional information. Also see response to Comment #170.

175. **Comment:**102.4(c) (4) (5) (i, ii, iii and ix) Each of these items needs to be defined or else revise the numbering sequence. (947)

Response: The Department believes that the comment is in reference to 102.4(b) (5) (i, ii, iii and ix). These provisions have not been revised from the existing regulations.

176. **Comment:**102.4(c) (4) (xiii)- Additional guidance on evaluating the potential for thermal impacts to surface waters needs to be provided especially when one is reviewing one specific site at a time. In some fashion, it is critical to be looking at the cumulative thermal impacts to water quality on a watershed basis. (947)

Response: The Department believes that the comment is in reference to 102.4(b)(4)(xiii). The design professional should be allowed to develop an appropriate response to thermal impact concerns. In addition to identifying the potential for thermal impacts, appropriate BMPs should be designed to mitigate those impacts.

177. **Comment:**102.4(c) (4) (xiv) Add the language "or a delegated conservation district" after "Unless approved by the Department," (947)

Response: The Department believes the comment is in reference to 102.4(b)(4)(xiv). This approval authority is retained by the Department since this would be an unusual situation.

178. **Comment:**102.4(c) (4) (8) It would be beneficial to add some language that if a delegated conservation district receives a complaint or is performing a site inspection that the District has the authority to require and charge a fee for its services related to the complaint and inspection. (947)

Response: The Department appreciates the comment. Section102.32(d) addresses the ability of the Department or conservation district to recover enforcement costs and expenses.

179. **Comment:**102.4(c) (4) (9) (b) - We would suggest somehow bolding this section or somehow calling it something else so that it is easier to find and stands out. What is (a)? (947)

Response: The format for regulations is set by the Legislative Reference Bureau and must be followed by all Commonwealth agencies.

180. **Comment:** Permit Coordination - 102.4(d) and (e) Electric utility projects are frequently phased projects. Some phases require earth disturbance, while others do not. However, Chapter 105 permits are often required for the non-earth which involve earth disturbance. But these same

lines may be leaving a substation, where earth disturbance is required for installing the substation equipment associated with the line upgrade. FirstEnergy and the Energy Association of PA request the Department's confirmation that a permittee may begin earth disturbance work in a substation or similar site before permits for non-earth disturbing line work have been obtained. Frequently, below grade work must be completed before line work is either designed or scheduled. (1115, 1267)

Response: This site specific permit coordination will be coordinated by the appropriate DEP regional office.

181. **Comment:** 102.4(d) – Provide examples. (1268)

Response: The requirement in 102.4(d) is in reference to permit or approval coordination. Typical permits or authorizations that may be needed include but not limited to water obstructions and encroachment permits, Act 537 plan approval, NPDES permits for industry stormwater discharges (other than construction) and incidental mining permits.

182. **Comment:** 5 foot contour maps should be included. Both plan map and contour should be to a scale that a person can define contours, buildings, storages, fields, roads and lanes. (3)

Response: The Department believes that items of this detail belong in the Erosion and Sediment Control Program Manual and not in the regulation. Some proposed activities may require 5-foot contours while other projects may require more or less detail to adequately show the proposed changes and to determine that the BMPs will perform as designed.

183. **Comment:** There should be a reasonable time limit to the implementation schedule. One could schedule BMP's for 20 years from today. (3)

Response: The implementation schedule should continue until construction is complete and the site is stabilized.

184. **Comment:** Evaluation of the potential for thermal impacts is required showing avoidance, minimization or mitigation of potential pollution from thermal impacts. These should only be required within a certain proximity to a Chapter 93 stream. (8)

Response: Evaluation for thermal impacts should be dependent on the site conditions, location and classification of the waters.

185. **Comment:** The earth disturbance activities or potential discharges **could** adversely affect a Pennsylvania or federal endangered or threatened species. (6)

Response: In Section 102.6(a)(2), consultation with the PA Natural Heritage Program regarding the presence of state or federal threatened or endangered species is required for activities that require permit coverage.

186. **Comment:** Should just leave AG “E&S Plan” just as the conservation plan. Will alleviate confusion with the farmer, renter, etc. True conservation plan has maps, soils, schedule of implementation. However – this is something that would need to be enforced in the Agricultural community. What training will be provided for plan preparer’s and District staff for developing and reviewing conservation plans? Who will be responsible for inspection of agricultural sites? Will DEP still be responsible for the enforcement of AG activities or will that fall under another agency? Has there been coordination with other governmental agencies to discuss the AG issues – such as development, inspection, etc (256)

Response: Conservation plans cover a broader array of activities that go beyond erosion and sediment control. In Section 102.4(a)(7), a conservation plan that identifies BMPs to minimize accelerated E&S may be used to satisfy the E&S plan requirements. The Department and delegated conservation districts will determine training needs and also be responsible for inspection and enforcement of agricultural activities, as currently practiced.

187. **Comment:** Remove “after consultation with the Dept”. Changes occur in the field, plan does not show the existing field conditions. If need to leave in, then put some type of clarification, moving construction entrance, silt soc, silt fence, stock piles, would be ok for the District to make, but any structural BMP, may need consultation with the Dept. (256)

Response: This refers to information or BMPs not normally requested during the review, or for unusual circumstances and not routine reviews. This requirement for the Department to be involved will ensure consistency statewide. Also see response to Comment #170.

188. **Comment:** Erosion and sediment control requirements: Forestry’s good record on water quality is due to implementation of voluntary BMP’s by foresters and timber harvesters who have been trained through the efforts of the Sustainable Forestry Initiative (SFI). This training and the Timber Harvesters Action Packet – developed by DEP in collaboration with conservation districts, DCNR, industry and others - has provided these individuals with the knowledge to assemble E&S plans. DEP must ensure that the proposed additional information required in the E&S plan can still be provided by these same individuals through updates in the Action Packet and SFI training. (1176, 1221)

Response: The Department appreciates the comment and intends to work with various stakeholders to continue to provide appropriate training.

189. **Comment:** We believe it is critically important that foresters and loggers remain as principles in the completion of E&S plans. That process establishes a heightened awareness and sense of responsibility for what needs to be done in terms of protective actions and measures. I am convinced that it is a major contributor to the exemplary record of practices that forestry and timber harvesting have established over the years. It seems perfectly logical and practical to me that regulations need to be as simple and minimal as is possible to achieve the desired outcomes. When regulations become overly complex and expansive, it creates the potential for compliance failures. Further, it fosters a greater workload for those limited resources that serve to monitor and enforce compliance. Shouldn’t the limited financial and human resources available to

monitor and enforce these regulations be concentrated on those activities that are actually responsible for the problems? Forestry and timber harvesting are not among them. (1237)

Response: The Department appreciates the comment. Sites that have a minimal impact or risk to water resources would require a less-detailed E&S plan than more complex or higher risk sites.

190. **Comment:** Subsurface ownership: "Collins Pine Company" CPC, like many other large landowners in the state, owns only a small percentage (less than 10% in our case) of the subsurface rights. Our lands lie in the oil and gas rich region of NW PA and we recognize the fact that those who own the subsurface have a legal right to access their ownership even if it is contrary to our wishes. When development of these subsurface rights require permits under Chapter 102, the mandates and costs, including the regulatory taking associated with the buffers, are imposed upon landowner. The proposal needs to address this situation and provide relief for landowners such as CPC caught in this situation. (1221)

Response: A person proposing earth disturbance activities is required to implement an E&S plan. The Department has clarified the requirements when riparian forest buffers are required including when the permittee does not have ownership of the surface rights.

191. **Comment:** With regards to how the regulations apply to the oil and gas activities, applications of the regulations and related definitions need clarified better in the revisions, i.e. transmission facility. This was not intended to mean pipelines, but pump stations. (1170)

Response: The Department appreciates the comment, however has determined that the definition of oil and gas activities is consistent with federal requirements.

192. **Comment:** We do applaud the DEP for including the oil and gas industry in these proposed regulations. They have been exempt until now. The threat posed to our environment by drilling for oil in the Marcellus Shale formation highlights the need to strictly regulate the oil and gas industry. (1285)

Response: The Department acknowledges the comment, however, oil and gas activities have been exempt from NPDES stormwater construction permitting requirements. The Department under state authority is requiring an E&S permit for any earth disturbance for oil and gas activities.

193. **Comment:** Although it isn't a change, I wanted to comment that we support DEP's plan to require NPDES stormwater permits for earth disturbance activities associated with oil and gas development. Earth disturbance activities from oil and gas drilling can cause serious damage to our streams just like other forms of development. There's no reason to treat oil and gas activities differently from other forms of development, and we're pleased that DEP is requiring such sites to obtain a stormwater NPDES permit. With the current gas drilling boom in the Marcellus Shale region, this protection is more important than ever. (1302)

Response: The Department acknowledges the comment and appreciates the support. However, the Department is unable due to federal regulations to require NPDES permits for oil & gas activities. The Department is permitting oil & gas activities under a state authorized E&S Permit (ESCGP-1).

194. **Comment:** The members and friends of the Darby Creek Valley Association want waterways protected and would henceforth support requiring NPDES permits for stormwater discharges associated with construction for earth disturbance activities associated with oil and gas development. Such earth disturbance activities can result in sediment and stormwater pollution during both the construction and post-construction phases, just as with other forms of development. There is no good reason to treat oil and gas developers differently from commercial and residential developers with respect to erosion and sediment control and stormwater permitting. (431)

Response: The Department would like to clarify that oil and gas activities have been exempt from NPDES stormwater construction permitting requirements. The Department under state authority is requiring an E&S permit for any earth disturbance for oil and gas activities.

195. **Comment:** We support the requirement for earth disturbance activities associated with oil and gas to obtain NPDES stormwater permits. (644, 646, 648, 833, 943, 1131, 1253, **1270**, 1286, 1293, 1307, 1309)

Response: The Department would like to clarify that oil and gas activities have been exempt from NPDES stormwater construction permitting requirements. The Department under state authority is requiring an E&S permit for any earth disturbance for oil and gas activities.

196. **Comment:** Oil and gas activities also can cause accelerated erosion and sedimentation, but federal law has exempted them from the requirement of obtaining coverage under an NPDES permit. PennFuture therefore commends the Pennsylvania Department of Environmental Protection for filling this federal regulatory gap by requiring oil and gas activities to obtain an Erosion and Sediment Control Permit (E&S permit). (1191)

Response: The Department acknowledges the comment and appreciates the support.

197. **Comment:** The federal Energy Policy Act of 2005 expressly exempts stormwater discharges associated with oil and gas activities from NPDES permitting programs. Therefore, it is inappropriate to impose any requirements for stormwater discharges associated with oil and gas activities as a result of NPDES permitting rules. (1184, 1250, 1252)

Response: The Department acknowledges the comment, however, oil and gas activities have been exempt from NPDES stormwater construction permitting requirements. The Department under state authority is requiring an E&S permit for any earth disturbance for oil and gas activities.

198. **Comment:** Support for requiring NPDES permits for 1-5 acres of disturbance (1317)

Response: The Department acknowledges the comment and appreciates the support.

199. **Comment:** Support E&S permits for disturbance of 5 acres or more for activities not covered elsewhere. (1317)

Response: The Department acknowledges the comment and appreciates the support.

200. **Comment:** There is internal confusion with respect to the rate requirements between the language in the proposed Chapter 102 and the Department's model stormwater management ordinance. Given the Department's desire to integrate all of its water management programs, it is important to make sure that the requirements are consistent. All references to the one-year storm should therefore be eliminated. (1264, 1291)

Response: There are no references to the 1-year storm in the proposed rulemaking. The requirement is for control of the two-year storm. This storm event is used to evaluate and design BMPs for stormwater quality and volume control.

201. **Comment:** The laws under which the Chapter 102 Rules and Regulations are developed DO NOT include the legal authority to selectively impose requirements of the Act of 1945, P.L.913, No.367, as amended, the Engineer, Land Surveyor and Geologist Registration Law, (or similar law concerning **licensure** of Landscape Architects) on limited sections of these regulations. Simply, either the design of E&S controls and stormwater facilities, their during construction inspection and certification of as-built controls meets the definition of "Practice of Engineering" contained in Section 2(a)(1) & (2) of Act 367 (with the term "inspection" further defined under subsection (b)), OR THESE ACTIVITIES DO NOT! The Chapter 102 regulations cannot pick and choose when these legal requirements apply based on a special selection of one party or group of the overall regulated community. Either all of the regulated community, including agricultural interests, are included or none are. It is further noted that under Section 2 (n) "Practice of Geology" the last sentence reads: "The term shall not include the practice of engineering, land surveying or landscape architecture for which separate licensure is required. Similarly, under subsection (f) "professional Land Surveyor" the last sentence reads: "A professional land surveyor may perform engineering land surveys but may not practice any other branch of engineering". I would differ judgment on whether a definition for a licensed professional landscape architect's duties would include the type of work needed to provide for the design of E&S and stormwater BMPs. As just one indication of this problem, under Section 102.8(k) of the revisions, it states that "A licensed professional (engineer, geologist, land surveyor or landscape architect) or their designee shall be present on site and be responsible during critical stages of implementation of the approved PCSM plan". What this is saying is that a geologist or land surveyor (or worse their designee) shall be responsible for doing something that they are specifically prohibited to do by law. (9)

Response: The Department does not selectively impose requirement under the Engineer, Land Surveyor and Geologist Law, but rather defers to it, and the oversight by the PA Department of State.

202. **Comment:** The public hearings have also seen a small group of foresters call on the Department to support the state licensing of those practicing forestry, and have the proposed rulemaking require the use of licensed foresters. There is no legal basis for this proposal. Pennsylvania has no law requiring the licensure of foresters. The Pennsylvania Forest Products Association believes that the current system of well-trained foresters and timber harvesters engaged in E&S Plan development and implementation has proven both workable and productive as a means of controlling erosion. (1176)

Response: The Department appreciates the comment and agrees with the important role of foresters in protecting water quality. The Department also appreciates the comments supplied by the commentator on the proposed legislation; however, licensing foresters was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

203. **Comment:** Ensure that the proposed additions to the E&S plan can be completed by the existing population of foresters and timber harvesters that have already been trained in the use and practice of voluntary BMPs. (1176, 1186)

Response: The Department appreciates the comment however, the use of BMPs is not voluntary but has been and continues to be a requirement to protect, maintain and improve water quality. The Department will continue to work with the industry to ensure training is available in the proper selection and use of BMPs.

204. **Comment:** There is a call for additional planning for projects requiring F&S permits. Foresters, though not licensed in the state, have been preparing E&S permits for some time and doing an excellent job. This provision for foresters to continue preparing E&S permits must be retained, licensed or not. (711)

Response: The Department appreciates the comment and agrees with the important role of foresters in protecting water quality. The Department also appreciates the comments supplied by the commentator on the proposed legislation however, licensing foresters was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

205. **Comment:** If the listed standard for development/design of E&S and PCSM plans is a person "trained and experienced" in such work, then the regulations cannot subsequently impose the work of a "licensed professional" for inspection, certification and even plan development under other sections of the regulations. The creation of a third requirement, the lack of any requirements for development of agricultural E&S plans, likewise indicates a total lack of program understanding and administration. From a very practical viewpoint the "trained and experienced" criteria is non-enforceable since DEP provides no criteria for their staff, or those of the county conservation districts to apply in determining if someone meets this standard. Likewise, neither I nor any other licensed engineer that I have communicated with will agree to inspect or certify design work prepared by such an individual. It's just not going to happen. DEP must also look into its requirement for inspections and certification by a P.E. from an economic viewpoint. This work will add thousands of dollars to small and medium sized projects and is unnecessary. It should and must be the contractor's responsibility to certify that

the project was completed and functions as designed. After all, contractors carry just that type of liability insurance. (9)

Response: The Department disagrees with the commentator that use of “trained and experienced” imposes the work of a licensed professional. Projects vary greatly, therefore the Department has also added language to clarify that a person’s training and experience shall be “applicable to the size and scope of the project being designed.” The Department further disagrees that the Department does not have requirements for our staff or the conservation district. The Department also disagrees that the contractor should be responsible for certifying that the plan has been implemented and functioning as designed.

206. **Comment:** The idea that the licensing boards will some how begin punishing engineers who submit substandard stormwater plans when their only disciplinary actions in recent memory have dealt with either practicing without a license or dealing drugs is just unbelievable to us. (1302) The approach of pursuing action against licensed professionals through the State Licensing Board is problematic. (1314)

Response: The Department appreciates the comment, however must rely upon the Department of State through their state registration board to assure that licensed professionals perform work for which they are qualified to do.

207. **Comment:** Act 367 of June 30, 1946 and as amended (hereinafter “Act”), is a valuable piece of legislation that plays relevant in the Proposed Rulemaking. The Act defines the “Practice of Engineering” and states “...the performance of the forgoing acts and services being prohibited to persons who are not licensed under this act as professional engineers unless exempt under other provisions of this act.” The Act further states that the issue of practicing engineering, land surveying, or geology without licensure and registration is noted as being prohibited. In fact, the Act states “in order to safeguard life, health, or property and to promote the general welfare, it is unlawful for any person to practice or to offer to practice engineering in this Commonwealth, unless he is licensed and registered under the laws of the Commonwealth as a professional engineer...”. Under the current process established, a Professional Engineer (hired by the applicant) designs the Plan and a Professional Engineer (retained by the Municipality) reviews the Plan. At the same time, the Plan is submitted to the Conservation District, where typically, if not always, the review is conducted by someone that is not a Professional Engineer, and directives are given as to modifications required of the Plan. Why are the proposed regulations again silent on requiring a Professional Engineer to review these Plans on behalf of the Conservation District? Given that the design Professional Engineer is already responsible for the Plan, is there language that can be added to this proposed Rulemaking that can reiterate this fact of responsibility to the design Professional Engineer and also indemnify the Conservation District, while at the same time allows the assessment of substantial penalties should a pollution event occur? (1159)

Response: Some conservation districts are delegated to conduct reviews of plans to determine consistency and compliance with these regulations and any permit established under these regulations. Districts may employ the services of an engineer who then can do an engineering review. Those districts who do not have the services of an engineer conduct a

technical review of the plan using a checklist developed by DEP professional engineers to ensure that all required items are present in the plans.

208. **Comment:** Temporary channels should require a minimum c.f.s. per acre. (2.25) to avoid downsizing swales. The sizing of temporary conveyance swales per any of a variety of calculation procedures often results in a swale incapable of handling storm water run-off during construction. If the State insists on allowing the design engineer to calculate the capacity then it should be clear that the worse case scenario of the drainage area should be used for the land cover.(2)

Response: Recommendations for channel design methodologies and design criteria are provided in the Erosion and Sediment Pollution Control Program Manual . The Department agrees with the suggestion that the design professional should consider the proposed site conditions being disturbed during the earth disturbance activity so that the BMPs are adequately sized.

209. **Comment:** Demolition should be added as an earth disturbance activity. This has been a consistent problem where earth disturbance occurs prior to permit issuance on redevelopment projects. (2)

Response: Some demolition does cause earth disturbance to the land and therefore would be included in the definition of earth disturbance activity.

210. **Comment:** Special Sediment Basin Requirements - Note more than just Sediment Basin requirements are under this section, seems to be out of place. This requirement should be implemented for impaired streams as well. (2)

Response: Section 102.4(b)(6)(i) has been deleted from the final rulemaking.

211. **Comment:** A paragraph under Section 102.4 states "the Department of Conservation District may approve alternative BMP's which will maintain and protect...". Given that past experience in the interpretation of "may" predominantly results in denial of a design presented that is not exactly per the BMP Manual, why is the design Professional Engineer restricted in his design approach if the approach can be proven to achieve a desired result? (1159)

Response: The professional engineer is not restricted in a design approach and if the professional can demonstrate that the BMP will achieve the desired water quality result, then the design can be approved.

212. **Comment:** While it is outside the proposed rulemaking, we would take this opportunity to encourage EQB and DEP to resist any calls for reductions in the earth disturbance thresholds which are in the current regulations at this point in time. (1176)

Response: The Department acknowledges your comment. Earth disturbance thresholds have not been reduced in the proposed rulemaking.

213. **Comment:** Prescribed fire is not mentioned in the proposed rulemaking as requiring an E&S plan or E&S permit, but it is certainly in a class that will quickly affect water quality. (1305)

Response: These regulations are for earth disturbance activities; therefore not all impacts that could affect WQ are regulated under Chapter 102.

214. **Comment:** Section 102.4(x) Define "stormwater event" in the context of requiring inspections. (1141)

Response: A stormwater event is when runoff from precipitation, snowmelt, surface runoff or drainage occurs. See also the definition of stormwater.

215. **Comment:** As an electric and gas utility, PECO's concerns are largely centered on the aspects of the unique issues of transmission and distribution utilities and is requesting the opportunity to work with the Department and other electric and gas utilities to develop a utility-specific Soil Erosion and Sediment Control Plan that marries the regulatory/ environmental needs with the constraints imposed by FERC, NERC, and the PAPUC. Such a program design would include accelerated permitting and could also allow for variances and programmatic permits. This type of program would easily fit within the proposed regulatory framework, allowing the utilities the ability to maintain electrical reliability throughout their service territories while continuing to manage their operations in an environmentally responsible manner. (1262)

Response: The Department acknowledges your comment, and appreciates the industry's cooperation.

216. **Comment:** A requirement has been added to plan and implement measurements. If specific items are proposed to be measured, they should be enumerated as part of this regulation. (1289)

Response: Any measurement that is necessary to demonstrate and support the design of the E&S plan such as size and location of BMPs, is required.

217. **Comment:** We support increased use of natural infrastructure to handle E&S control and stormwater management and think that they should be expanded. (1317)

Response: The Department appreciates the comment, and agrees with the use of natural infrastructure as a BMP.

218. **Comment:** Requiring a professional seal and certification will not ensure compliance with the Clean Water Act or other environmental concerns. (1314)

Response: The Department disagrees. A professional seal and certification will provide greater assurance that BMPs are designed and installed according to the requirements, which in turn are designed to ensure compliance with the Clean Water Act.

219. **Comment:** A soil amendment and restoration requirement should be added to the regulations. (833)

Response: Soil restoration guidance is included in Pennsylvania Stormwater Best Management Practices Manual (PADEP # 363-0300-002) and will be included in the newly revised Erosion and Sediment Control BMP Manual.

220. **Comment:** Additional clarification needs to be added regarding the reports that must be written for each erosion and sedimentation control inspection, all Best Management Practices repair and maintenance activities, and Post Construction Storm Water Management inspections. The DEP should quantify the frequency of reporting, when the reports should be made, what they should include, and how long they should be retained. (1153)

Response: The specification of reporting requirements are established in Section 102.4(b)(5)(x) and 102.8(f)(10) as a permit condition.

221. **Comment:** Replace "Forest Stewardship Plan" with "Forest Management Plan" everywhere it occurs in the regulations and the guidance. This is to reduce confusion with the Federal Stewardship Program. (1275)

Response: This term has been deleted from the rulemaking.

222. **Comment: 102.4 b -** Language should be added somewhere in the E and S portion of the regulations to address spoil and borrow sites. (947)

Response: Spoil and borrow sites are considered earth disturbance activities and would follow the same requirements as other earth disturbance activities under this Chapter.

102.5 Permit Requirements.

1. **Comment:** Section 102.5. Permit requirements. - Need; Reasonableness; Economic impact; Feasibility; Clarity. *Applicability of permit requirements* Commentators, including the Home Builders Association of Southeastern Pennsylvania, appear to be confused as to whether they are affected by permit requirements. Paragraphs (a)(1) and (2) require a person to obtain "an individual NPDES permit or coverage under a general NPDES permit or NPDES permit-by-rule." We recommend that the EQB review the permit requirements and make it clear to readers of the regulation whether they must obtain a permit and if so, what type. (1322-IRRC)

Response: The Department has clarified the permit requirements as recommended by revising the rulemaking and identifying that the applicable earth disturbance activity disturbing one acre or greater to Chapter 92 in Section 102.6(a) relating to permit application requirements.

2. **Comment:** *Oil and gas activities and exemptions* The exemptions at the beginning of Paragraphs (a) (1) and (2) and Subsection (d) do not include the oil and gas industries. Commentators believe the oil and gas industries are exempt under the Clean Water Act. On the other hand, the Pennsylvania Council of Trout Unlimited commented in support of permitting oil and gas development. The EQB should explain why the exemption is not included in these provisions or add this exemption to these provisions. Additionally, the Pennsylvania Oil and Gas Association requests clarification of Subsection (c) regarding whether it requires a general E&S permit. The EQB should make this amendment or explain why it is not needed. (1322-IRRC)

Response: Oil and Gas are exempt from NPDES permitting requirements but still must meet state water quality requirements. Section 102.5(c) clearly states that E&S permits are required. Section 102.5(c) states "A person proposing oil and gas activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project shall obtain an E & S Permit under this chapter prior to commencing the earth disturbance activity."

3. **Comment:** *Preconstruction meeting* Subsection (e) states "...a preconstruction meeting is required unless the permittee has been notified otherwise in writing by the Department or conservation district." The Department of Transportation commented that this may overload DEP staff and delay projects. The EQB should explain the need for this meeting and how it would impact the timeline for completing a project. (1322-IRRC)

Response: A pre-construction meeting ensures that all parties are familiar with the permit requirements and should eliminate issues prior to the start of construction. The Department's experience is that a preconstruction meeting is critical to communicating the requirements of the permit and keeping the project on schedule. The final-form rulemaking was clarified by adding language that attendance at the preconstruction meeting is required by specific entities that have a role in the design or implementation of the E&S or PCSM Plans. Additional clarification was provided by requiring the permittee to invite the Department or conservation district to attend the preconstruction meeting and requiring at least seven days notice of the preconstruction meeting to all invited attendees. The proposed language was retained requiring the Department or conservation district to provide written notice to the permittee that a preconstruction meeting will not be required.

4. **Comment:** *Long-term maintenance of the PCSM Plan* Subsection (f) states:

A person proposing earth disturbance activities requiring a permit or permit coverage under this chapter shall be responsible to ensure implementation and long-term operation and maintenance of the PCSM Plan.

The Pennsylvania Builders Association and others commented on two concerns with this provision. First, who specifically is "a person proposing earth disturbance activity"? We agree that this needs to be made clear. For example, if a person contracts with a developer, is the owner or developer responsible? We recommend that this provision clearly state who bears responsibility. Our second concern, upon consideration of public comments, is with the requirement for "long-term operation and maintenance of the PCSM Plan."

This provision is vague and potentially unreasonable and cost prohibitive. What does the EQB mean by "long-term"? Who determines what "operation and maintenance" will be required? Can responsibility be transferred to another entity such as a local government? What if the party assigned responsibility is no longer in business? What if the PCSM plan for a property works as it was designed, but is later compromised by storm water from development elsewhere in the watershed? Until these concerns can be made clear and answerable, the person responsible cannot know what responsibility is assigned to them. Further, if these phrases are meant to be for perpetuity, Subsection (f) would essentially prohibit any activity because its risk and liabilities might be too great.

The EQB should amend Subsection [f] to make it clear, but must also explain how Subsection (f) is feasible, reasonable, and how it would be implemented. (1322-IRRC)

Response: The final rulemaking was revised by deleting reference to long term operation and maintenance in this subsection. Additional clarifying language related to these issues has been consolidated in Section 102.8(m). The Department has added a definition of long term operation and maintenance in Section 102.1. The Department has also established a transfer of responsibility process in Section 102.7 Permit Termination which identifies the person(s) that have agreed to be responsible for the long term operation and maintenance.

5. **Comment:** *Applicability of exemption in Subsection (i)* Subsection (i) provides an exemption from an E & S Permit and NPDES Permit for activities covered by a permit under section 404 of the Clean Water Act. While supportive of this exemption, the Department of Transportation's comments list four clarifications it seeks on the application of this exemption. We will review the EQB's response in our consideration of whether the final form regulation is in the public interest. (1322-IRRC)

Response: The E&S approval would be obtained during the review of the Water Obstruction and Encroachment Permit since an E&S Plan is a required part of that application – a separate NPDES permit would not be required. An activity that is covered by another permit issued under Chapter 404 of the Clean Water Act, such as a Chapter 105 permit, does not require an additional E&S or NPDES permit for the activity covered by that other permit. In the case of a Chapter 105 permit, that would be the area within the watercourse, floodway or body of water.

In addition, an E&S plan would need to be approved as part of the 401 water quality certification. Any other activities outside of the area permitted for coverage under Section 404 would need additional E&S or NPDES coverage.

6. **Comment:** Our understanding is that DCNR only have to submit a PCSM plan if we require an NPDES permit. Is this correct? And under what circumstances would we require an NPDES permit? Is DCNR forestry exempt? In what circumstances, if any, would DCNR forestry need to submit a forest management plan? (1275)

Response: Any earth disturbance activity that requires a permit under this Chapter would require the development and submission of a PCSM Plan. The rulemaking includes both NPDES and E&S permitted activities. State agencies are not exempt from the requirement. Permit requirements are provided in Section 102.5(a)-(d). The Department has deleted the term forest management plan from the final rulemaking.

7. **Comment:** The draft permit requirements place undue burdens on pipeline projects. (1272)

Response: The Department disagrees that the permit requirements in the rulemaking place undue burdens on industry, including those involved with pipeline projects. Many of these are existing requirements that have been updated to incorporate federal NPDES obligations which are now being codified into regulation.

8. **Comment:** Throughout the Draft Provisions, it is stated that stormwater discharges associated with construction activities with earth disturbance greater than one acre and less than five acres with a "point source" are required to obtain NPDES permit coverage. Please note that small construction sites that discharge into waters of the United States are themselves point sources. The EPA Construction General Permit explicitly defines a facility or activity covered by such permit as a point source, and several court decisions (See North Carolina Shellfish Growers Ass'n v. Holly Ridge Assoc., 278 F. Supp. 2d 654,680-81 (E.D. N.C. 2003) and Calif. Sportfishing Protection Alliance v. Diablo Grande, Inc, 209 F. Supp. 2d 1059 (E.D. Ca. 2002) have also stated that the construction activity itself is the "point source". EPA requests that reference language specifying that only "point source" discharges must apply for a permit be removed and that the Draft Provisions specify that all earth disturbing activities of equal to or greater than one acre and less than five acres be required to obtain permit coverage. (1268)

Response: The Department acknowledges the comment and has revised Section 102.5(a) appropriately.

9. **Comment:** 102.5 (1 and 2) These sections are duplicated. (947)

Response: The Department agrees, and appropriate revision has been made to 102.5(a) to establish a one acre or greater threshold for NPDES permits for stormwater discharges associated with construction activity regardless if the activity results in a point source.

10. **Comment:** 102.5(a) This section is difficult to understand. If there is any way to simplify the language, that would be beneficial. (947)

Response: The Department has revised this section.

11. **Comment:** Effective and meaningful compliance and enforcement activities should be pursued for all violations. (1317)

Response: The Department appreciates the comment. Compliance and enforcement are key elements in a successful program to protect water quality.

12. **Comment:** Section 102.5(a) Expand to include the Department's "Permit Guidelines for Phased NPDES Stormwater Discharges Associated with Construction Activities" (944, 1204)

Response: The Department disagrees that reference to the policy document is necessary or appropriate for this rulemaking.

13. **Comment:** Revise Section 102.5(a) to read: "[An] NPDES permit for stormwater discharges associated with construction activities" (946, 1115, 1129, 1191)

Response: The department has deleted this provision from the final rulemaking.

14. **Comment:** Section 102.5(a)(1) This provision specifies that a point source discharge to surface waters takes place-what happens if there is no such discharge? (1264, 1291)

Response: The requirement for point source discharge to surface waters with a disturbance of 1-5 acres has been removed from the rulemaking.

15. **Comment:** 102.5(a)(1) should be reworded to read "plan of sale or development"(708, 946, 1114, 1191, 1208)

Response: The Department has not made the change as recommended. The language in the rule is existing language consistent with federal requirements.

16. **Comment:** 102.5(a)(1) Repeat comment: "...point source discharge to surface waters" leaves two "outs" for activities to avoid getting a permit. (436, 650)

Response: Point source discharge has been deleted from 102.5(a)(1).

17. **Comment:** Section 102.5(a)(1) Why is this use excluded? If construction activities are occurring in an animal heavy use area, the construction activities must be regulated. E&S controls are important in animal heavy use areas to minimize/reduce nutrient and sediment runoff. (1268)

Response: Animal heavy use areas as defined does not require a permit, however if construction of greater than one acre is proposed within an animal heavy use area, that construction activity would require permit coverage.

18. **Comment:** Section 102.5(a)(1) Delete "point source". (1268)

Response: Point source discharge has been deleted from 102.5(a)(1)

19. **Comment:** Section 102.5(a)(1) What about sheet flow from the construction site? Sheet flow is not included in the definition of a point source. (1268)

Response: Point source discharge has been deleted from 102.5(a)(1)

20. **Comment:** 102.5 (a)(1) Please confirm that an NPDES permit is not needed for a project that disturbs between one and five acres which does not have a point source discharge. (1245)

Response: Point source discharge has been deleted from 102.5(a)(1). Any earth disturbance greater than one acre will now require an NPDES permit under this Chapter.

21. **Comment:** "Over the life of the project" phrase in 102.5 (a) (1). We suggest that this phrase should be tied to the submission and acknowledgement of the Notice of Termination (NOT). (947)

Response: This phrase has been deleted from 102.5 (a) (1).

22. **Comment:** §102.5(a)(1), (2), and (3)(c) Since "oil and gas activities" has been specifically added to the definition of "Earth Disturbance Activity" in 102.1, it appears that oil and gas activities will be required to obtain an NPDES permit as well as an E&S permit. We urge the deletion of any requirement to obtain NPDES permits under this program.(691, 1124, 1241, 1250)

Response: The Department disagrees with the commentator's conclusion that all earth disturbance activities as defined in Section 102.1 are required to obtain an NPDES permit. The Department is not requiring NPDES permits for oil and gas activities as a result of the Energy Act of 2005 and subsequent rulemaking by the federal Environmental Protection Agency. However, oil & gas activities may be required to get coverage under a state E&S Permit (ESCGP-1).

23. **Comment:** The distinction between the NPDES and E&S permit types is not maintained in section 102.5 (permit requirements) for NPDES-exempt stormwater discharges associated with oil and gas activities. We suggest that the Board should modify the final rule to clarify the exemption and thereby avoid possible confusion when the rule is implemented. While section 102.5(c) specifically establishes the E&S permit requirements for anyone proposing regulated oil and gas activities, we suggest that the final rule should also add language in sections 102.5(a)(1) and (2) and 102.5(d) to include oil and gas activities in the list of activities that are not required to obtain an individual NPDES Permit or coverage under a general NPDES permit or NPDES

permit-by-rule. We also suggest that the Board should amend the final rule at section 102.5(c) to clarify that the E&S permit required for regulated oil and gas activities is a general E&S permit. Specifically the subsection should be amended to read: (c) A person proposing oil and gas activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project shall obtain ~~an~~ a general E & S Permit under this chapter prior to commencing the earth disturbance activity. (1250)

Response: The Department disagrees, and has not revised 102.5(a) or (d) as suggested. The Department is not requiring NPDES permits for oil and gas activities as a result of the Energy Act of 2005 and subsequent rulemaking by the federal Environmental Protection Agency. However, oil & gas activities may be required to get coverage under a state E&S Permit (ESCGP-1).

24. **Comment: Revise 102.5** (a)(2) to read:... shall obtain an individual NPDES Permit for Stormwater Discharges Associated With Construction Activities or coverage under a general NPDES permit ~~or NPDES Permit by Rule~~ for Stormwater Discharges Associated with Construction Activities prior to commencing the earth disturbance activity. We are opposed to the permit-by-rule (693)

Response: Section 102.5 (a)(2) has been deleted.

25. **Comment:** 102.5 (a) (3) (f) and (g) Provide consistency between “earth disturbance activities” and “an earth disturbance activity” throughout section.(1187)

Response: The Department does not believe that the recommended revisions are necessary or provide additional clarity.

26. **Comment:** If the proposed amendments to 25 Pa. Code Chapter 102 are not modified to exempt from permitting railroad activities that fall within the purview of the exclusive jurisdiction of the STB, the EQB will intrude into areas specifically reserved for the STB and run afoul of the preemption provisions of ICCTA. We suggest (without waiver of the positions presented herein) at a minimum that the exclusion for maintenance activities contained in the federal regulations under the Clean Water Act discussed above be added to the proposed regulations and/or the proposed regulations be modified to place railroad maintenance activities on the same footing as road maintenance activities (without the requirement to obtain an E&S Permit for earth disturbances of 25 acres or more). This latter outcome can be accomplished by modifying the definition of "road maintenance activities" set forth in 25 Pa. Code § 102.1 to specifically include "railroad roadbed and right-of-way maintenance and repair, culvert clean out, and ditching activities, including activities to maintain hydraulic capacity" within the activities enumerated in the definition and striking the phrase "or road maintenance activities" in 25 Pa. Code § 102.5(b) (proposed). (1256)

Response: Railroad maintenance activities have been added to the revised definition of “road maintenance activities” in 25 Pa. Code § 102.1. “Road maintenance activities” remains in 25 Pa. Code § 102.5(b). Whether some activities regulated under this Chapter may be preempted

and fall within the jurisdiction of the STB when undertaken by a railroad, will be determined on a case-by-case basis and does not require further revision of the regulation.

27. **Comment:** Section 102.5 (b) Is an E&S Plan also required with the E&S Permit? If so, it should be stated here. (1268)

Response: Requirements for an E& S plan are included in 102.4(b).

28. **Comment:** Section 102.5 (c) What is the distinction between an E&S permit, a NPDES permit, and an E&S Plan? This provision does not comply with 40 C.F.R. Part 122.26(c)(1)(iii). Discharges from small construction activity at oil and gas sites that include reportable quantities or contribute to WQS violations should be required to have permits. (1268)

Response: The Chapter 102 regulations for earth disturbance activities, other than agricultural plowing and tilling and animal heavy use areas, provide a tiered approach to management of the related stormwater discharges, based upon area of disturbance triggers. Under Section 102.4(b)(1) all earth disturbance activities require BMPs regardless of the area of disturbance. Under Section 102.4(b)(2) all of the following earth disturbance activities shall develop a written Erosion and Sediment Control Plan: 1) where the earth disturbance activity will result in a total earth disturbance of 5,000 square feet (464.5 square meters) or more; 2) the person proposing the earth disturbance activities is required to develop an Erosion and Sediment Control Plan pursuant to this chapter under Department regulations other than those contained in this chapter, or 3) the earth disturbance activity, because of its proximity to existing drainage features or patterns, has the potential to discharge to a water classified as a High Quality or Exceptional Value water pursuant to Chapter 93 (relating to water quality standards). When the earth disturbance activity involves one acre or more of earth disturbance activity, and is not exempt from the NPDES requirements, an NPDES permit is required. If the activities are exempt under the federal regulations, they may trigger a state E&S Permit at certain acreage thresholds, as set forth in 102.5. To comply with permit requirements, whether NPDES or E&S, the permittee must utilize BMPS and the written E&S plans described above. The Department agrees that exempt activities with reportable quantities or which contribute to water quality standards violations, do require an NPDES permit as provided in the federal regulations which are incorporated by reference by 25 Pa. Code Chapter 92.

29. **Comment:** Suggest that DEP add the words "oil and gas activities" to §102.5(d) to state: "Other than agricultural plowing or tilling activities, animal heavy use areas, timber harvesting activities, road maintenance activities, or oil and gas activities, a person conducting" (1241)

Response: The Department disagrees, and has not revised 102.5(d) as suggested since these activities are cross referenced by including subsection (c).

30. **Comment:** Section 102.5(e) Does the term "permit" in this section include an E&S Permit or only a NPDES Permit? (1123)

Response: It includes any permit under this Chapter which includes both an E&S Permit and a NPDES Permit.

31. **Comment:** Section 102.5e Clarify - A pre-construction meeting would not be required if 0.90 acres of disturbance is proposed, since an NPDES permit would not be required, although an E&S Plan would need to be approved. Certain conservation districts require pre-construction meetings even for projects that do not require a NPDES permit. (1123)

Response: The commentator is correct that if a permit is not required then a preconstruction meeting is not required. It is important to note that conservation districts may request a preconstruction meeting even though the Department is not requiring one.

32. **Comment:** 102.5(e) The Proposed Rulemaking requires a preconstruction meeting for all permitted activities. PennFuture strongly supports such meetings, which should help to identify and resolve any misunderstandings between the regulators and the regulated before those misunderstandings lead to violations and impacts to nearby residents and natural resources. The Proposed Rulemaking also requires a presubmission meeting for persons seeking coverage under the proposed permit-by- rule (PBR). PennFuture also supports these meetings, which should help not only to ensure that projects will appropriately protect natural resources, but also to expedite the permitting process by identifying and resolving issues before a registration of coverage (ROC) is submitted. PennFuture urges the Department to consider expanding this requirement to all permitted activities, rather than just those seeking coverage under the PBR. (1191)

Response: The Department strongly encourages the applicant to request a pre-submission meetings with the conservation district or the Department, however disagrees that this should be a regulatory requirement. The proposed permit-by- rule section (102.15) has been deleted from the final rulemaking.

33. **Comment:** 102.5 (f) - The language should be modified to clarify that the applicant can transfer the responsibility of long term operation and maintenance of the PCSM Plan to an appropriate steward, such as a home owners association, a municipality, a home owner, etc. Requiring a permittee to be responsible in perpetuity is unreasonable. (695)

Response: Chapter 102.8(m) of the rulemaking requires implementation and allows the permittee to transfer long term operation and maintenance responsibility to another person when that person agrees to be responsible for the long term operation and maintenance.

34. **Comment:** Section 102.5(f) This refers to a "person proposing earth disturbance activities" as responsible for implementation and long-term O&M of the PCSM plan. Should this refer instead to the "permittee," as the term "person" has a clear definition? Once the issue of who has to get a permit or who is on a registration of coverage is resolved, all of these should read "permittee." There is no definition of "permittee" or "registrant" in the draft, but it does use "person." The draft needs to use definitions consistently, and once again, it must be clear that the builder and/or developer can transfer responsibility for long-term operation and maintenance once he has no further connection to a project. (1264, 1291)

Response: The Department has clarified the final rulemaking by eliminating the reference to long term operation and maintenance from 102.5(f). Use of the term "person" is consistent

with the remainder of the proposed rulemaking. Chapter 102.8(m) of the rulemaking requiring implementation and allows the landowner to transfer long term operation and maintenance responsibility to a different person.

35. **Comment:** Revise Section 102.5(f) to read “...shall be responsible to ensure development, implementation...” (1268)

Response: The Department acknowledges the comment, but disagrees with the addition. Development is implied and necessary prior to implementation.

36. **Comment:** FirstEnergy seeks language to provide flexibility both in determining whether Implementation and maintenance of PCSM BMPs is warranted and in identifying a responsible party. Utility projects that are multi-mile and linear in scope necessarily run across or through consecutive properties owned by different landowners. The permittee likely does not own the property and may not be the party responsible for maintenance or have control over how the property within the easement or right-of-way is used by the landowner. Thus, flexibility and communication between the permittee and the Department on a case-by-case basis is necessary to determine both the need for PCSM BMPs on a particular project and the party responsible for long-term operation and maintenance of PCSM BMPs. Adding the language "if necessary" to the end of proposed 102.5(f) should provide the requested flexibility, in part. Additionally, providing language in proposed Section 102.8(m) which acknowledges the unique position of the regulated utility industry, and provides for the naming of a responsible party in cooperation with the Department, without necessarily requiring the deed restriction will provide flexibility and a practical solution to this issue. (1115)

Response: The Department recognizes the unique nature of linear projects and as made appropriate revisions to Section 102.8(m). No revision is needed to 102.5(f).

37. **Comment:** More than 7 days notice prior to commencement of construction is necessary to allow for the preconstruction meeting required under Section 102.5(e). While we believe that requiring a preconstruction meeting is a good idea, the minimum 7 day notice requirement is too short. Given current conservation district and DEP staffing concerns and the workload of E&S and stormwater program staff, it is unreasonable to assume a meeting can be scheduled and familiarity with the plans can occur within such a timeframe. A 10 business day minimum is more realistic; 15 days is reasonable and appropriate. (1257)

Response: This requirement has not been changed from the existing regulations. The department believes the minimum 7 day notice is adequate.

38. **Comment:** Regulations must apply to oil and gas developers as well. They should receive no preferential treatment in the permit review process. (1299, 1310)

Response: Federal requirements exempt oil and gas activities from NPDES permits, however, these activities are required to comply with E&S and PCSM requirements. Additionally, oil and gas activities that exceed 5 acres require coverage under a state E&S permit.

39. **Comment:** Section 102.5(c) could be read to include oil and gas delivery to utility customers in a provision that appears to be meant for oil and gas exploration and production activities. The regulations should be clear that distribution activities are not included in the requirement. (1301)

Response: The definition of “oil and gas activities” provides clarity.

40. **Comment:** PECO already manages stormwater during construction activities using Best management practices (“BMPs”) (See Prop. Rule 102.2) However, it is unclear which BMPs may now constitute anti-degradation best available combination of technologies (“ABACT”). The regulation must clearly indicate what BMPs constitute ABACT. Further, in defining BMPs, the use of the term “restore” raises issues of extreme concern to utilities. Restoration implies attaining a pre-defined standard and presumes water quality testing to determine what the current standard is relative to this pre-defined standard or benchmark. For any particular stream segment at issue, there is generally no benchmark for the quality of the water entering that stream segment. Additionally, utilities do not have control over what is occurring upstream. This leaves utilities in a precarious position and allows anyone to insist that the utility bring a stream segment up to standard simply because it crosses a ROW even though the degraded water quality is due to some other upstream source. These concerns are only enhanced by the inclusion of temperature in determining whether a water segment has been degraded. Section 102.5(c) could be read to include oil and gas delivery to utility customers in a provision that appears to be meant for oil and gas exploration and production activities. The regulations should be clear that distribution activities are not included in the requirement. (1262)

Response: The Department has included clarifications in the final rulemaking that should address many of these comments. The Department notes further that the regulation provides flexibility and any BMP may be utilized that achieves the ABACT and nondischarge alternative BMP performance standard provided in the definition of those terms. The final regulation also references BMP guidance documents that will include more detail and specificity regarding the types of BMPs and their specifications that should meet the antidegradation performance standards.

41. **Comment:** §102.5(a). Suggest this section be expanded to identify and explain the differences of an individual NPDES Permit, general NPDES Permit and NPDES Permit-by-rule for Stormwater Discharges Associated with Construction Activities. What criteria will the Department use to require a person to obtain these three types of permits? This should clearly be identified in the first section of this requirement or in §102.1 Definitions. Additionally, this section needs to be expanded to codify the Department’s “Permit Guidelines for Phased NPDES Stormwater Discharges Associated with Construction Activities”, Document No. 363-2134-013, dated March 29, 2003. This document provides guidelines allowing an owner to present multiple phases for review in one common submission; saving the owner’s submission and the agencies’ review efforts. (944, 1204)

Response: The permit-by-rule has been deleted from the regulations. Comments related to Department policy are beyond the scope of the comment and response document related to the

Chapter 102 regulations. Information on determining the type of NPDES permit (general or individual) is included in the NPDES application instructions. Information on the phased permit policy is available on the Department website.

42. **Comment:** 102.5(a)(3) - This section should clarify that meeting the antidegradation requirements of Chapter 93 should only be required for existing discharges from an Individual NPDES Permit site if earthmoving activities are proposed within the drainage area of the existing point discharge. Permittees should not be required to construct permanent antidegradation BMPs in drainage areas where no earthmoving is proposed. (1129)

Response: The requirements of this rulemaking apply to E&S control and PCSM associated with earth disturbance activities. Antidegradation requirements apply to all activities regulated under the Chapter.

43. **Comment:** 102.5(3)(d) conflicts with 102.5(3)(i). Section i states that an E&S permit is not required for Section 404 permitted activities however section d states that an E&S permit is required. (218)

Response: The Department disagrees. Subsection (i) only relates to activities associated with dredge and fill activities.

44. **Comment:** §102.5(e) For earth disturbance activities authorized by a permit under this chapter, a preconstruction meeting is required unless the permittee has been notified otherwise in writing by the Department or conservation district. We request that the rule specify that in most cases a preconstruction meeting will not be required. The PA DEP should specify the conditions under which a preconstruction meeting may be held. Any preconstruction meeting should be held at the nearest PADEP Bureau of Oil and Gas Management office or the local Conservation District office. The Bureau of Oil and Gas personnel and the Conservation Districts are most familiar with our activities and construction practices and are normally involved with the preconstruction activities. Their participation in this role continues to be appropriate and beneficial and should continue as currently managed with these offices both scheduling and participating in preconstruction meetings at their discretion. (691, 1124, 1152, 1250) If this requirement is not changed to allow for the discretion of the Department with oversight responsibilities, Dominion asks that provisions be made in the rule for those occasions when a Department representative is unable to attend the preconstruction meeting although the required notifications have been made in a timely fashion. (1152)

Response: The Department has maintained the requirement for a preconstruction meeting in the final rule to ensure that the persons responsible for the activities have an understanding of the plans approved for the project. The Department has provided a provision in the rule for the Department or conservation district to notify the permittee that a pre-construction meeting is required or not. Additional clarification was provided by requiring the permittee to invite the Department or conservation district to attend the preconstruction meeting and requiring at least seven days notice of the preconstruction meeting to all invited attendees. The proposed language was retained requiring the Department or conservation district to provide written notice to the permittee that a preconstruction meeting will not be required.

45. **Comment:** 102.5(e) requires preconstruction meetings unless the permittee has been notified otherwise in writing by DEP or the conservation district. Mandatory attendance for all projects at preconstruction meetings by DEP or conservation district personnel ("must attend ... along with the Department or conservation district") will overload the (DEP and conservation district) staff and cause construction contract delay claims due to scheduling conflicts. PennDOT requests that this language be changed to require that DEP and the conservation districts will be invited to the meetings, but they are not required to attend. PennDOT does not want projects delayed due to the unavailability of DEP or conservation district personnel. The following revision to the language is requested to address this comment: (e) For earth disturbance activities authorized by a permit under this chapter, a preconstruction meeting is required unless the permittee has been notified otherwise in writing by the Department or conservation district. The Permittee(s), co-permittee(s), operator(s), and licensed professional or designee responsible for critical stages of construction must attend a preconstruction meeting. The permittee must invite the Department and conservation district to attend the preconstruction meeting and must provide reasonable notice of the preconstruction meeting. The permittee must contact the Department or conservation district at least 7 days but not more than 30 days prior to the commencement of construction. (708, 1114)

Response: The Department has clarified the final rulemaking. The Department has maintained the requirement for a preconstruction meeting in the final rule to ensure that the persons responsible for the activities have an understanding of the plans approved for the project. The Department has provided a provision in the rule for the Department or conservation district to notify the permittee that a pre-construction meeting is required or not. Additional clarification was provided by requiring the permittee to invite the Department or conservation district to attend the preconstruction meeting and requiring at least seven days notice of the preconstruction meeting to all invited attendees. The proposed language was retained requiring the Department or conservation district to provide written notice to the permittee that a preconstruction meeting will not be required.

46. **Comment:** This may require a licensed professional to inspect and monitor the work done by another individual. (1141)

Response: The Department agrees. The licensed professional or their designee overseeing critical stages of construction of the PCSM plan conducted by a contractor, developer or other entity conducting the earth disturbance activities could be providing oversight of another designer's work.

47. **Comment:** An overall comment is that a mandatory review meeting with the conservation district must occur before any and all erosion and sediment applications are submitted to outline environmental expectations and requirements. Detailed work should not be necessary at the pre-application meeting, but supporting documentation should be available for review. Additionally an engineering review should be delegated to conservation district that has an engineer on staff. (640)

Response: The Department agrees that a pre-application meeting is generally useful, especially on complicated or complex projects, but disagrees that it should be required for all applications.

48. **Comment:** 102.5(3)(e) - YCCD welcomes the requirement for a preconstruction meeting for permitted activities. YCCD would further strongly recommend that a pre-application or pre-submission meeting be required for all permitted activities not just for the NPDES permit-by-rule. On-site pre-application meetings are preferred and ensure both the conservation district and the plan preparer visits the site and see it first hand. Pre-application meetings are a proactive approach that allows potential issues to be anticipated and resolved before the client incurs significant costs addressing deficiencies found during the plan review process. (218)

Response: The Department agrees that a pre-application meeting is generally useful, especially on complicated or complex projects, but disagrees that it should be required for all applications. The permit-by-rule section of this rulemaking has been deleted.

49. **Comment:** 102.5 (e) "For earth disturbance activities authorized by a permit under this chapter.. ." we would recommend adding language that would require operators be added to the permit as a co-permittee prior to the pre-construction meeting. (947)

Response: Some co-permittees are known at that time and some are identified later in the development process. If it is known that someone is going to be a co-permittee, it would be useful for them to take part in the process at this time.

50. **Comment:** 102.5 (j)- This section should be moved into the appropriate section of 102.4 as it relates to agriculture. (947)

Response: This section addresses permits and is the appropriate location for this requirement.

51. **Comment:** Chapter 102.4, Section 102.5(g) and Chapter 102.8. Requests a clarification if an E&S Control permit is required for an activity like mining that is already regulated and permitted for E&S by another DEP program. (1265)

Response: If the mining activity has been approved under a Department permit and complies with Chapters 92 and 102 then no additional permit under this Chapter is needed.

52. **Comment:** 102.5 (g) You cannot use another State permit which is not part of the State approved program to avoid an NPDES permit requirement. (1268)

Response: The reference in 102.5 (g) is an existing requirement, and is not intended to avoid an NPDES permit requirement. The requirements are to comply with both Chapter 92 and 102 when these requirements are included in other Department regulations and permit requirements that are reviewed for other permit applications. The other Department permit provides sufficient authorization, therefore a separate authorization under permits identified in this rule are not necessary – Some examples include mining and waste management permits.

53. **Comment:** Revise 102.5 (h) to read: Operators who are not the permittee shall be co-permittees apply for permit coverage on a form provided by the Department. (693)

Response: The Department does not agree with the recommended change. This section just identifies the proper relationship of operators on the project.

54. **Comment:** 102.5 (h) Will co-permittees be responsible for implementing the E&S plan? (1268)

Response: Yes, as an operator as defined by this rulemaking, co-permittees have a role in project oversight or BMP implementation and maintenance.

55. **Comment:** 102.5 (i) - If an applicant is required to obtain Section 404 Permit and a Water Obstruction and Encroachment Permit, does this section mean that an E&S approval and NPDES Permit is not required to be obtained? An example would be a bridge replacement project. (1123)

Response: The E&S approval would be obtained during the review of the Water Obstruction and Encroachment Permit since an E&S Plan is a required part of that application – a separate NPDES permit would not be required. Section 102.5(i) of the proposed rulemaking added a new subsection providing that a separate NPDES Permit for Stormwater Discharges Associated with Construction Activities is not required for activities covered by a Clean Water Act §404 dredge and fill permit. When an activity is authorized under Chapter 404 of the Clean Water Act for example, that activity does not require a separate E&S or NPDES permit for the activity covered by the 404 permit so long as the project is a single and complete project, includes an E&S Plan meeting the requirements of this Chapter and the earth disturbance work does not exceed the footprint of the activities authorized by the 404 permit. In addition, the E&S plan would also be approved as part of the 401 water quality certification. Any other activities would need E&S or NPDES permit coverage. No revisions to this subsection in the final-form rulemaking were necessary.

56. **Comment:** 102.5 (i) A 404 permit is not a 402 permit. A 404 permit can only authorize discharges of dredged or fill materials; a person conducting an earth disturbance activity requires a 402 permit for discharges of stormwater. (1268)

Response: The Department agrees, a 404 permit is not a 402 permit.

57. **Comment:** 102.5 (j) Why is this exclusion included? (1268)

Response: This confirms that agricultural plowing and tilling activities and animal heavy use areas regulated by this rulemaking do not require permit coverage. This does not exempt these activities from the requirement for an E&S Plan that implements and maintains BMPs as identified in Chapter 102.4(a).

58. **Comment:** 102.5 (k) What does this mean? (1268)

Response: Persons proposing earth disturbances but do not meet the permit thresholds would still be required to meet other appropriate requirements of this Chapter, such as developing and implementing a plan to control erosion and sedimentation.

59. **Comment:** Eliminate the loophole requiring a point source for projects between 1 and 5 acres. Prefer an exemption for single-family lot with maximum disturbance of 2 acres. (2)

Response: The requirement for point source discharge to surface waters with a disturbance of 1-5 acres has been removed from the rulemaking.

60. **Comment:** A person proposing industrial wind activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project shall obtain an E & S Permit under this chapter prior to commencing the earth disturbance activity. (6)

Response: An industrial wind activity is an earth disturbance activity; therefore it must comply with the proposed rulemaking.

61. **Comment:** A person proposing earth disturbance on any portion, part, or during any stage of a larger common plan of development sale that involves equal or greater than 1 acre and less than 5 acres shall obtain an individual NPDES Permit. An E&S Permit is already required for this type of project upgrading to an NPDES permit will add undue costs to small subdivisions and land developers. In addition to the excessive NPDES fees, hiring a licensed consultant to prepare the required plans, complete the additional applications, permitting these activities, and then monitoring the construction, will add substantial cost. (8)

Response: There is currently no "E&S permit" requirement under the existing regulations for projects less than 5 acres, although, E&S Plans are required. The revision to Section 102.5(a) is a codification of the federal NPDES regulations under the Clean Water Act, and is a clarification of NPDES "Phase II" permit requirement DEP has implemented since 2002.

62. **Comment:** There should be no E&S Permits issued for disturbances within 150 feet of streams, except in exceptional cases. (1253)

Response: The Department does not agree with the commentator's recommendation.

63. **Comment:** It is unclear in this section and others as to the exact permit requirements for road maintenance activities. Every year, thousands of miles of rural roadside ditches are scraped to maintain drainages without any form of E&S planning or controls. Is this another example of DEP looking the other way where significant releases of sediments and other pollutants are released directly into Commonwealth waterways? (9)

Response: Section 102.5(b) requires an E&S permit for road maintenance activities involved in 25 acres or more of earth disturbance.

64. **Comment:** Should not the coverage provided under the Chapter 105 Regulations (permits) be included in this paragraph? It is a joint state/federal permitting program. (9)

Response: No, the Chapter 105 permitting program utilizes a joint state/federal permit application process; however separate authorizations are provided meeting the requirements of either Chapter 105 or Section 404.

65. **Comment:** Commercial and residential projects approved or in construction minimal activity recently. Many of these approved projects will need to have their NPDES permits renewed to address new policy revisions. Require developers to modify their plans in mid-construction, adding costs and additional infrastructure that they simply cannot absorb. At the same time, the potential reduction in the number of units or total square footage from a project will eliminate a significant amount of asset value of the property. (1233)

Response: The Department disagrees that this rulemaking will require developers who have valid permit coverage to modify their plans in mid-construction. At the time a permit extension is required, the Department or conservation district would consider the progress of the project during the review of the permit extension request. In addition, the Department has included a "grandfathering" provision for NPDES permit renewals in Section 102.8(a).

66. **Comment:** The revisions do not address procedures for renewing NPDES permits. Many residential projects have NPDES permits that will expire prior to their completion due to the housing slump. Most of these projects have all the infrastructure in place with exception to the wearing course on the roads. *A consistent renewal process should be established.* It would seem reasonable and in the best interest of water quality to review the existing BMP's at the site and if they are well established and functioning correctly to simply extend the permit. This could be accomplished by a site inspection and review of any current violation notices by the local conservation district. A fee to accomplish this could be established. (1235)

Response: Procedures for renewing NPDES permits is established in the Department's Chapter 92 regulations. At the time a permit extension is required, the Department or conservation district would consider the progress of the project during the review of the permit extension request. In addition, the Department has included a "grandfathering" provision for NPDES permit renewals in Section 102.8(a).

67. **Comment:** As we interpret the proposed regulation, renewals of existing NPDES permits would need to meet the requirements included in the new proposal. This would be an extraordinarily difficult and costly challenge for existing permit holders, many of which have installed utilities, roads, curbing, and the like based on the terms of their current permit. We strongly suggest that the Department revise the proposed regulation in order to ensure that this outcome is not a consequence of its revision of Chapter 102. (1256, 1264, 1291, 1323)

Response: The Department generally agrees that this rulemaking will not require persons currently undertaking earth disturbance activities will be required to modify their plans. Exceptions to this would include where a person conducting the activity may be in violation; permit coverage has expired or water quality standards including effluent limitation guidelines

and standards are required to be met. At the time a permit extension is required, the Department or conservation district would consider the progress of the project during the review of the permit extension request. In addition, the Department has included a “grandfathering” provision for NPDES permit renewals in Section 102.8(a).

68. **Comment:** Added statement requiring conservation districts to consult with the Department: Appreciate the additional guidance however concerned that this will become an excuse to extend permitting timeframes. The notice of termination acknowledgement is already greatly abused. Repeatedly see conservation districts holding the NOT over developers' heads to get things that are not required, like installation of additional post construction BMPs. As written, the Department has no incentive to issue a NOT. They essentially have someone on the hook to operate or pay violations for not operating the BMP until the permit expires. Recommend that a specific timeframe from this submission of the NOT be included.(1234)

Response: Prior to the issuance of an NOT, the Department or conservation district need to ensure the site is in compliance with their permit requirements. A provision has been added to Section 102.7 requiring the Department or conservation district to conduct an inspection and to approve or deny the Notice of Termination within thirty (30) days.

69. **Comment:** The term minimize is used throughout the regulations: Who determines when this is met? Minimized impervious is no impervious. Potential to use this as another reason to try to deny permits. Recommend that numerical numbers be established. (1234)

Response: The term minimize is used in its common usage and historically in Chapter 102. It is the person responsible for the earth disturbance activity to demonstrate that impervious surfaces are reduced in extent, size or amount that will still provide water quality protection.

70. **Comment:** Sec. 102.5 Permit Requirements: Since forestry and timber harvesting involve limited and temporary earth disturbance and do not result in a change in land use, *these activities should be exempt from the requirements for a PCSM plan*, which involves long-term maintenance of constructed stormwater management facilities. (1221)

Response: Forestry and timber harvesting that disturb 25 acres or greater and require an E&S permit would require a PCSM plan to compensate for any change in stormwater runoff as a result of the activity. However, where a site is fully restored or reclaimed, the obligation for long term PCSM operation and maintenance may not be required.

71. **Comment:** It is only reasonable to conclude that these documents will be subject to continuing and increased review and discussion by the Regulatory Community. Very simple administrative changes to these document and to implementation policy and guidelines can raise all timber harvesting, and thereby **forestry**, to the permit level. It is *presently unclear to the regulated community that a permit will not be required for all timber harvesting under the proposed rule making*. (1215, 1305)

Response: Section 102.5(b) requires an E&S permit for timber harvesting activities that involve greater than 25 acres of earth disturbance.

72. **Comment:** Lowering of 25 acre threshold for E&S permit: During the public hearing process, a number of individuals and environmental groups have suggested that timber harvest and road activities should be required to obtain an E&S permit upon the disturbance of five acres, rather than the current 25 acres of disturbance. The rationale for this recommendation has been simplistic – that other activities require a permit for 5 acre impacts, and so should timber harvesting. *We disagree with this opinion and recommend that timber harvesting and road maintenance activities continue to be permitted upon disturbance of 25 acres.* Unlike other activities, timber harvesting is a temporary disturbance, which does not change land use. Residual stumps from harvested trees continue to provide erosion control. The linear nature of logging road disturbance offers greater area interface with the existing remaining vegetation, compared to more permanent and concentrated development activities. The strongest argument for the status quo is the historic results, which show timber harvesting to be a negligible contributor toward water impairment in the state. *Lowering the threshold would create a burden for both the timber industry and the Department without creating a substantial return* (1170, 1176, 1186, 1202, 1221, 1287)

Response: The Department disagrees that the permit threshold should be reduced to 5 acres.

73. **Comment:** The acreage threshold for permitting requirements for timber harvesting and road maintenance activities should be revised from 25 acres to 5 acres. Timber harvesting and road maintenance activities of 25 acres can result in significant amounts of earth disturbance and potential for erosion and stormwater runoff. The threshold should be revised to be 5 acres or greater, so that regulation of these projects is captured and consistency with other regulated sectors is achieved. (646, 833, 1131, 1249, 1257, 1286, 1293, 1302, 1309, 1310)

Response: The Department disagrees that the permit threshold should be reduced to 5 acres.

74. **Comment:** Timber harvesting activities are defined in existing Chapter 102 definitions as having a much more expansive application to timber harvesting and forestry than the existing Timber Harvesting Packet, which includes Erosion, Sedimentation Control Plan for a Timber Harvesting Operation, number 3930-Forest Management-WMO155, Revised 7/2004. And the Timber Harvest Operations Field Guide for Waterways, Wetlands and Erosion Control presently provides. It is only reasonable to conclude that these documents will be subject to continuing increased review and discussion by the regulatory community. Very simple administrative changes in these documents and to implementation policy and guidelines can raise all timber harvesting and thereby forestry to the permit level. It is presently unclear to the regulated community that the permit will not be required for all timber harvesting under the proposed rule making. (1294)

Response: The Department would clarify that the permitting requirements for timber harvesting activities has not changed.

75. **Comment:** What strikes me through my personal experience is the failure of this regulation, draft regulation, and other regulations of the DEP is to include the banning of those companies whose experience and record in earth moving has led to violations as validated by inspection records that show repeated actions of noncompliance with EMS guidelines as they presently stand. In other words, people who are serial violators. (1307)

Response: The Clean Streams Law gives enforcement authority to the Department or conservation districts for activities in violation of this rulemaking. The Department or conservation district will also conduct investigations based on public complaints.

76. **Comment:** 102.5(g) states that a person conducting an earth disturbance activity under a DEP permit issued under a chapter other than Chapter 92 does not need to obtain an additional E&S permit or NPDES permit for stormwater discharges associated with construction activities. PennDOT requests that this be clarified by providing the specific chapters under which such a permit would be issued. PennDOT also requests clarification on the application of this section to its projects. If a bridge replacement project requires a Chapter 105 permit does that mean that a separate E&S permit or NPDES permit is not required under the regulations? If a separate E&S or NPDES permit is required, explain the reasons for requiring the separate permit and the areas included in the permit area. (708, 1114)

Response: The Department has not revised the rulemaking as recommended. If a permit that requires compliance with both Chapter 92 and 102 is issued for a project, then that project would not need to obtain the additional NPDES or E&S Permit. An example would be a mining or waste management permit. The activities covered by these permits would not need additional coverage, although any activities outside the mining or waste area not permitted may need to be covered by a separate NPDES or E&S Permit under this Chapter. When an activity is authorized under Chapter 404 of the Clean Water Act for example, that activity does not require a separate E&S or NPDES permit for the activity covered by the 404 permit so long as the project is a single and complete project, includes an E&S Plan meeting the requirements of this Chapter and the earth disturbance work does not exceed the footprint of the activities authorized by the 404 permit. In addition, the E&S plan would also be approved as part of the 401 water quality certification. Any other activities would need E&S or NPDES permit coverage.

77. **Comment:** 102.5(h) should read as follows: Operators who are not the permittee shall be co-permittees **after acknowledgement of a co-permittee agreement by the Department or conservation district.** (1208)

Response: Some co-permittees are known at that time and some are identified later in the development process. This section just identifies the proper relationship of operators on the project.

78. **Comment:** 102.5(i) provides that if the activity (associated with discharging dredged or fill material) requires a permit pursuant to Section 404 of the Clean Water Act, there is no need to obtain an additional E&S or NPDES permit for stormwater discharges associated with construction activities for the area of disturbance covered by the Section 404 permit. First and

foremost, PennDOT supports this provision. Second, PennDOT requests the following clarifications on the application of this section to its projects:

- (a) Projects involving only the replacement of an existing bridge with incidental approach work require Section 404 permits. Would these projects not require an additional E&S or NPDES permit under this section? If these projects would require a NPDES permit, explain the reasons for requiring the separate permit and the areas included in the permit area.
- (b) If an NPDES permit is not required under this section of the regulations, would a bridge crossing project in an EV watershed be required to satisfy the forested riparian buffer requirements contained in Section 102.14?
- (c) For a bridge project that also involves other improvements, e.g., intersection improvements, realignment of the existing road to straighten out a road or widening of the footprint for a stretch of the roadway that includes the area of the bridge replacement, if the bridge replacement portion of the project requires a Section 404 permit, would that area of the project involving the bridge replacement and the areas incidental to the bridge replacements, e.g., the approaches, be excluded from the NPDES or E&S permit area, i.e., not included in the disturbed areas under either of these permits.
- (d) If the area related to the stream crossing of a larger project located in an EV watershed is excluded from the permit area under this section, would that area be subject to the forested riparian buffer requirements contained in Section 102.14? (708, 1114)

Response: The Department appreciates the support. In response for clarification the Department offers the following:

- (a) No, so long as the project is a single and complete project and all approach work, staging areas, etc. are considered incidental to the 404 activity. An E&S Plan will be required to be approved as part of the 401(c) water quality certification. Additionally, the Department is developing guidance to address 404 permit projects.
- (b) No – only activities that require either an E&S permit or an NPDES permit for stormwater discharges associated with construction activities would need to comply with the riparian buffer provisions of the rulemaking.
- (c) No, that would not be a single and complete project covered under 404. The entire project site would now be covered by the E&S permit or NPDES permit for discharges associated with contractor activity.
- (d) Yes. Several variances have been added for riparian forest buffers. The project may require protection or establishment of a riparian buffer. The specifics of a project would have to be evaluated.

An activity that is covered by another permit issued under Chapter 404 of the Clean water Act, such as a Chapter 105 permit, does not require an additional E&S or NPDES permit only for the activity covered by that other permit. In the case of a Chapter 105 permit, that would be the area within the watercourse, floodway or body of water. In addition, an E&S plan would need to be approved as part of the 401 water quality certification. Any other activities would need additional E&S or NPDES coverage. Section 102.14(a) has been revised to allow exceptions and waivers for certain activities.

79. **Comment:** The permits are still only good for 5 years, but when renewed the remaining portion that is undisturbed will be required to comply with the most current BMP regulations. No argument, however, while some projects shouldn't be "grandfathered" indefinitely, I fear acceptance of this rule may be used incorrectly to kill a project that should be otherwise approvable, just to persecute a developer. (16)

Response: The Department generally agrees that this rulemaking will not require persons currently undertaking earth disturbance activities will be required to modify their plans. Exceptions to this would include where a person conducting the activity may be in violation; permit coverage has expired or water quality standards including effluent limitation guidelines and standards are required to be met. At the time a permit extension is required, the Department or conservation district would consider the progress of the project during the review of the permit extension request. In addition, the Department has included a "grandfathering" provision for NPDES permit renewals in Section 102.8(a).

80. **Comment:** As currently drafted, the proposed permit and permit-by-rule processes would be of little or no utility for the oil and gas industry. Oil and gas construction activities are significantly different from other types of construction projects and are expressly regulated under the Oil and Gas Act. However, to improve upon the current program, the PADEP should create a general permit program solely for such activities. (1184, 1250, 1252)

Response: The final rule contains specific authority in 102.5 for the Department to issue general permits. The Department is reviewing the Key Elements of a Categorical General Permit for Earth Disturbance Activities Associated with Oil and Gas Development submitted by the Marcellus Shale Committee. The permit-by-rule (102.15) requirement has been deleted from the rulemaking.

102.6 Permit Application and Fees

1. **Comment:** Section 102.6. Permit application and fees. - Economic impact; Reasonableness; Need; Clarity. *Pennsylvania Natural Diversity Inventory* Paragraph (a) (2) is amended to replace the Pennsylvania Natural Diversity Inventory (PNDI) with the Pennsylvania Natural Heritage Program (PNHP). The EQB should explain why this amendment was made and why the PNHP is the best resource for this information. (1322-IRRC)

Response: As part of a recent strategic planning session, the program evaluated its effectiveness in contributing information and expertise to the effort of conserving the States native biological diversity. The program changed the name from the Pennsylvania Natural Diversity Inventory (PNDI) to the Pennsylvania Natural Heritage Program (PNHP). The purpose of the program is to provide current, reliable, objective information to help inform environmental decisions.

2. **Comment:** *PPC Plan (Preparedness, Prevention and Contingency Plan)* Paragraph (a)(3) requires "a person...to prepare and implement a PPC plan...." The Department of Transportation commented that PPC Plans are prepared and implemented by contractors and not the person proposing the activity by a permit application. The Department of Transportation asked for an amendment stating the PPC Plan is a condition of the permit rather than a permit application requirement. We recommend that the EQB clarify this paragraph. (1322-IRRC)

Response: The Department agrees and for clarity purposes we have moved Section 102.6 (a)(3) to Section 102.5.

3. **Comment:** *Permit fees* Commentators subject to these fees commented that the fees are excessive, particularly compared to the current fees. The Department of Transportation requested an exemption as the proposed fees would impose an estimated cost of \$300,000 to \$500,000 per year. Several legislators also commented that the fees may be excessive. A commentator also requested a multi-level fee structure that matches the fee to the size of the project. The EQB should explain how it calculated the fees in Subsection (b) and why they are appropriate. (1322-IRRC)

Response: In Section 102.6(b) of the proposed rule new language was added that identified specific permit fees for the various general and individual permits required under this Chapter. Section 102.6 (b)(4) exempts federal or state agencies or independent state commissions that have a mutual agreement with the Department from payment of fees. In addition, the Department has revised the fee structure to a tiered approach where smaller earth disturbances would pay a smaller fee. As a matter of current practice no state agencies, including DOT pays permit fees, however future budgets may not allow this practice to continue. The Department of Transportation regulatory exemption request is not appropriate because the Department and conservation districts expend considerable resources in the review of DOT projects.

4. **Comment:** *Complete applications or NOI (Notice Of Intent)* Paragraph (c)(2) does not state how long DEP may take to make its determination and send notification. We note that this

same provision only allows 60 days for the applicant to make an application complete. We recommend requiring DEP to determine that an application is complete within a specified timeframe. We also recommend that the regulation specify what happens if DEP does not meet that timeframe. Additionally, Paragraph (c)(2) only allows DEP to determine an application or NOI is incomplete. Can this function also be performed by a conservation district? (1322-IRRC)

Response: The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe. The Department's administrative completeness review is set at 20 days within the moneyback guarantee program. The Department has had an ongoing problem with applicants not responding to requests for additional information. In the past this has led to applications being open or under review for an undetermined period of time. Adding this to the regulation allows the Department to close a permit application after 60 days of non-response by the applicant. If an applicant needs additional time to provide the requested information, the rulemaking allows for a request of extension. Additionally, the Department agrees that the conservation districts perform this function and Section 102.6(c)(2) has been revised accordingly.

5. **Comment:** Regulations should be strengthened by having an analysis of earthmoving violations and excluding those with a history on non-compliance from obtaining permits or doing construction on permitted sites. (1253)

Response: A compliance history is part of the NPDES application. If there is a history of noncompliance, permits can be held until compliance is achieved. Further, this requirement is already established under the Clean Streams Law and permit conditions, therefore it is not necessary to place it in the final rule.

6. **Comment:** Increasing the application review fees to reflect the actual cost of review is reasonable, but will place an undue burden on non-profit organizations that sponsor the construction of recreational facilities such as athletic fields. These organizations are already feeling economic pressures because of the economy. \$5,000 in permit fees (\$2,500 NPDES and \$2,500 E&S plan plus conservation district review) is excessive for non-profit organizations. Reduced fees should be available for non-profit organizations. (1223)

Response: The Department understands that permit fees may have an effect on non-profits especially in the current economic climate. The Department has revised the fees in the final rulemaking based on disturbed acres and a nominal base fee.

7. **Comment:** 102.6(a). We recommend inserting as number (1) in this section the following, which is consistent with the requirement under 102.15(c)(1): Schedule a pre-submission meeting with the Department or conservation district prior to submitting a permit application. (1208)

Response: The Department recommends pre-submission meeting with the Department or conservation district, but does not believe it should be a requirement for all projects.

8. **Comment:** I do support an increase to application fees that will help to cover current costs associated with reviewing permits and plans. The fees should be at levels that can sustain the program. I applaud DEP on their efforts to date, and understand the tight fiscal situation that the Department is in, but this cannot come at a cost of our most precious and healthy watersheds. An increase in application fees would address these challenges. (420)

Response: The Department agrees and appreciates the support.

9. **Comment:** I note that fees collected under Chapter 102 are expected to increase substantially, from approximately \$650,000 to nearly \$7.3 million. Much of this money will be retained by county conservation districts who implement the Chapter 102 programs on behalf of the department. I would appreciate an estimate of how much of the \$7.3 million will be retained by county conservation districts, and whether this revenue must be segregated by the county conservation districts and utilized only for implementation of the Chapter 102 programs, and not redirected elsewhere. Additionally, I would like to know whether county conservation districts can charge fees above and beyond those authorized in Chapter 102, and whether the department has based the new fee schedule on the actual time and expertise needed to review a permit application. (948)

Response: The Department has completed an evaluation of program costs and estimated revenue as part of this rulemaking package. The Department and conservation district place their fees in their Clean Water Funds which is to be used to implement the program. Conservation districts are authorized to charge additional fees under Section 102.6(b)(3). The Department has revised the fees in the final rulemaking and provided a financial analysis in response to public comments.

10. **Comment:** We also understand that fees collected under Chapter 102 are expected to increase substantially, from approximately \$650,000 to nearly \$7.3 million. We believe this proposal is excessive and unwarranted, and should be eliminated from the regulation. However, if the significant majority of these fees are to be retained to allow conservation districts to underwrite their expenses, then we recommend that the fee structure be based upon the size of the proposed project, either by number of units or acres disturbed. We also recommend that the fee schedule be reasonably proportional to the actual cost of performing these services. We would like to know if the department has developed data which demonstrates the actual time and expertise needed to review a permit application. If so, we would appreciate you providing that information to Chairman Scott Hutchinson. (1321)

Response: The Department has revised the fee structure to a tiered approach where smaller earth disturbances would pay a smaller fee. The Department has completed an evaluation of program costs and estimated revenue as part of this rulemaking package.

11. **Comment:** The proposed rule substantially increases fees for permits issued pursuant to Chapter 102 to \$2,500 for a general permit and \$5,000 for an individual permit. The current fee for Erosion and Sediment Control General Permit (ESCGP-1) is only \$500, an amount that we believe is reasonable given the scope of Department review that is associated with this general permit. While some fee increase may be appropriate if the department can demonstrate the need,

we are concerned that the proposed fee increase is excessive. We encourage the Board to revisit the proposed fee increases, especially those imposed for general E&S permits. (1250)

Response: The Department has revised the fee structure to a tiered approach where smaller earth disturbances would pay a smaller fee. The Department has completed an evaluation of program costs and estimated revenue as part of this rulemaking package.

12. **Comment:** The proposed rule will impose a fee of \$2,500 for a general E&S permit and \$5,000 for an individual E&S permit. The fee for the present ESCGP-1 for the oil and gas industry is only \$500. This is a reasonable and appropriate amount. Increasing the costs 5 to 10 times is simply not justified. We believe that no new or additional permits programs are necessary for the oil and gas industry and, thus, these fees should not affect or be imposed upon the industry. We are willing to accept a reasonable fee for an oil and gas industry-specific general permit program. (1184, 1250, 1252)

Response: The Department disagrees that a different permit fee structure should be developed for each industry. The cost of services performed by the Department or conservation district does not vary from industry to industry.

13. **Comment:** There is considerable confusion within our Bureau, as well as in the forestry community as to the interpretation of the 25-acre trigger for E&S permit requirements. Some people interpret the regulations to mean that because 10% of a timber harvest is considered "disturbed," that the trigger for the E&S permit would be a 250-acre harvesting operation. Others have interpreted the regulations to mean that harvests over 25-acres will trigger an E&S permit. If the first supposition is correct, then the \$500 fee for the permit is not prohibitive in most cases. If the second supposition is correct, the \$500 permit fee will likely put a heavy burden on the economic viability of the project, impacting both the professional foresters and the landowners. In this case, a \$50 permit fee was felt to be more reasonable. At any rate, seeing that there was a wide range of interpretation by our staff on this issue, it would be wise to clarify the language related to this subject so that there is no doubt when these regulations go to Conservation Districts and municipalities for use and interpretation. (1275)

14. **Comment:** The rulemaking has established a 25-acre or greater area of disturbance threshold for timber harvesting activities. The disturbance area is calculated on actual disturbance of activity relating to hard roads, skid roads and landing areas. The 10% rule of thumb is not an acceptable means of calculating the disturbance.

15. **Comment:** § 102.6(a) Delete "...an Erosion..." (1268) The Department proposed this deletion in the proposed rulemaking and has deleted in the final.

16. **Comment:** 102.6 - Permit fees The Districts do support an increase in fees. Six of the seven Districts in the southcentral region, with the exception of the Lebanon County CD favor a tiered fee system. The system could be as basic as requiring one fee for those sites meeting the 1-5 acre permit criteria and a separate fee for those sites of 5 acres or more. The Lebanon County CD favors a doubling or tripling of the NPDES fees from \$250 to \$500 or \$750 for General permits and from \$500 to \$1,000 or \$1,500 for Individual permits. (947)

Response: The Department appreciates the support. The Department has revised the final rulemaking by establishing a base administrative filing fee and an additional fee that is structured on the acres of disturbance.

17. **Comment:** Section 102.6(a)(1)-The term "registration of coverage" is not defined-see earlier comment regarding its absence from the "Definitions" section. (1264, 1291)

Response: This term was utilized with Permit by Rule (Section 102.15) which has been deleted from this rulemaking.

18. **Comment:** Revise Section 102.6(a)(1) to read "... a complete application, NOI, or ROC . . ." (946, 1191)

Response: ROC has been deleted and NOI has been added to the final rulemaking.

19. **Comment:** Revise Section 102.6(a)(1) to read "... or Registration of Coverage (ROC)..." (1268)

Response: The ROC term is not used in the final rulemaking and therefore all references have been deleted.

20. **Comment:** Section 102.6.a.1 "Other information the Department may require" - Should all pertinent information the Department may review be included in the proposed regulations? Would this "catch all" requirement open the door for reviewers to ask for irrelevant and sometimes costly information that does not significantly affect the proposed BMPs and plan? (1123)

Response: No. The information necessary to review a permit application is based on the site specific conditions. Such conditions may require additional information that can reasonably be provided that supports and demonstrates compliance with the requirements of this regulation.

21. **Comment:** § 102.6(a)(2) This section changed Pennsylvania Natural Diversity Inventory (PNDI) to Pennsylvania Natural Heritage Program (PNHP) as the authoritative source regarding the presence of State or Federal threatened or endangered species in a proposed project location. PA DEP should be aware that the website for PNHP contains a disclaimer that "retains the reservation at any time and without notice to modify or suspend the web site and to terminate or restrict access to it." What alternative resource does DEP recommend if this should occur? The Chamber recommends that DEP include in the regulation permission to use an alternative source for identifying the presence of endangered species if the PNHP site is inaccessible or shutdown. (1241, 1278)

Response: The existing regulation contains language as recommended by the commentator. This language allows the Department or conservation district to base their decision on other sources. However, as long as PNHP is available, it is the preferred and relied upon source by the Department.

22. **Comment:** 102.6(a)(2). This section should be revised to reflect that the referenced Pennsylvania Natural Heritage Program (PNHP) consultations should be done with the applicable agency(s) prior to application submittal, not with the Department or conservation districts. (1208)

Response: The Department or conservation district must make the decision that earth disturbance activity has been planned and conducted in such a way to avoid, prevent or minimize the impact based upon recommendations from state or federal resource agencies.

23. **Comment:** §102.6(a)(3). This section or §102.1 Definitions should include a reference to *the Department's Guidelines on the preparation of a PPC Plan*. (944, 1204)

Response: The Department agrees and has included a reference in Section 102.11.

24. **Comment:** 102.6(a)(3). PPC plans are prepared and implemented by the contractor, and not the person proposing the activity via a permit application. Please revise this requirement so that it can be a condition of the permit rather than a permit application requirement. PennDOT A suggests revising this language as follows: "Prepare and implement a PPC Plan prior to commencing earth disturbance activities when storing, using or transporting materials" (708, 1114)

Response: Section 102.5(l) now states that a PPC plan needs to be prepared, implemented and be available upon request. The Department has revised the final rulemaking such that the PPC plan requirement was moved to Section 102.5, permit requirements, rather than the permit application section.

25. **Comment:** 102.6(a)(3). How can a PPC Plan be prepared during an initial design of a site if the design professional does not know who or by what means the construction of the site will be completed? Should PPC plans be prepared by contractors who know what equipment and supplies will be onsite, prior to the commencement of an earth disturbance activity? (1123)

Response: Section 102.5(l) states that a PPC plan needs to be prepared, implemented and be available upon request. The Department has revised the final rulemaking such that the PPC plan requirement was moved to Section 102.5, permit requirements, rather than the permit application section.

26. **Comment:** 102.6(a)(3). Clarify if PPC plans have to be submitted for review. (1123)

Response: Section 102.5(l) now states that a PPC plan needs to be prepared, implemented and be made available upon request. The Department has revised the final rulemaking such that the PPC plan requirement was moved to Section 102.5, permit requirements, rather than the permit application section.

27. **Comment:** The proposed permit fees are increasing by 1000%. It is our opinion that increase in fees would be generally accepted by our clients, provided that the increase will result in more consistent and timely reviews and timeframes. (1153)

Response: The permit fees in this final rulemaking were designed to cover the majority of costs for the existing program, and are not based on hiring additional staff to improve review timeframes. The Department will continue to evaluate ways to improve program effectiveness and timeliness.

28. **Comment:** § 102.6(b) - Permit Fees Reasonable and justifiable permit fee adjustments are appropriate if that fee structure is dedicated to assure an adequate staffing of the program, and if firm commitments are made regarding review deadlines by DEP and/or Conservation District. Currently, time frames to review the permit application are implied as part of the permit application instructions. However, these instructions are subject to change at DEP's discretion without public input or comment. These schedules to review applications for E&S Plans and NPDES permit for construction activities and deadlines are critical to supporting RRI's environmental projects. (1278)

Response: The permit fees in this final rulemaking were designed to cover the majority of costs for the existing program,, and are not based on hiring additional staff to improve review timeframes. The Department will continue to evaluate ways to improve program effectiveness and timeliness. The Department's revision to permit application instructions are the result of improving program implementation, often as a result of comments received from the regulated community to assure that applications are complete, with the desired goal of reducing review times.

29. **Comment:** 102.6(b) Why are Pennsylvania municipalities required to pay the permit application fees when they are exempt from application fees for other Department activities? Municipalities need to remain exempt from permit application fees. (1123)

Response: The Department has not exempted municipalities from permit application fees under this Chapter and has not proposed to change that process with this rulemaking. Also, in the cost analysis conducted by the Department approximately 12% of the department's workload is associated with local government projects. Although this is a significant percentage of permits for the Department and conservation districts, it is a relatively small portion of the municipalities that are potentially affected.

30. **Comment:** 102.6(b)(2) With the increased fees, should the Department formulate a money-back guarantee program to ensure timely reviews and issuance of permits? (1123)

Response: The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe.

31. **Comment:** 102.6(b)(2) The increased fee schedule is acceptable, provided, the fees are used to augment the agency resources to improve responsiveness and provide reasonable

application processing timelines. As proposed, these rules only impose timelines on the permittee for response to application deficiencies. Timelines should be spelled out for both completeness and technical reviews by the agencies. (1115, 1267)

Response: The permit fees in this final rulemaking were designed to cover the majority of costs for the existing program,, and are not based on hiring additional staff to improve review timeframes. The Department will continue to evaluate ways to improve program effectiveness and timeliness. The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe. The Department's administrative completeness review is set at 20 days within the moneyback guarantee program.

32. **Comment:** Dominion believes that the increased fee schedule for permit applications as proposed at 102.6 of the rule is justified, provided that the fees are used to provide the agency resources to improve responsiveness and provide reasonable and defined application processing timelines. (1152)

Response: The permit fees in this final rulemaking were designed to cover the majority of costs for the existing program,, and are not based on hiring additional staff to improve review timeframes. The Department will continue to evaluate ways to improve program effectiveness and timeliness. The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe.

33. **Comment:** As proposed, these rules only impose timelines on the permittee for response to application deficiencies with no guarantee of times for Department review. Timelines should be mandated for both completeness and technical reviews by the Department. General permit applications should not be subject to technical review, but only a check to determine that all required elements are present and that the standard conditions for coverage have been met. (691, 1124, 1152, 1250)

Response: Notice of Intents (NOIs) submitted for NPDES GPs are subject to a technical review so that the Department can verify that the applicant has demonstrated compliance with permit effluent limits. The permit fees in this final rulemaking were designed to cover the majority of costs for the existing program,, and are not based on hiring additional staff to improve review timeframes. The Department will continue to evaluate ways to improve program effectiveness and timeliness. The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe.

34. **Comment:** *Complete applications or NOI (Notice Of Intent)* Paragraph (c)(2) does not state how long DEP may take to make its determination and send notification. We note that this same provision only allows 60 days for the applicant to make an application complete. We recommend requiring DEP to determine that an application is complete within a specified timeframe. We also recommend that the regulation specify what happens if DEP does not meet

that timeframe. Additionally, Paragraph (c)(2) only allows DEP to determine an application or NOI is incomplete. Can this function also be performed by a conservation district? (1322-IRRC)

Response: The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe. The Department has had an ongoing problem with applicants not responding to requests for additional information. In the past this has led to applications being open or under review for an undetermined period of time. Adding this to the regulation allows the Department to close a permit application after 60 days of non-response by the applicant. If an applicant needs additional time to provide the requested information, the rulemaking allows for a request of extension. Additionally, the Department agrees that the conservation districts perform this function and Section 102.6(c)(2) has been revised accordingly.

35. **Comment:** Along with the higher fees, review turn around times should be shortened and guaranteed. The money-back guarantee should also be made automatic. (1223)

Response: The permit fees in this final rulemaking were designed to cover the majority of costs for the existing program,, and are not based on hiring additional staff to improve review timeframes. The Department will continue to evaluate ways to improve program effectiveness and timeliness. The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe.

36. **Comment:** 102.6(b) Are conservation districts still going to charge resubmission fees based on a percentage of the initial application fee? (1123)

Response: Section 102.6(b)(3) states that conservation districts may charge additional fees in accordance with the Conservation District Law. The amount of these fees may vary between conservation districts.

37. **Comment:** 102.6(b) which addresses the proposed permit fees has been revised in such a way to no longer include references to other Chapters which excluded agencies of the Commonwealth from fee provisions. It appears that PennDOT would be subject to fees under the revised regulations. PennDOT requests an explicit exclusion from the fee provisions for agencies of the Commonwealth. Specifically, PennDOT requests the following revision to 102.6(b)(1): "A person except agencies of the Commonwealth submitting a permit application" This revision is consistent with the fee provisions in Section 91.22. If agencies of the Commonwealth are not excepted, this could amount to a \$330,000 to \$500,000 annual impact to PennDOT. (708, 1114)

Response: Section 102.6 (b)(4) exempts federal or state agencies or independent state commissions that have a mutual agreement with the Department from payment of fees.

38. **Comment:** *We support the increase in permit fees, 102.6(b)(2) to help offset the cost of administering the program(s)* (644, 646, 833, 1178, 1191, 1249, 1253, 1286, 1293, 1299, 1302, 1317)

Response: The Department appreciates the comment, and acknowledges the support.

39. **Comment:** The Chamber can support reasonable and justifiable permit fee adjustments if that fee structure is dedicated to assure an adequate staffing of the program, and if firm commitments are made as to review deadlines by DEP and/or Conservation District. E&S and construction NPDES permit application review schedules and deadlines are critical to supporting the competitiveness of Pennsylvania commerce and industry. First-to-market is vital to private industry for achieving competitive advantage, and therefore schedule can often be just as critical as cost. (1241)

Response: The permit fees in this final rulemaking were designed to cover the majority of costs for the existing program,, and are not based on hiring additional staff to improve review timeframes. The Department will continue to evaluate ways to improve program effectiveness and timeliness. The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe.

40. **Comment:** 102.6(b): While it is recognized that DEP permit fees have not increased in a number of years, a 10 fold across-the-board increase is inappropriate. In addition, any fee structure should have some relationship to the size of the property being developed and the relative cost of the review. For example, while a \$2,500 or \$5,000 fee may be small compared to the cost of developing a 50 acre or larger site, it would be a significant burden to the developer of a one (1) or two (2) acre site. (1255)

Response: The Department has revised the fee structure to a tiered approach where smaller earth disturbances would pay a smaller fee.

41. **Comment:** I have a significant concern with the proposed increase in fees being included as part of this Rulemaking (Section 102.6). Stakeholders in this process who are most impacted by the fee increase include both the development community and the licensed professionals who prepare the various plans and permit applications. A ten-fold increase in permit fees, even with the laudable intent of covering the actual program costs, must be clearly justified, especially in light of the current economic crisis in which we find ourselves. While the justification laid out for the increase in permit fees for both the E&S and NPDES programs is understandable, i.e., to cover the actual costs of administering the program, the cost basis outlined in the May 4, 2009 "Fee Report Form" issued by PADEP only lists "fee collections" for FY 2006 and FY 2007, and provides no information on the actual costs incurred by PADEP or the Conservation Districts. Not only should those "actual cost" totals be provided, but a detailed breakdown of the various elements discussed in the memo (training, permit review, inspections, program oversight, and compliance) should be included in order to provide full disclosure on costs. For example, only those "training" and "program oversight" costs directly associated with the E&S/NPDES permit programs should be considered for coverage by the fees. The costs for any other program

responsibilities (for PADEP and/or the conservation districts) should not be included in the cost analysis. (1279)

Response: The Department has revised the fees in the final rulemaking and provided a financial analysis in response to public comments.

42. **Comment:** 102.6(b)(1) This application fee should be comparable to the fees for obtaining a Permit. (1268)

Response: The new fee schedule is designed to cover the cost of the program and was based on a review of the history of past permit issuances.

43. **Comment:** 102.6(b)(1)(i). If the permit-by-rule is retained in the final regulation, we recommend that the fee be increased to \$5000 to reflect the substantial increase in field inspections/compliance work that will be associated with this option. (693, 1208)

Response: Section 102.15 (Permit by Rule) has been deleted from this rulemaking.

44. **Comment:**§ 102.6 (b)(1)(i) Since the PBR fee is less than an Individual NPDES permit fee, an applicant will choose PBR over NPDES every time to avoid District and DEP review in Special Protection Watersheds. In other words, the fee schedule gives the applicant the incentive to go for the PBR when there will be no buffer required and NPDES when a buffer will be required per the set standards. The PBR fee should at least be equal to the Individual NPDES permit fee if not more; although District and DEP technical reviews are not performed these projects will call for additional inspections and most definitely complaint responses. (1315)

Response: Section 102.15 (Permit by Rule) has been deleted from this rulemaking.

45. **Comment:** 102.6(b) We support the proposed fees and suggest that provisions be made for a reduced fee on smaller individual NPDES permit sites. (640, 693)

Response: The Department has revised the fee structure to a tiered approach where smaller earth disturbances would pay a smaller fee.

46. **Comment:** 102.6(b)(2) Would a sliding fee schedule, based on area of disturbance be a more practicable way to assess fees on applicants? (1123)

Response: The Department has revised the fee structure to a tiered approach where smaller earth disturbances would pay a smaller fee.

47. **Comment:** 102.6(b)(2) How long before earth disturbance activity is set to begin should the application and fees be submitted? (1268)

Response: Review times vary based on the complexity and size of the project. The Department recommends that an administratively complete and acceptable application be

submitted at least 90 to 120 days prior to anticipated earth disturbance activity to allow for application review and permit processing.

48. **Comment:** With regard to fees, we believe that permit fees should reflect the degree of site disturbance and off-site impact proposed. A one-fee-fits-all approach could be counter-productive to efforts to get smaller sites permitted, because the fees are high enough that people will make lots of efforts to avoid them by avoiding permits. We would suggest that the 1-5 acre fees could be less than what's proposed; we should also note that a fee based on impact and disturbance would be very logical and would be in accordance with fees already charged by most Conservation Districts. Plus, a disturbance-impact based fee might encourage people to use LID principles on a site. (941)

Response: The Department has revised the fees in the final rulemaking and provided a financial analysis in response to public comments.

49. **Comment:** Section 102.6(b)(2)(i)(iv) The proposed \$2,500 fee for a general NPDES permit is ten times the current fee. How can such an increase be justified, especially in addition to the additional E&S fees that may be charged by conservation districts? (16, 1264, 1291)

Response: The Department has revised the fees in the final rulemaking and provided a financial analysis in response to public comments.

50. **Comment:** The costs of adopting these revisions for most of the regulated community will be extreme. The objective of charging application/review fees (which will prompt unspecified fee increases by the conservation districts) to make this program economically self sufficient, and the increased engineering fees will effectively destroy residential and small commercial development across rural Pennsylvania. The agricultural community will, of course, bear none of these costs and large residential/commercial developments will easily absorb the increases. But for a small subdivision or single new home owner/builder, these increased costs along with other recent DEP on-lot sewage disposal requirements will result in increases of \$20,000+ and effectively destroy this opportunity for rural home ownership. The overall economic loss for this loss of future development in Pennsylvania may be catastrophic. (9)

Response: The Department disagrees, and has revised the fees in the final rulemaking and provided a financial analysis in response to public comments.

51. **Comment:** The administratively complete review and non-refund of the fee should only apply to the portion being reviewed (i.e. separate admin complete review for E&S and NPDES, and related fee applications). (1190)

Response: The proposed administrative filing fee covers the entire permit, and is not broken down into categories.

52. **Comment:** *The dramatic increase in application fees by 1000% seems unfair and unjustified.* This excessiveness comes at a time when projects are under significant financial stress. We are all desperately trying to reduce costs by changing the way we arrive at solutions.

This proposed change might actually exceed the cost of the design for small projects. (422, 428, 429, 690, 938, 940, 1122, 1126, 1132, 1133, 1134, 1136, 1172, 1185, 1231, 1232, 1236, 1244, 1246)

Response: The Department has revised the fees in the final rulemaking and provided a financial analysis in response to public comments.

53. **Comment:** We feel that the proposal to raise fees for NPDES permits by 1,000% is excessive. It is our understanding that these new fees would underwrite conservation district expenses, even though the districts have the power to set their own fee schedule in addition to the proposed fee schedule. However, we do feel that fees should be reasonably proportional to the actual cost of performing the services. A \$5,000 fee for an Individual NPDES permit on a small site does not seem proportional -again, particularly in light of the fact the conservation districts will add several more thousands of dollars on top. In many cases, the fee will exceed the cost to engineer such a small project. We would like to suggest that the proposed rules adopt the approach taken by most conservation districts. That is to say, the fee schedule should be based upon the size of a proposed project - either by number of units or acres disturbed. We would recommend a tiered fee schedule that ranges up to \$2,500/\$5,000 for the NPDES permits based upon project size, versus a flat rate for all projects. A three acre site should not be charged the same as thirty acre site. (423, 429, 435, 695)

Response: The Department has revised the fee structure to a tiered approach where smaller earth disturbances would pay a smaller fee.

54. **Comment:** We would encourage the Department to consider a tiered fee approach. We think that it is unfair to charge the same amount to a small permitted site as to a large subdivision. We would suggest those permitted sites from one to five acres that require an NPDES permit to have a fee of \$1,000 and those sites five acres and more to pay \$2,500. In addition, we would suggest that the Department define what the applicant should expect by paying the filing fee. (947)

Response: The Department has revised the fee structure to a tiered approach where smaller earth disturbances would pay a smaller fee.

55. **Comment:** We would like to recommend a fee schedule based on a project's size and type of development. (690, 695, 938, 940, 1132, 1133, 1136, 1162, 1172, 1187, 1190, 1229, 1244, 1253, 1259, 1279, 1303, 1307) Based on the amount of earth disturbance (1, 1115, 1267, 1141)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant.

56. **Comment:** 102.6(b)(1)(iii). Pike County Conservation District suggests tiered Individual NPDES permit fees. For Individual NPDES permits for **projects 1 to up to 5 acres**, a fee of **\$2,500** is more appropriate. For Individual NPDES permits for projects greater than 5 acres, \$5,000 is appropriate. (1208)

Response: The Department has revised the fee structure to a tiered approach where smaller earth disturbances would pay a smaller fee.

57. **Comment:** The new NPDES fee for permit-by-rule (\$500.00) is very reasonable except that the requirements to meet this permit will entail much greater costs than the associated savings would bring. Requiring a Professional Engineer or Geologist to prepare and seal the plans will greatly increase the costs of small projects, and make this permit relatively un-used. (1)

Response: Section 102.15 (Permit by Rule) has been deleted from this rulemaking.

58. **Comment:** Fee increase seems to be very substantial. We would recommend a tier approach for the smaller developments in order to be cost effective. The tier approach could be *based on the proximity to waters of the commonwealth, percent slope, amount of disturbance, etc.* (256)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

59. **Comment:** 102.6 As mentioned earlier, *a graduate review fee dependant on the size and scope of a project should be instituted rather than a flat fee for all projects.* In addition, *Conservation District should only be permitted to not refund a fee relative to the submission deemed incomplete, should the application contain all E&S requirement but be incomplete relative to the NPDES checklist then only the NPDES fee is surrendered.* With 2 independent fees of the amounts proposed, they must be managed appropriately. (1190)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

60. **Comment:** §102.6 (b)(2) CNX Gas believes that the proposed increased fees are not acceptable nor can they be justified, however, some lower level of fee increases may be acceptable provided that the fees are used to provide the agency resources to improve responsiveness and provide reasonable and defined application processing timelines. (691, 1124, 1250)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

61. **Comment:** 102.6(b)(2) - A concern is that the fee does not take into account the size of the project and may not be equitable, though easy to understand. The proposed NPDES fee of \$2,500 or \$5,000 is charged regardless of whether the site is a 2 acre site or a 200 acre site. The fee is unlikely to cover the costs for larger sites and on the other hand be particularly burdensome for smaller sites (that could even include single family residential lots requiring an NPDES permit).

A suggestion could be to implement a tiered system where a single family lot would be charged \$250 and others \$2,500. Is the Department recommending that a \$2500 or \$5000 fee be charged for each administratively incomplete re-submission? (218)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant.

62. **Comment:** Permit delays due to understaffing or lack of prescribed response times at agency levels associated with state and federal threatened and endangered species continues to be a source of contention. (1301)

Response: The Department disagrees. The most common reason for permit delays is due to improperly prepared applications including technically inadequate plans or lack of adequate demonstration in meeting regulatory requirements. Permit delays as a result of coordination with PHNP for threatened and endangered species should be minimal since this coordination can and should be conducted during the planning process and prior to submission of the permit application.

63. **Comment:** §102.6(b)(1). *The permit fees for the General E&S Permit and the Individual E&S Permit are excessive and onerous.* (3, 9, 256, 944, 1204)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

64. **Comment:** The regulation seeks to raise fees for timber harvesting and road maintenance activities from \$500 to \$2,500, an excessive and unreasonable five-fold increase. These fees would be paid to the Department on top of fees charged by County Conservation Districts that, in nearly all cases, are the exclusive reviewer of plans and permit applications according to formal delegations of that authority from the Department. If an increase can be justified as being reasonable in relation to services performed, then it should be either phased in over a period of time; limited to permit applications that are not subject to the review, approval and supervision of conservation districts; or offset dollar-for-dollar by fees charged by the Districts. (643, 1176)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

65. **Comment:** There needs to be an understanding of what expenses are expected to be covered by the permit fee. Item (3) specifically allows conservation districts to charge additional fees. Additional fees will most likely be necessary in order to adequately fund this program. *Conservation districts must be able to have adequate funding without any appearance of a double dip.* (1229)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

66. **Comment:** Item (2) states that the "Department will review the adequacy of the fees established in this section at least once every 3 years". *What criteria will be used to determine the adequacy?* Was this criteria applied to the establishment of the proposed fees? (1229)

Response: The criteria to be used to determine the adequacy of the fees is simply whether the revenue generated by the fees covers the Department's costs in administering the program. DEP is required to provide the EQB with an analysis every three years to demonstrate the adequacy of the fees, including what adjustments need to be made to ensure that fees meet all program costs and those programs are self-sustaining. The fees established in the rulemaking were established to cover a majority of the costs of the Department and conservation districts in administering the program. DEP determines fee amounts through comprehensive workload analysis studies, which help quantify the funding necessary to support the duties specific to the program. To ensure proper public input and comment, any subsequent adjustments in fees will be required to be evaluated through the regulatory review process. Such an evaluation will be conducted by the EQB in response to a DEP generated report which will include an analysis of the fees and how they relate to the Department's cost of administering the program, with the objective of ensuring fees meet all program costs and programs are self-sustaining. Fee adjustments every three years are not "automatic". In order to adjust the fees, the Department will need to justify that the current fee structure is not adequate to cover program costs.

67. **Comment:** We are happy to see the added language that the Department will review the adequacy of the fees at least once every three years. We would encourage the Department to work closely with the Districts in order to improve the true costs of running these programs. Presently, if one looks at the amount of variation that exists for program costs as provided by the Districts through the Conservation District Fund Allocation Program (CDFAP), you see a tremendous amount of variation. A number of Districts are not even reporting any costs associated with administering the programs. In addition, there is little guidance from the Department about those costs that the Districts incur while administering the agricultural portion of the program. (947)

Response: The department agrees with the importance of periodic review of fees. The Department asks conservation districts to report program costs, however depending on other district obligations and funding or other factors, they may not elect to do so. Through the program the delegation and annual reporting by the department can request additional information or clarification of program costs if necessary

68. **Comment:** Section 102.6 (b) (2) -the Department has the ability to request alternations to permit fees every 3 years. With this inflation factor being built into the regulations, why must the jump in permit fees be so dramatic this first year? Why not allow for a gradual-phase in of permit fee increases? (645)

Response: The Department can request permit fee adjustments at any time, however every three years is the general time frame established in this rulemaking. It is estimated that the fees in this final rulemaking will cover the cost for Chapter 102 program activities such as the permitting, inspection and technical assistance components of the program. The vast majority of activities regulated by this Chapter are permitted under the NPDES Stormwater Construction Permitting program. Currently the fees are \$250 for a general permit and \$500 for an individual permit. These fees have not been increased since 2000. The current economic climate and recent budget cuts have forced DEP to adopt a fee based structure to maintain programs.

69. **Comment:** 102.6(c)(1) should be revised to read as follows: An application, ROC or NOI for a permit is not complete ... (1208)

Response: The ROC has been deleted from this rulemaking, and the NOI has been added to this section.

70. **Comment:** 102.6(c)(1) Is there a timeframe for automatic approval if incompleteness is not received? If the applicant intends on discharging into impaired water, the NOI should require the applicant include this in the application. (1268)

Response: No, the Department can not provide a deemed or automatic approval of a permit.

71. **Comment:** 102.6(c)(1) Should the specific requirements under the Clean Streams Law be listed that the Department would like to see in order for the application or NOI to be considered complete? (1123)

Response: No, it is inappropriate to duplicate requirements that can be found elsewhere.

72. **Comment:** 102.6 (c) Complete applications or NOI. (2 and 3) Please add "or delegated conservation district" after "When the Department..." throughout this section. Use one of these words "incomplete or deficient" instead of the word withdrawn in both of these sections to be more consistent. In (3), we would suggest that you add some language about the conservation district's E & S fee will also not be refunded. (947)

Response: Conservation district has been added as suggested. The term withdrawn is appropriate since the applicant was given the opportunity to provide the necessary information and failed to do so. The refund language relates to all fees associated with the application, and an individual district may elect to return certain fees.

73. **Comment:** §102.6(c)(2). The document states: "Requests for a specific extension may be sought by the applicant in writing". *What guidelines and criteria will the Department use to grant a specific extension to an applicant?* (944, 1141, 1204)

Response: The Department intends to consider any reasonable request for an extension. The purpose of the request is to communicate the intent of the applicant to the Department concerning the requested information.

74. **Comment:** 102.6(c)(2) We agree with the concept of considering incomplete applications withdrawn after a reasonable time period. The section should be revised to read as follows: When the Department or **conservation district** determines that an application, **ROC** or NOI When an application, **ROC** or NOI is considered withdrawn, the Department or **conservation district** will close the application file (1208)

Response: Conservation district has been added as suggested. ROC has been deleted from the rulemaking.

75. **Comment:** Revise 102.6 (c)(2) to read: When the Department or **conservation district** determines that an application or NOI is incomplete The applicant shall have 60 days to complete the application or NOI, or the Department or **conservation district** will consider the application to be withdrawn When an application or NOI is considered withdrawn, the Department or **conservation district** will close the application file and take no further action to review the file. (693)

Response: Conservation district has been added as suggested.

76. **Comment:** 102.6 (c)(2) -This section should include conservation districts as follows: "When the Department or conservation district determines that an application or NOI is incomplete ... The applicant shall have 60 days to complete the application or NOI, or the Department or conservation district will consider the application to be withdrawn ... When an application or NOI is considered withdrawn, the Department or conservation district will close the application file and take no further action to review the file. (640)

Response: The Department agrees and 102.6 (c)(2) has been revised as suggested.

77. **Comment:** § 102.6 (c)(2) When the Department [or delegated conservation district?] determines that an application or NOI is incomplete or contains insufficient information to determine compliance with this chapter, it will notify the applicant in writing. The applicant shall have 60 days to complete the application or NOI, or the Department [or delegated conservation district?] will consider the application to be withdrawn by the applicant. Requests for a specific extension may be sought by the applicant in writing. The applicant will be notified in writing when an application or NOI is considered withdrawn. When an application or NOI is considered withdrawn, the Department [or delegated conservation district?] will close the application file and take no further action to review the file. [Does this apply for ROC administrative review as well?] (1315)

Response: Conservation district has been added as suggested. ROC has been deleted from the rulemaking.

78. **Comment:** §102.6(c)(2). How many days after submittal will the applicant be notified of an incomplete NOI? (1268)

Response: The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe. The Department's administrative completeness review is set at 20 days within the moneyback guarantee program.

79. **Comment:** §102.6(c)(3). The document states: "*If the incomplete or deficient application is returned or withdrawn, the fees associated with filing the application will not be refunded.*" This needs additional clarification to prevent reviewers from rejecting a submission based on a technical deficiency and then charging another fee claiming the document is "administratively incomplete." This already has occurred in some areas of the Commonwealth. (944, 1204)

Response: Only the administrative filing fee will need to be resubmitted for administratively incomplete or deficient applications.

80. **Comment:** Retention of the entire application fee for a returned incomplete application is outrageous. It would not reflect the actual cost to determine that an application is incomplete and it gives the Department financial motivation for frivolous rejection of applications. Remember that the regulations provide that the applicant shall submit "other information that the Department may require." [102.6(a)(1), 102.8(f)(16) et. al.] This means that the Department could return applications for ANY reason. If the application is returned incomplete, the part of the fee that reflects the actual review time saved should be returned or applied to future reviews. (1223)

Response: Only the administrative filing fee will need to be resubmitted for administratively incomplete or deficient applications.

81. **Comment:** Because the application fees are so high, the department should be required to show a breakdown of hours, labor rates and expenses in support of the new fees. Without such a breakdown, the increases appear to be arbitrary. (1223)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

82. **Comment:** The requirement that E & S and PCSM Plans to be submitted with registration of coverage for the permit-by-rule be sealed by a registered professional is reasonable. However, such submittals should have reduced fees because they rely on the certification and should, therefore not require as much review by the Department. (1223)

Response: The permit-by-rule has been deleted and is not included in the final rulemaking.

83. **Comment:** 102.6 (c) (2) First sentence states "it will notify the applicant in writing". *It should state "they will notify..."*.(1187)

Response: The Department appreciates the suggestion, however the existing wording is appropriate.

84. **Comment:** Section 102.6(c)(2) The Department should have to determine administrative completeness within 30 days. (1264, 1291)

Response: The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe. The Department's administrative completeness review is set at 20 days within the moneyback guarantee program.

85. **Comment:** 102.6 (c)(2) The Department should increase the proposed time an applicant has to complete a deficient NOI and/or request an extension from 60 days to 120 days. (423, 695, 1245, 1323)

Response: The Department feels 60 days is adequate, however if the applicant needs additional time, a further extension can be requested.

86. **Comment:** Additionally, if the proposed rulemaking finds it fair to deem an application "withdrawn" if an applicant fails to contact the Department within an established timeframe, it is equally fair to expect that an application is deemed "administratively complete" if the Department does not communicate with the applicant in writing within 30 days. (423, 695, 1245)

Response: The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe. The Department's administrative completeness review is set at 20 days within the moneyback guarantee program. The Department can not provide a deemed or automatic approval of a permit.

87. **Comment:** Section 102.6(c)(2) states that, if an application or NOI is deemed incomplete or contains insufficient information, the applicant has 60 days to provide the required additional information, with the possibility of a time extension if needed. If the applicant fails to provide the required additional information, the Department will then withdraw the application and close the file. However, Section 102.6(c)(3) states " If the incomplete or deficient application is returned or withdrawn, the fees associated with filing that application will not be refunded" This is simply an egregious misuse of authority on the part of the Department and/or the conservation districts. The only funds to which the reviewing entities should be entitled are those funds necessary to cover the costs of conducting the Administrative Completeness review of the application or NOI. It would be bad enough with the current fee schedule, but with the outrageous increase in fees being proposed in the review Chapter 102 regulations this is unconscionable case of greed, if not outright theft from the applicant. This provision should be struck and replaced with language that allows the reviewing entities the right to retain that portion of the permit fees necessary to cover the cost of their actual expended effort - nothing more. (1279)

Response: The applicant has the opportunity to reply within the 60 day period or request an extension. If they do not, the Department must assume that the applicant does not want to

continue with the project. It is appropriate for the Department to retain the application fees. Including this requirement in the regulation is an attempt by the Department to order to identify which projects are active and therefore a schedule can be maintained to review the projects in a timely manner.

88. **Comment:** We would recommend that language is added stating that reasonable requests for extension by the applicant will be approved. A slow or depressed housing market may dictate waiting on a permit, and, an applicant shouldn't be punished by having to re-pay the application fees if they are proactively staying in contact with the review agency by filing extensions (695)

Response: The Department intends to consider any reasonable request for an extension. The purpose of the request is to communicate the intent of the applicant to the Department concerning the requested information.

89. **Comment:** 102.6 (c) (2 & 3) references completion of the notice of intent. The notice of intent (and associated checklists) has become for all practical purposes so confusing, so ambiguous, and so cumbersome that it is impossible to adequately complete. The problem here does not lie with the design professionals....the problem lies with the form itself!! *Make a simplified and comprehensible notice of intent if you expect anyone to get it right the first time.*(1187)

Response: The application process and the administration of the permit by the Department requires the applicant to explicitly consider and document the required analysis to demonstrate compliance of state and federal requirements including antidegradation when needed. The Department must also consider and document in the permit application review how the applicant demonstrates that the project discharges will protect and maintain water quality.

90. **Comment:** 102.6(c) (5) - We have concerns about the use of the term "approved" when referring to an "approved" PCSM plan. From the 2008 annual 102 data submitted by Districts, approximately 85% of all of the NPDES permits are General permits. Presently, with the exception of that handful of Districts that are administering the PCSM delegation agreement and who are approving the PCSM plan associated with a General NPDES permitted site, all of the other Districts are only doing a cursory administrative review of the PCSM plan. Even though the General NPDES permit has been acknowledged by a District involved with the normal 102/NPDES delegation agreement, we feel that it is misleading for applicants to think that their PCSM plan has gone through a technical review and has been approved when that is not the case. We would encourage the Department to delete the use of the word "approved" relative to PCSM plans when they have not been approved from a technical perspective. We also have some concerns about the role of Districts and our involvement with PCSM plans and if this might not be considered an act of engineering. (947)

Response: The word "approved" has been removed from Section 102.7(b)(5) and appears to be the section the commentator is referencing.

91. **Comment:** Section 102.6(c) does not insure timely review and decision on permit requests. The Department should be given a set number of days to make a permit decision. There is no

reason why small E&S plans could not be reviewed in 2 weeks. As it stands now, the Department has 20 days to review the permit application for administrative completeness even before it moves to technical review, which could take several more weeks. For smaller/simpler E&S Plans, a total of 3 weeks should be more than sufficient for adequate review. Currently, the Department is under no obligation to review and approve an E&S Plan in a timely manner. Similar limitations on review time should be placed on Soil Conservation Districts. (1262, 1301)

Response: The Department has a money-back guarantee policy and has also established policy with conservation districts as part of a delegation agreement in processing permit applications within a certain timeframe. Further, E&S plan reviews may not be required unless part of a permit review process. In response to the commentator, small or simple E&S plans do not routinely need to be reviewed outside the permit process.

92. **Comment:** Regarding incomplete applications - or incomplete applications and NOIs, we feel that the limitation of 60 days to complete or revise the application is too rigid. Applications have increased in complexity and may take more than 60 days to address any deficiencies identified. We would recommend increasing the time to make revisions up to 120 days. Also, we would recommend that language is added stating that reasonable requests for extensions by the applicant will be approved. (695, 1245, 1303)

Response: The Department intends to consider any reasonable request for an extension.

93. **Comment:** Appropriate performance requires not only timely review across districts and regions, but consistency of the reviews as well. Currently each regulator has the power to request different items on the E&S Plan. The applicant knows what a reviewer's particular needs are in any E&S Plan only if an historical working relationship exists between the applicant and the particular regulator/reviewer. This of course leads to confusion, frustration, and more importantly, loss of time. This is unacceptable and the Department should take the opportunity provided by this regulatory initiative to correct this performance deficiency. (1301)

Response: The Department disagrees. Inconsistencies, if any, are more appropriately corrected through policy, guidance, and training rather than by regulation.

94. **Comment:** Increase in NPDES Permit fees beneficial in addressing the cost of maintaining this program at the Conservation District level. (2)

Response: The Department agrees, and acknowledges the support.

95. **Comment:** Provide an accounting of the way this fee was calculated. Possibly some overlap between this fee and the Erosion Control Fee for Service currently implemented. Recognize the Conservation District would need to maintain a reserve account to service these permits for five years. If this fee is to cover transfers of permit, Notice of Terminations, etc., will the State Conservation Commission be revising its fee charging policy as a result of this increase in NPDES Permit Fees? (2)

Response: The Department has revised the fees based on the applicant's proposed earth disturbance in the final rulemaking and provided financial analysis in response to public comments. The Department can not address whether the SCC will revise its fee policy.

96. **Comment:** An increase of 10 fold for permit and NPDES fees is unreasonable. The reasoning is that the department never charged enough to cover costs. Mismanagement must be considered and thoroughly reviewed before such huge increases are implemented. Local Conservation Districts may also charge additional fees, further increasing the cost to consumers and average citizens. Also, this section does not necessarily limit the fees if in the sole judgment of the administrators the submittal package needs to be revised, additional fees may again be assessed. (9, 1323)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

97. **Comment:** We suggest that any proposed modification to the permit application fees set a "cap" on the total application fees to be imposed by both PADEP and the Conservation Districts. If the Conservation Districts are actually performing the review of permit applications pursuant to cooperative agreements with PADEP, it unfair for PADEP to collect and keep permit application fees for work that the Conservation Districts are performing in the actual review of permit applications, while at the same time allowing the Conservation Districts to charge additional fees for their review of permit applications. (1323)

Response: The Department disagrees. The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant.

98. **Comment:** Need to include some type of reference to permit renewals. Will district be able to charge fees for review of the Ag E&S plans and others to offset the cost of the program? (256)

Response: The Department agrees and has revised the final rulemaking to reference that renewal permits require a new application fee. Even though permit renewals require the same information as a new application, the Department does not establish a fee for the review of plans that do not involve a new permit application.

The Conservation District Law and the State Conservation Commission provides direction on when and how conservation districts may charge fees. The only time that the Department mandates the review of a plan is when the plan is required to be submitted as part of a permit application. The permit application fee includes plan review as well as other administrative aspects of that permitted activity. The Department does not require the review of Ag E&S plans, and therefore has not established a fee for that review. Districts may charge a fee for review of such plans if it is consistent with Conservation District Law and State Conservation Commission policy.

99. **Comment:** Permittees who renew existing NPDES permits should not be required to address new permit requirements that did not exist at the time of the original permit issuance. (1140)

Response: Chapter 92 and federal NPDES regulations require that any person with an unexpired approval of coverage under the general permit shall be responsible for complying with the final renewed, reissued, or amended general permit. The final rulemaking however has provided some relief through a “grandfather” provision for NPDES permit renewals in Section 102.8(a).

100. **Comment:** Many commercial and residential projects approved or in construction have had minimal activity recently. Obviously, if the economy picks up anytime soon, the active status of these projects will allow people to get back to work immediately. Unfortunately, many of these approved projects will need to have their NPDES permits renewed to address these new policy revisions. It will require developers to modify their plans in mid-construction, adding costs and additional infrastructure that they simply cannot absorb. At the same time, the potential reduction in the number of units or total square footage from a project will eliminate a significant amount of asset value of the property. (1132, 1133)

Response: NPDES permits need to be renewed prior to expiration.

101. **Comment:** Proposed fee increase for NPDES Permits, E&S Permits, and new PBR: The Lancaster County Conservation District does support a fee increase. However, the fee increase proposed appears to be somewhat excessive, especially for smaller projects that may require one of the above mentioned permits. A simple tiered fee schedule should be developed. The Lancaster Conservation County District recommends a permit fee for projects disturbing 1-5 acres (with a point-source discharge) and projects 5 acres or more.(3)

Response: The Department appreciates the comment and the support of fee increases. The fees in the final rulemaking have been revised and will be based on the area of proposed earth disturbance by the applicant.

102. **Comment:** Can Conservation Districts assume review fees can be charged under this scenario? Most Districts require a review or submission fee to review and approve plans. (3)

Response: The Conservation District Law and the State Conservation Commission provides direction on when and how conservation districts may charge fees.

103. **Comment:** Section 102.6 (b)(2) – We feel that all permit applications and fees should remain as listed under the current regulations. (1166)

Response: The Department acknowledges the comment. The fees in the final rulemaking have been revised and will be based on the area of proposed earth disturbance by the applicant.

104. **Comment:** Sec. 102.6 Permit applications and Fees: The proposed fees would be paid to the Department on top of fees charged by county conservation districts that, in nearly all cases,

are the exclusive reviewers of plans and permit applications according to formal delegations of that authority from the Department. If an increase can be justified, it should be either phased in over a period of time; limited to permit applications that are not subject to the review, approval and supervision of conservation districts; or offset dollar-for-dollar by fees charged by the Districts. (1221)

Response: The final rulemaking has been revised by clarifying that the fees are to cover the majority of costs for implementation of the existing program by the Department and delegated conservation districts. Conservation districts may establish a fee for services or costs that are not covered by a permit application fee.

105. **Comment:** Section 102.6 (b) Permit fees. - The Department should consider a graduated fee scale up to \$2,500/\$5,000 based upon project size. Additionally, the Department should establish a more strict process than currently exists for the approval of conservation district fee schedules for E&S reviews. Often, District fee schedules do not appropriately reflect the proportional cost to provide the application review and inspection services. (695)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments. The Department does not review conservation district fee schedules. The State Conservation Commission has the authority to review conservation district fees to determine if such fees are reasonable in relation to the scope of the service provided.

106. **Comment:** We would like to suggest that the proposed rules adopt the approach taken by most conservation districts. That is to say, the fee schedule should be based upon the size of a proposed project – either by number of units or acres disturbed. We would recommend a tiered fee schedule that ranges up to \$2,500/\$5,000 for the NPDES permits based upon project size, versus a flat rate for all projects. A three acre site should not be charged the same as thirty acre site. (1245)

Response: The Department agrees, and has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant

107. **Comment:** Minimum 100 foot forested buffers are a key part of any good stormwater management plan. But because your agency is already stretched thin, we suggest that the application fees be at a level that reflects the actual costs associated with reviewing applications and plans. (1290)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

108. **Comment:** Regarding the cost of development the proposed regulation as has been noted previously increases fees significantly. In the case of a general NPDES permit, by a thousand percent. The fee for the proposed permit-by-rule has been raised from \$500 in the April 8th, 2009 version of this regulation presented to the State's Water Resources Advisory Committee to

\$2,500 in the current version, which lessens the incentive for potential applicants to choose that option. At the same time, the fee for an individual permit would be twice that of the permit-by-rule, despite the fact that both require the same information. Questions also exist as to when the training and compliance piece of the costs are properly recovered and there are also municipal costs that must be considered. (1264, 1291)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

109. **Comment:** We could probably do a much better job and make developers much happier if we'd reduce fees, but have them face the penalty. Have them face the likelihood of a severe penalty for any infraction. (1308)

Response: The Department has revised the fees in the final rulemaking based on the proposed earth disturbance by the applicant. The Department also provided a financial analysis in response to public comments.

110. **Comment:** § 102.6(c) Complete applications or NOI. [Does this include a ROC? If so, ROC should be specified and consistently referenced throughout 102.6 (c) (I), (2), and (3).] (1315)

Response: The ROC term is not used in the final rulemaking and therefore all references have been deleted.

111. **Comment:** Is it possible proposed new or increased changes to the earth disturbance activities on projects under PBR coverage may kick it into requiring NPDES permit coverage? For example, the new or increased earth disturbance activities no longer meet eligibility for PBR coverage for which the original ROC was provided written verification of coverage (e.g. proposed earth disturbance area exceeds the maximum 15 acre limit of disturbance, is within or on sensitive areas, encroaches on required riparian forested buffer area, etc.) (1315)

Response: The PBR has been deleted and is not included in the final rulemaking.

112. **Comment:** Is a pre-submission meeting with the Department or Conservation District required prior to submission of an amended ROC? (1315)

Response: ROC has been deleted from the rulemaking.

113. **Comment:** These are certainly challenging times for all of us. While we support DEP's goal of protecting our environment, we certainly hope they will support the need for economic vitality. Permit extension requirements which mandate the implementation of current regulations for projects already fully approved and under construction and rigid riparian buffers certainly make it difficult for businesses to be successful. These new requirements will have a serious ripple effect across every industry and will result in greater and continued stress on the citizens

and governments of Pennsylvania. I hope that you will consider alternative methods to achieve a common goal for all. (432, 1122, 1126, 1132, 1137, 1138, 1276)

Response: At the time a permit extension is required, the Department or conservation district would consider the progress of the project during the review of the permit extension request. The Department intends to consider any reasonable request for an extension. The purpose of the request is to communicate the intent of the applicant to the Department concerning the requested information.

102.7. Permit Termination.

1. **Comment:** Section 102.7. Permit Termination. - Reasonableness; Economic impact; Clarity. *written acknowledgement of an NOT (Notice Of Termination)* Subsection (c) states: Until the permittee has received written acknowledgement of an NOT, the permittee will be responsible for compliance with the permit terms and conditions including operation and maintenance.... Commentators are concerned that this action is open-ended and, without a response from DEP within a reasonable time, a person could be held responsible for unreasonable costs long after a project is completed. We agree that DEP should be required to respond in a reasonable timeframe. Also, the EQB should review the sentence quoted above and fix the grammatical error in the final-form regulation. (1322-IRRC)

Response: The Department has corrected the grammatical error and has added a provision requiring The Department or conservation district to conduct an inspection and to approve or deny the Notice of Termination within thirty (30) days.

2. **Comment:** 102.7 PACD questions what incentive is there to submit a permit termination? Without some incentive, permits may never be terminated. (640)

Response: Until a permit termination is submitted, the permittee or copermitttee is responsible for the earth disturbance activities including long term O&M of the PCSM BMPs. It should be noted that the Notice of Termination should not be submitted until the site has been permanently stabilized in accordance with 102.22(a).

3. **Comment:** Section 102.7(a) How much time do permittees have to submit the NOT from the time construction is completed? (1268)

Response: There is no time limit, but until a Notice of Termination is submitted, the permittee or co-permittee is responsible for the activities taking place on the site including the long term O&M of the PCSM BMPs.

4. **Comment:** Revise 102.7(b)(2) to read: The **permittee** ~~operator~~ name and address. *This section appears to contemplate the termination of the permit for the entire project which can only be accomplished by the permittee.* (693)

Response: A Notice of Termination can be submitted for the entire project or portions of the project. This section was not included in the proposed rulemaking.

5. **Comment:** 102.7(b)(5) How can a NOT be submitted by a developer (or contractor) who has installed all post construction BMPs on a site, but has not yet sold lots to individual homeowners, as this new section requires an identification of persons who will be responsible? (1123)

Response: In this scenario, the permittee, co-permittee or other person who has agreed to long term O&M of the PCSM BMPs will be identified in the Notice of Termination.

6. **Comment:** Section 102.7(b)(5)-(c)-These provisions call for identifying- the "person" responsible for operation of the PCSM BMPs in accordance with the approved PCSM plan in the notice of termination (NOT)-and for the permittee to remain in compliance with all terms and conditions of the permit until receiving written acknowledgment of a NOT. The draft regulation seems to indicate that once a co-permittee (including a project manager, engineer or developer) joins a project, he becomes a permittee. Since the draft also identifies the permittee as responsible for compliance with all permit terms and conditions, including operation and maintenance of PCSM BMPs--despite not defining the term "permittee"--the regulation must clarify who is intended to be responsible, when a transfer of that responsibility can occur, and when persons involved in the project can be released from that responsibility. (1123)

Response: The proposed language is a codification of existing permit requirements. The Department has revised this section to clarify that the permittee or co-permittee is responsible to submit the Notice of Termination. Additionally, the Department revised the regulation to allow for a submission by the co-permittee once they have met their obligations under the permit. The transfer of operation and maintenance can occur when the BMPs have been installed completely and according to the plans and permanent stabilization has been achieved.

7. **Comment:** 102.7(b). Wording from Section 102.8(1) regarding Record Drawings should be included in this section. Add: The permittee shall include with the notice of termination "Record Drawings" with a final certification statement from a licensed professional. (693, 1208)

Response: An NOT can be submitted for sections of a project, but final certification needs to be submitted with the final Notice of Termination at the completion of the entire project.

8. **Comment:** 102.7 (c) First sentence, add "of" between "acknowledgement" and "an" (693, 946, 1115, 1129, 1187, 1191)

Response: The Department has revised the section to address the comment.

9. **Comment:** §102.7(c) Permit Termination. The Department has provided no justification for the proposed requirement to require written acknowledgement of NOTs which is a future demand on limited Department resources. Again, there is no commitment of response time for this acknowledgement in the proposal, however, permittees would continue to be responsible for permit conditions and the project site for this intervening, undetermined amount of time. This could include continued unnecessary inspections of completely stabilized disturbed areas for extended duration, at considerable expense and with to no further benefit. We request that this requirement be deleted in its entirety - especially for projects involving only temporary earth disturbance that are restored with no added impervious surfaces or constructed PCSM BMPs - such a pipeline installation or repair projects. At a minimum, the NOT should be deemed acknowledged if no response is received within 15 days. (691, 1124, 1152, 1250)

Response: The proposed language is a codification of existing permit requirements. The transfer of operation and maintenance can occur when the BMPs have been installed completely and according to the plans and permanent stabilization has been achieved. The Department has

revised the final rulemaking to include a requirement that the Department or conservation district will conduct an inspection and approve or deny the Notice of Termination within thirty (30) days.

10. **Comment:** § 102.7(c) – Notice of Termination Process DEP has added language to the proposed rule requiring written acknowledgement of the filing of a Notice of Termination (NOT) before the permittee can be released from permit terms and conditions. Considering the recently reduced resources that the Department has encountered, the Chamber is extremely concerned about this new requirement. The Chamber strongly recommends that this requirement either be deleted; or alternatively that a “deemed approval” provision be included in which a NOT is deemed approved if the Department or conservation district has not provided a written objection to the NOT within a specified time frame (say 14 days of receipt). (1241) It is recommended that the amendments be revised to state that unless the permittee receives written notification from PADEP within 30 days of the submission of the NOT, a NOT shall be "deemed approved. (1278, 1323)

Response: The proposed language is a codification of existing permit requirements. The transfer of operation and maintenance can occur when the BMPs have been installed completely and according to the plans and permanent stabilization has been achieved. The Department has revised the final rulemaking to include a requirement that the Department or conservation district will conduct an inspection and approve or deny the Notice of Termination within thirty (30) days.

11. **Comment:** § 102.7(c) – There is a grammatical error in the opening clause of this subsection. (1241)

Response: The Department has revised the section to address the comment.

12. **Comment:** The notice of termination acknowledgement is already greatly abused. We repeatedly see conservation districts holding the NOT over developers heads to get things that are not required, like installation of additional post construction BMPs. As written, the Department has no incentive to issue an NOT. They essentially have someone on the hook to operate or pay violations for not operating the BMP until the permit expires. We recommend that a specific timeframe from this submission of the NOT be included. (1289)

Response: The proposed language is a codification of existing permit requirements. The transfer of operation and maintenance can occur when the BMPs have been installed completely and according to the plans and permanent stabilization has been achieved. The Department has revised the final rulemaking to include a requirement that the Department or conservation district will conduct an inspection and approve or deny the Notice of Termination within thirty (30) days.

102.8. PCSM Requirements

1. **Comment:** Section 102.8. PCSM requirements. - Economic impact; Need; Reasonableness; Clarity *"Or other Department permit that requires compliance with this Chapter"* Relating to Subsection (a), the Pennsylvania Chamber of Business and Industry commented that the phrase "or other Department permit that requires compliance with this chapter" is extremely broad and would encompass many projects. It suggests that Subsection (a) be limited to earth disturbances that require an NPDES permit. We agree and recommend that the EQB amend this provision accordingly. (1322-IRRC)

Response: The Department disagrees, and believes that the Clean Streams Law as well as case law related to PCSM that makes clear that permanent change to the surface of the land is a potential source of stormwater pollution to waters of the Commonwealth that the Department must consider when it makes permit decisions or other regulatory authorizations. [See Oley Twp., Valley Creek, Zlomsowitch, Alpine Rose, CCN and PMA cases]. This section applies whenever a permit is required either under Chapter 102 or another Chapter administered by the Department authorizing earth disturbance activities, all of which must comply with the requirements of Chapters 93 because they have the potential to cause pollution due to changes in stormwater runoff volume, rate, quality and temperature, and may also require compliance with the requirements of Chapter 92 because they are regulated point sources. The Department believes that to limit the requirements of this section to the NPDES Stormwater Construction permits would leave other sectors vulnerable to legal challenge or uncertainty regarding regulatory requirements and performance standards. Inclusion of these programs under Section 102.8 will facilitate compliance with the antidegradation requirements of Chapter 93 for all regulated activities that may have stormwater discharges after earth disturbance activities. The Department has clarified the provisions in Section 102.8 that accommodate programs such as Mining and Reclamation and Oil and Gas Management recognizing that these programs require site restoration, which will typically meet most of the post construction stormwater management requirements.

2. **Comment:** *Minimize and maximize* Subsection (b) uses the vague terms "minimize" and "maximize." These requirements are subjective. For example, under Paragraph (7) there could be considerable disagreement over whether a plan would "minimize soil compaction." We recommend replacing these provisions with quantifiable standards. (1322-IRRC)

Response: These terms have been historically used in Chapter 102. The use of the terms gives latitude to the design professional to prepare a plan that is site specific and meets the requirement of the regulations.

3. **Comment:** *Utilize other measures or controls* Paragraph (b)(8) is vague. It follows seven requirements and considerations, including Paragraphs (2) and (3) which require the plan to minimize stormwater runoff and volume. We also question why the concept of pollutants is included and what it implies. We recommend deleting Paragraph (8) or that it be amended to provide a specific standard for compliance. (1322-IRRC)

Response: This section has been revised in the final rulemaking to be more specific. "Measures or controls" has been replaced with the more specific language "structural or non-structural BMPs". Further, this section has also been revised to reference "changes in stormwater runoff" and has deleted the separate reference to "pollutants." The Department notes, that stormwater runoff may contain pollutants as that term is defined in Section 102.1 of the Chapter, which must be addressed in accordance with the requirements of Section 102.8.

4. **Comment:** *A person trained and experienced in PCSM design methods and techniques* Subsection (e) is nonregulatory language. It imposes no definable level of expertise. It should either be deleted in its entirety or replaced with specific credentials for a person to design PCSM Plans. (1322-IRRC)

Response: This language is parallel structure to the E & S portion of the regulation in Section 102.4(b)(3). The language in 102.4(b)(3) is existing language that historically has been effective considering the broad range of activities regulated under this Chapter. Projects vary greatly, therefore the Department has also added language to clarify that a person's training and experience shall be "applicable to the size and scope of the project being designed." More specific credentials may also exclude qualified designers who are not licensed by the Commonwealth and potentially increase development costs.

5. **Comment:** *Other supporting documentation* Subsection (f) states a PCSM Plan must contain "other supporting documentation." How will a person know how to comply with this requirement? We recommend deleting this phrase or providing detail in the regulation specifying what other information is required. (1322-IRRC)

Response: As recommended, this phrase has been deleted in the final rulemaking.

6. **Comment:** *Immediate surrounding area* Paragraph 102.8(f)(1) requires a description of the "immediate surrounding area." This is a vague requirement. The regulation should provide specific guidance on how far from the project the topographic features must be described. (1322-IRRC)

Response: This term gives latitude to the design professional to include the area that would impact the project site, and may depend on drainage, topography and other factors.

7. **Comment:** *Limitations of the soils and geologic formations* Paragraph 102.8(f)(2) requires a PCSM Plan to include "limitations of the soils and geologic formations." Without a context to what is considered a "limitation," the regulation is not clear. We recommend that the EQB amend this paragraph for clarity. (1322-IRRC)

Response: A limitation is a commonly used term that refers to a characteristic of the soil or geology that would not allow it to perform as needed in the site design. Design professionals that have training and experience are well aware of these limitations. Limitations are generally listed in the county soil surveys and geologic mapping. This is similar to the existing requirement for the E & S plan included in Section 102.4(b)(5)(ii), and has been in place for years in submitting E&S plans.

8. **Comment:** *Past land uses* Paragraph 102.8(f)(3) requires the characteristics of "past, present and proposed land uses." Why is the past use relevant and needed, and how far into the "past" must a plan go to comply? We recommend deleting the requirement for the characteristics of past land uses. (1322-IRRC)

Response: Past land use may have caused pollutants to be found in the soil that the person proposing the earth disturbance must be aware of so those pollutants and potential disturbance are considered. The Department historically has requested that permit applicants use due diligence for a 50 year period when such records are reasonably available, however the designer is encouraged to select the time period most appropriate for that site and the potential for pollutants to be present.

9. **Comment:** *Supporting calculations and plan drawings* In 102.8(f)(8) requires "supporting calculations," and Paragraph (9) requires "plan drawings." The regulation should specify what supporting calculations and plan drawings are required. (1322-IRRC)

Response: This language is consistent with existing language contained in Section 102.4(b)(5) for E&S plans. This language provides the flexibility to address the wide variety of activities from implementation of simple to complex projects or activities, and the supporting calculations and plan drawings at a level appropriate for the earth disturbance activity covered under this regulation.

10. **Comment:** *"Long-term operation and maintenance schedule and inspection which provides for inspections" and "effective and efficient operation"* 102.8 (f)(10) requires a "long term operation and maintenance schedule which provides for inspection" and this schedule is "to ensure effective and efficient operation." Both of these phrases are vague. What is "long-term"? Who does the inspections? What standards are to be used to determine "effective and efficient operation"? Paragraph (10) needs to be rewritten to establish binding norms for how it can be complied with and who is responsible for the requirements. (1322-IRRC)

Response: The permittee at the time of Notification of Termination will specify who will be responsible for the long term operation and maintenance. Section 102.8(f)(10) & (11) indicates what the operation & maintenance schedule should include and who should be responsible. The operation and maintenance requirement is for the BMPs that are installed as part of the PCSM management plan. In order for these BMPs to function efficiently, they must be maintained in perpetuity or until the land use changes.

11. **Comment:** We further question the economic impact of Paragraph (f)(10). The EQB should include an estimate of the cost for long-term maintenance and inspection of PCSM Plans. (1322-IRRC)

Response: The Department has completed an analysis of the regulatory impact and has included that review in the Regulatory Analysis Form.

12. **Comment:** *Thermal impacts* Similar to E & S Plans, Section 102.8 (f)(14) requires PCSM Plans to include an evaluation of the potential for thermal impacts to surface waters from earth disturbance activities. Commentators state there is no guidance on how to meet this requirement. One commentator believes that rather than an evaluation, they should only be required to identify the potential for thermal impacts. We recommend that the regulation clearly state what evaluation of thermal impacts will be acceptable to DEP. (1322-IRRC)

Response: The Department has revised the final rulemaking by replacing the requirement of the “evaluation” to “identification” as recommended. Since each site is different, the Department believes the design professional should be allowed to develop an appropriate response to address thermal impact concerns. In addition to identifying the potential for thermal impacts, appropriate BMPs should be designed to mitigate those impacts. The Department will be establishing additional guidance to assist the design professionals in meeting this requirement.

13. **Comment:** *Costs to comply with Subsection (g)* The Department of Transportation cited several specific concerns with the costs imposed by Subsection (g) and the effect of the requirements, including Paragraphs (1), (2) and (3). The Department of Transportation has provided suggested alternatives. The Pennsylvania Builders Association believes the provisions in Clauses (g)(2)(i) and (ii) are not reasonable and should be modified. The EQB should review these concerns and consider amendments to decrease costs and ease compliance. (1322-IRRC)

Response: The Department included these provisions as a codification of the existing permit requirements. Further, these requirements are necessary in order for the applicant to demonstrate that the project does not degrade water quality. The Department has also clarified the requirements when the activity involved is the repair, reconstruction or restoration of a roadway and the repair, reconstruction or restoration of utility infrastructure. The Department incorporated alternative provisions and approaches to protect water quality.

14. **Comment:** The EQB should review Clauses (g)(2)(i) and (ii) and explain why they are needed. The Department of Transportation also requests an exception to Subsection (g) to cover instances when standards may not be satisfied due to health, safety and welfare issues. The EQB should include this exception or explain why it is not needed. (1322-IRRC)

Response: The purpose of including these requirements in the Chapter is to standardize the methodology for evaluating the proposed changes in post construction runoff associated with creation of permanent impervious surfaces as well as a consistent performance standard that must be met. The Department believes that it is in the public interest as well as the interest of the regulated community to provide a standard for quantifying the pre-existing land use condition in relation to evaluating the anticipated change in runoff from the permanent changes to the land being proposed by the applicant. The Department does not agree that there should be exemptions from the requirements to conduct the analysis as a threshold matter, but does agree that there are projects that are necessary to ensure public health, safety or the environment such as those that may be undertaken by PennDOT, where meeting the performance standard required may not be feasible. The analysis required should not be exempt, but the Department has included provisions for allowing for variance from the ultimate performance standard where the applicant demonstrates that the project is necessary to protect the public health and safety and

meeting regulatory standard is not feasible. For redevelopment projects the Department has also included variance language where the applicant demonstrates the project is in the public interest, or necessary to protect public health and safety, and the 20% meadow condition is not feasible, and the applicant has maximized stormwater management retrofit opportunities.

15. **Comment:** *Require additional information or BMPs* Paragraph (g)(6) is a broad provision that allows DEP to require additional information or additional BMPs. Why is this provision needed? How can a demand made under this provision be appealed? (1322-IRRC)

Response: This provision is designed to allow the Department to request information in unusual or unique situations that can not be anticipated. The Department, rather than the conservation districts, reserves the authority to make this request to ensure statewide consistency. These requests could be discussed among the applicant and the Department to maintain reasonableness. Once the Department makes a permit decision, those actions can be appealed.

16. **Comment:** *Resubmittal of a PCSM Plan* Subsection (i) states: Upon complaint or site inspection, the Department or conservation district may require that the PCSM Plan be submitted for review and approval to ensure compliance with this chapter. Subsection (i) is redundant with Subsection (j). We recommend deleting Subsection (i). (1322-IRRC)

Response: Subsection (i) and Subsection (j) cover two different situations. Subsection (i) requires that upon inspection or complaint the PCSM plan may need *to be submitted for review and approval*. This is to make sure the activity is not causing stream degradation. Subsection (j) requires that the PCSM plan and reports or records *be available* for review and inspection by the Department or conservation districts as a matter of recordkeeping regardless of the existence of a complaint.

17. **Comment:** *Cost and Redundancy of Subsections (k) and (l)* Subsection (k) requires a licensed professional to be onsite during "critical stages" of implementation. The phrase "critical stages" is vague. Also, we question what phases of implementation are not critical. The regulation should state the specific periods a licensed professional must be onsite. In addition, the requirement for a licensed professional to be onsite will be costly. The EQB should explain what need this serves and how much it will cost. Finally, Subsection (l) requires a licensed professional to certify that the project was constructed properly. Why are both Subsections (k) and (l) needed? (1322-IRRC)

Response: Subsection (k) lists several items considered critical stages, and the licensed professional will determine other activities are also critical for them to be onsite. The intent is for the person who designed the plan to be able to identify and document that the plan is implemented properly, and the Department to receive that assurance through the certification required in Subsections (l). In response to IRRC requests and request by the Standing Committees, the Department has undertaken further economic analysis and has included an analysis in the Order to this rulemaking.

18. **Comment:** *Record drawings* Commentators stated that record drawings required in Subsection (l) are not applicable to all earth disturbance activities. The EQB should amend the

language in Subsection (1) to only require record drawings if they were required to meet another requirement. (1322-IRRC)

Response: The Department agrees that record drawings required in Subsection (1) are not applicable to all earth disturbance activities. Certification is required for all permitted activities. This will allow the Department to have an accurate set of plans of what was actually constructed onsite.

19. **Comment:** *Responsibility of the landowner and covenants* Subsection (m) states the operation and maintenance of PCSM BMPs shall be "the responsibility of the landowner" and the deed for the property shall contain a covenant that runs with the land. The EQB should explain the need to regulate post construction activity to such a degree as to require deed amendments and covenants. The EQB should also explain how this is a viable way to protect the environment given the inherent presumption that all landowners can afford to maintain and rectify any failure of a BMP for perpetuity. The Department of Transportation commented that its projects are along the roadway and within a right of way, and covenants could pose problems for future improvement of roadways. Therefore, the Department of Transportation requests an exemption. The EQB should either include an exemption or explain why it is not needed. (1322-IRRC)

Response: Subsection (m) allows the permittee to designate who will be responsible for operation and maintenance. The landowner is ultimately responsible if no other party is designated. The operation and maintenance requirement is for the PCSM BMPs that are installed as part of the PCSM plan. In order for these BMPs to function efficiently, they must be maintained in perpetuity or until the land use changes. This maintenance responsibility would remain if the property transfers, therefore the need for a covenant that runs with the land.

20. **Comment:** 102.8 Additionally, the Pennsylvania Builders Association suggests that this provision instead require an easement. The EQB should consider using easements. (1322-IRRC)

Response: The Department appreciates the suggestion, however "easement" is too limiting of a term in this instance. However, Section 102.8(m)(2) has been revised by the Department to include language that a legal instrument must be recorded with the recorder of deeds that will assure disclosure in the ordinary course of a title search..

21. **Comment:** *Responsibility for long-term PCSM operation and maintenance* The EQB should explain the need for long-term maintenance, why it is reasonable to extend it beyond soil stabilization on the project site and how the final-form regulation represents a legally viable, economical, reasonable and feasible assignment of responsibility. (1322-IRRC)

Response: The operation and maintenance requirement is for the PCSM BMPs that are installed as part of the PCSM management plan. In order for these BMPs to function efficiently, they must be maintained and inspected. We don't think that there is one solution to PCSM and long-term operation and maintenance and the regulation was written to provide as much flexibility as to who provides long-term operation and maintenance.

22. **Comment:** The O&M responsibility should be currently provided in the PCSM Plan submitted to the Department or Conservation District and subject to the review and approval. In some cases the landowner will have to be responsible. In others, the person that operates or manages the newly constructed facility (shopping center, apartment complex, home owners association, etc.) makes more sense because they are directly involved in the day-to-day operation. The PCSM plan requires that the person responsible for O&M be specified just as maintenance of E&S controls is specified in the E&S Control Plan. The proposed regulations already recognize this. See 102.8(f)(11). There is no need to expand the regulations already in place. (1223)

Response: The Department has revised the final rulemaking to have the permittee identify the person responsible for operation and maintenance when the Notice of Termination is submitted. The Department has experienced problems with persons having no knowledge of their responsibility to operate and maintain PCSM BMPs that are located on their property.

23. **Comment:** The Postconstruction stormwater management ("PCSM") regulation should be revised to be more flexible. (1272)

Response: The Department acknowledges the comment. There were several changes to Chapter 102.8(g) to allow alternative approaches.

24. **Comment:** Requirements relating to PCSM plans are not part of the federal NPDES permit program for stormwater discharges during construction activities. Instead, they are an independent creature of state law. Unlike permitting requirements that apply to stormwater discharges during construction activities which are necessarily of limited duration, requirements associated with managing stormwater from post-construction discharges are potentially of unlimited duration. It appears that once a PCSM Plan has been approved by PADEP and implemented, the proposed amendments to 25 Pa. Code Chapter 102 envision that the requirements will be added to the deed for the property and become an obligation that runs with the land and is imposed on each succeeding property owner. The proposed regulations are completely silent as to what happens if changes are made to the property that the need for post-construction stormwater management BMPs or different BMPs are employed in the future. The proposed regulations fail to recognize the consequences of encumbering property and create the potential for property records to be cluttered with competing and conflicting requirements for BMPs that may become obsolete or unnecessary. In addition, the proposed requirements relating to PCSM Plans are written so broadly and with so much latitude for interpretation that they create a minefield of potential problems in the context of permitting decisions. For example, 25 Pa. Code 102.8(b) (proposed) directs that to the extent practicable, management of post-construction stormwater be done so as to, among other things, minimize impervious areas, maximize the protection of existing vegetation, minimize land clearing and grading, minimize soil compaction, and protect, maintain, reclaim and restore the quality of water and the existing and designated uses of waters within the Commonwealth. These type of criteria allow individuals reviewing PCSM Plans, and litigants appealing permit decisions by PADEP, to second guess virtually every element of a proposed project and impose their own subjective views as to whether the criteria have been met "to the extent practicable." We therefore suggest that the requirements for PCSM Plans be streamlined to identify a limited universe of key objectives to

be achieved by PCSM Plans, so that project proponents can then have flexibility to use different combinations of design elements to achieve those objectives. Otherwise, significant amounts of time and energy may be devoted to compiling information and providing analyses within a permit application that may have little overall benefit. (1256, 1323)

Response: The PCSM requirements are in part driven by requirements in the federal NPDES permit program, as well as state law. The Department has revised 102.8 in several ways that address these comments, including some revision to Chapter 102.8(b), including the deletion of proposed 102.8(b)(9). The remaining sections in Chapter 102.8(b) provide a list of general planning concepts that parallel the general planning concepts related to the E&S Plan requirements. Provision of broad planning concepts is intended to provide the applicant flexibility to choose the most appropriate combination of BMPs for a specific site to meet water quality and project objectives. The requirements related to long term operation and maintenance of PCSM BMPs have been consolidated in revised section 102.8(m)

25. **Comment:** The proposed regulations do not require the seal of a licensed professional for E&S plans involving structural BMPs however the most current NPDES Permit Summary Sheet (3930-PM-WM0035 Rev. 512007) requires the seal of a licensed professional. Please clarify. (218)

Response: The permit terms and conditions may vary considerably based on the type of department permit and the particular activity that it regulates. Due to the variation of these terms and conditions of a particular permit it would not be appropriate to list them in the Chapter 102 regulatory requirements. Therefore the NPDES permitting requirement is that a licensed professional's seal is required on erosion and sediment control plans and post construction stormwater management plans for engineered structural BMPs. The Department thanks the commentator for bringing this to our attention.

26. **Comment:** Consistency with DEP Post Construction Stormwater Management Delegation; The proposed regulation fails to recognize the Department's relatively new PCSM delegation agreement with certain conservation districts, including Pike, which have incurred significant costs to hire and train Professional Engineers (PEs) to oversee PCSM plan reviews/site inspections at the district level. Throughout the proposed regulation, there are provisions relating to Department review of alternative designs, BMPs or stormwater management strategies or district consultation with the Department on these issues. Examples include 102.4(b)(4), 102.4(b)(5)(xiv), 102.4(b)(6), 102.4(c), 102.8(d), 102.8(f)(16), 102.8(g)(6), 102.8(k), 102.8(m), 102.11 (b). For PCSM delegated districts with PEs on staff, this added step contradicts roles and responsibilities set forth in the delegation agreements and may unnecessarily delay the NPDES Permit review process. (1208)

Response: It has always been and remains the Department policy that alternative designs and BMPs not in the current design manuals are allowed provided that adequate documentation is provided by the applicant showing that the alternative design or BMP is as protective of water quality and existing and designated uses as the approved BMPs. This approval process for alternative BMPs and design standards should be done in consultation with the Department to ensure statewide consistency. The department disagrees with the commentator's assertion that

this requirement will unnecessarily delay the NPDES permitting process even for those districts that are delegated the PCSM responsibilities and employ a professional engineer on staff to conduct engineering reviews.

27. **Comment:** It is perhaps easier to argue that costs of managing post construction storm water structures should be placed upon the owner(s) of the property when major earth disturbance is involved in development and construction activities. The proposed rulemaking makes the professional and contractor (Operators) co-permittees along with the owner with the implication that all three should be responsible for maintenance in perpetuity. In most instances of large development the PCSM maintenance structures become in effect public ownership which should be the responsibility of the public owners. Professionals and contractors should not be burdened with perpetual maintenance responsibility. (1149)

Response: Sections 102.7(c) and 102.8(m)(1) require that a party be named that will be responsible for long term operation and maintenance. In some cases this could be a municipality. However, in recent history, municipalities are more reluctant to take dedication of these PCSM BMPs. These changes are the Department's effort to ensure that these PCSM BMPs function to protect water quality.

28. **Comment:** All of Philadelphia's streams are impaired due to urban runoff. It is unclear how an applicant can *"demonstrate that all construction and posts construction discharges will not degrade the physical, chemical or biological characteristics of the surface waters."* Philadelphia has adopted Stormwater Regulations across the entire City which are consistent with Department approved Act 167 Plan in the Darby-Cobbs Creeks watershed, approximately 7% of Philadelphia's total land area. The Stormwater Regulations have been adopted in order to meet our MS4 permit compliance requirements and Philadelphia's Stormwater Regulations exceed the criteria of the State Model Ordinance. Therefore, it seems appropriate to allow the Stormwater Regulations to apply to the entire City rather than identifying areas which must comply with DEP requirements in some cases and the Philadelphia Stormwater Regulations in others. (1280)

Response: The Department agrees. Deference is given to an approved Act 167 Plan that includes volume, water quality and rate control provisions. These requirements are provided in 102.8(g)(2) and (3).

29. **Comment:** Chapter 102 should promote sustainable planning and design strategies and prioritize the use of nonstructural BMPs in the development of PCSM Plans. By doing so, it becomes easier to comply with anti-degradation requirements in special protection waters, reduces costs of compliance, and minimizes complications with long term O&M. (693)

Response: The Department agrees. The general planning requirements in Chapter 102.8(b) support this concept.

30. **Comment:** Post-construction stormwater management ("PCSM") requirements are unnecessary for the oil and gas industry because the relevant construction activities differ markedly from other types of development and construction sites. The Oil and Gas Act and

regulations at 25 Pa Code Chapter 78 establish a comprehensive program with requirements for well site restoration. There is no need to expand this existing program. Restored sites cover only a small area; there is at most an insignificant difference in runoff from pre to post construction. Earth disturbance activity where the site is restored to pre-construction runoff levels should not be subject to PCSM requirements. (1261)

Response: Chapter 102 needs to cover all earth disturbance activities. The goal of the PCSM requirements is to prevent an increase in the rate and to minimize the increase of volume of runoff from the development activity. In addition, 102.8(n) references whether activities such as oil and gas are required to do site restoration or reclamation which identifies PCSM BMPs and may be used to satisfy the PCSM plan requirements.

31. **Comment:** It is my understanding that the PA Clean Streams Law was last revised in 1980 and the PA Stormwater Management Act was signed in 1978. Neither law requires any specific stormwater controls. The Department's difficulty in assigning long-term operation and maintenance responsibility is a function of the inadequacy of the law to match the sweeping reach of post construction stormwater management regulations. Ultimately, the owner of the property is responsible for meeting the requirements of the Clean Streams Law and the Stormwater Management Act. The Department is overreaching when it concerns itself with implementing regulations in a manner contrary to existing environmental laws and established property law. (1260)

Response: The final rulemaking gives specific methods to meet the PCSM requirements but also allows alternative approaches and methods that can be shown to maintain and protect existing water quality and existing and designated uses.

32. **Comment:** 102.8. We find it confusing when the terms "prevent and minimize" are used throughout this section relative to the rate and volume of stormwater runoff. In (8) both words are used implying that the applicant can choose between preventing or minimizing the generation of increased stormwater runoff and pollutants. (947)

Response: The Department utilized these words to provide flexibility to the applicant when designing how to meet the provisions. Chapter 102.8(b) is a list of general planning concepts. More specific requirements are listed in Chapter 102.8(g).

33. **Comment:** Unfortunately, we feel that the proposed regulations and especially the stormwater component are cumbersome and difficult to understand and will have little if any impact to improving water quality. We are not in favor of combining stormwater by regulation to the Chapter 102 Erosion and Sediment Control regulations. The proposed regulations are difficult to understand and read. For example, in reading 102.8 PCSM requirements there are an a and b then (1 through 9) then (c, d, e and f) then (1 through 16,) then (g) then 1 and 2 then i and ii, then (3), then i and ii then (4, 5 and 6) then (h, i, j, k, and l) then (I and 2) and finally (m and n). The above example is 7 pages long and it is very difficult to follow. The existing Chapter 102 regulations are shorter and much easier to read and understand. (947)

Response: The Department disagrees. An adequate discussion of the PCSM requirements dictated that the section be increased in length from the previous regulation. The numbering and lettering follow the Legislative Reference Bureau standards for regulations.

34. **Comment:** More definition of long term O&M required. (1317)

Response: The Department disagrees. Section 102.8 (f)(10) provides a detailed description of what is needed as part of an operation and maintenance plan.

35. **Comment:** Post-construction stormwater can have long-lasting impacts on nearby residents and natural resources. For that reason, PennFuture appreciates the increased attention the Proposed Rulemaking gives to post-construction stormwater management (PCSM), including requirements for certification of proper implementation of PCSM best management practices (BMPs), and for long term operation and maintenance (O&M) of those BMPs. (946, 1191)

Response: The Department appreciates the comment.

36. **Comment:** We suggest splitting a post construction certification into two parts, one for design and one for inspection. This will allow a municipal engineer to sign off on the construction side to prevent unwarranted costs to developers. The Department should determine how to uniformly require and implement the water quality standards. As it stands now if one developer creates ten one acre lots, they would be required to provide stormwater management, including long-term O&M and an increased cost to these lot owners. On the other side of the road, a second developer has a second ten acre parcel and subdivides it to ten one acre lots but doesn't construct. He sells all ten lots to individual owners. Since each lot is under one acre of disturbance, they're separately owned, these lot owners have no postconstruction stormwater requirements. Two identical projects on opposites sides of the same road, one's exempt, one has to comply. (1289)

Response: The Department disagrees about splitting out the post-construction certification into two parts, as suggested by the commentator. Based on the scenario provided, the two activities would require NPDES permit coverage and therefore development of a PCSM plan. Both activities would require the NPDES stormwater construction permit since both activities would involve earth disturbance activity on any portion or during any stage of a common plan of development or sale.

37. **Comment:** I am writing in support of the continuation of the Department of Environmental Protection's (DEP) technical review process of stormwater plans. (734)

Response: The Department acknowledges the support.

38. **Comment:** We suggest that DEP make the permittee legally responsible for ensuring long term operation and maintenance of the BMPs in their post-construction stormwater management plan. As part of that plan, the permittee should be required to demonstrate that they have made an ongoing, long-term arrangement for inspection and maintenance of their BMPs. One option would be for the permit holder to contract with the county conservation districts to provide O&M

services on a fee for service or with some other qualified agency or vendor. Proof of such a contract should be required as part of the postconstruction stormwater management plan application. (648, 833, 1131, 1253, 1302, 1309, 1310)

Response: Under Section 316 of the Clean Streams Law, the landowner is legally responsible for any pollution or the potential for pollution that emanates from their property. These BMPs are in place to protect against pollution or the potential for pollution. Under certain circumstances, it may be appropriate that the permittee considers long term O&M "agreement" with a third party as identified in 102.8(m)(4).

39. **Comment:** As part of any regulation, we should also state that developers should be required to maintain post-construction stormwater plans and best management practices and should be monitored closely. (1299)

Response: The Department acknowledges the comment. The proposed regulations do establish the responsibility of developing and implementing PCSM plans and BMPs.

40. **Comment:** Regarding the responsibility for long-term permanent operation and maintenance of storm water management systems, forestry professionals and contractors should not be burdened with perpetual maintenance responsibility or oppressive permit fees in the case of timber sale within 150 feet of an Exceptional Value stream. (1202)

Response: Earth disturbance activities have long term impacts. The rulemaking provides for the development and implementation of PCSM BMPs to protect water quality. The BMPs require maintenance to function properly and a responsible party to ensure appropriate operation and maintenance.

41. **Comment:** The proposed revision will now require management of post construction stormwater. The Clean Streams Law regulates contaminants as pollution. This proposed regulation now identifies post construction stormwater as pollution by the mere fact that water is discharged from areas that have undergone construction activities, even if the water contains little or no contaminants. We recommend that post construction stormwater should be managed under separate regulations and guidelines. (944, 1204)

Response: The Department acknowledges the comment, however the Department would like to clarify that the Clean Streams Laws provides for the regulation of activities that cause or have the potential to cause pollution to waters of the Commonwealth. It has been well documented that the increases in volume and rate of stormwater runoff, along with the potential for contaminants that are collected in the runoff have a degrading effect on water quality. The Department maintains that the Chapter 102 regulations are the appropriate document for regulating stormwater after construction and earth disturbance activities.

42. **Comment:** The PA Environmental Council commends the Department for the addition of Section 102.8 ("PCSM requirements"), as well as the conforming revisions to other related sections, to the Chapter 102 regulations. Clearly stated, enforceable requirements designed to ensure the long-term operation, maintenance, repair and monitoring of BMPs is an imperative

element of effective erosion and sediment control and stormwater management. The hall marks of the PCSM planning and plan implementation requirements should include: (1) clear assignment of responsibility for the performance of the activities specified in the PCSM Plan to a capable "Operator" in the first instance; (2) an effective process for the subsequent assignment of responsibility by the then current designated Operator to a capable successor; (3) effective routine communication, on a periodic basis, concerning the actions required to comply with the approved PCSM Plan; (4) a record-keeping and reporting system that will provide an effective means for the Department or other delegated entity to monitor compliance without exclusive reliance on complaints and random site inspections; and (5) a mechanism for ensuring that parties responsible for the performance of long-term PCSM plan activities have the financial capacity to do so. (1249)

Response: The Department acknowledges the comment and appreciates the support of the rulemaking. The Department has made revisions to the final rulemaking to clarify the process, the entity and the mechanisms for identifying the party or parties that are responsible for long term operation and maintenance.

43. **Comment:** The provisions of this proposed regulation include many PCSM BMPs for site designs that will be difficult to comply with and require a substantial amount of money to design, install and maintain. A much more efficient and cost-effective means of controlling water pollution throughout Pennsylvania (and especially within the Chesapeake Bay watershed) would be to allow for a "stormwater BMP offset" option for builders and developers as part of the Chapter 102 regulations. Under a "stormwater BMP offset" program, builders, developers and other applicants would be permitted to fund off-site stream buffers in return for offsets of certain PCSM BMP requirements. Applicants would still need to install all erosion and sedimentation control measures, as well as stormwater facilities to control the runoff rate to predevelopment conditions. In particular, the proposal would offset stormwater infiltration areas-which will be a long-term problem, as noted previously, for all parties involved to guarantee maintenance and function-with off-site stream buffers. Instead of designing and installing these infiltration areas, we would propose that a builder or designer work with the appropriate county conservation district to identify farm BMP projects, such as riparian forest buffers, that need funding. This process could work in a manner similar to that utilized in wetland banking, and it would assist the Department in enforcing existing conservation requirements on Pennsylvania. Once it is implemented, farmers, the Department, EPA, and conservation districts could cooperate in securing a source of funding for these projects in order to: a) Maximize environmental benefits at a reasonable cost; and b) Minimize issues with long-term operation, maintenance and enforcement. Farmers would need to grant a conservation easement along a stream in return for technical assistance to bring the farm into compliance and install the buffer. It may also be possible to generate and sell nutrient credits under this option, which could provide a source of long-term funding to farmers and/or conservation districts. (1264, 1291)

Response: The Department has provided an opportunity to utilize riparian forest buffers in Section 102.14(e)(2) that would allow for the use of trading or offsetting credits in accordance with procedures or regulations established by the Department.

44. **Comment:** Chapter 102 must provide more tools to the designer/owner. For instance, if the project site is unsuitable for infiltration, then allow for in-kind offsite infiltration in the same watershed or BMP trading. If other landowners can not or will not reasonably cooperate, then allow for a contribution to a BMP Bank. In this manner, we would stop forcing infiltration in areas that don't work and actually get better results that we are all looking for. (1123)

Response: The Department recognizes that many sites are not suitable for infiltration BMPs. In the referenced Stormwater Best Management Practices Manual (PADEP #363-0300-002), there are many other BMPs that could be used for volume reduction in place of infiltration. The final rulemaking allows for alternative approaches that will maintain and protect existing water quality and existing and designated uses.

45. **Comment:** 102.8 -there is no mention about coordination of PCSM stormwater requirements. This is an issue that should be addressed. Currently we have had instances where there were conflicts between Municipal and PSCM requirements. Coordination and consistency should be addressed during design phase. (218)

Response: Coordination and consistency are identified by reference to the applicable Act 167 plans and 102.43 withholding of permit approvals or authorization by the municipality.

46. **Comment:** PCSM Requirements prevent an increase in the rate of storm water runoff volume for the 2 year storm. The volume control for larger storms is minimal. PCSM BMP measures that prevents the generation of increased pollutants. Add drainage areas to structural PCSM BMP's. Why duplicate information required as part of E & S Plan? (2)

Response: The Department requires duplicate information to maintain coordination and consistency.

47. **Comment:** What format will the "Record Drawings" be required to be submitted? Can they be in an electronic format with lat. and long. coordinates required? (2)

Response: The Department requires hard copies of Record Drawings in order to maintain long-term storage of the documents.

48. **Comment:** We are concerned with the need to provide significant details of our record drawings of substations. The levels of oversight record drawings, deed notices, for example, add unnecessary cost to a project that will be ultimately passed on to the ratepayer. These requirements aren't necessary because when a substation is closed all of the buildings, all of the equipment and BMPs are removed and the property is returned as close as possible to its pre-construction condition prior to sale. (1301)

Response: The drawings, BMPs, and other supporting information needs to be maintained for developed areas. Once a project is reclaimed or restored to the pre-development condition, no further drawings, BMPs, and other supporting information needs to be provided.

49. **Comment:** § 102.8(a) *PCSM requirements*. As written, this would require a PCSM Plan (containing all of the extensive listed requirements) for many small repair activities that do not generate post-construction stormwater management issues of any type. For example, a small repair to a pipeline or other structure within a stream channel requires a Chapter 105 permit. All Chapter 105 permits require compliance with Chapter 102 -however, a PCSM Plan would not be appropriate for that activity. CNX Gas requests that the PCSM Plan requirements apply only to earth disturbance activity that requires an NPDES or E&S Permit under this chapter by removing the phrase "or other department permit that requires compliance with this chapter". (691, 1124, 1250)

Response: The Department disagrees. On minor projects where there is little or no change in the runoff characteristics from the site, the PCSM plan may only be a sentence or two describing the situation.

50. **Comment:** § 102.8(a) This new section requires that a person proposing an earth disturbance activity that requires an NPDES permit, or another Department permit that requires compliance with Chapter 102, shall develop, implement, operate, and maintain a PCSM plan. The Chamber concurs with the requirement for a PCSM for earth disturbances requiring a construction NPDES permit. But the Chamber has concerns with the wording, "or other Department permit that requires compliance with this chapter shall be responsible." This wording pulls in an extremely large world of very small projects that, as a condition of an applicable non-Chapter 102 permit, must meet some aspect of the Chapter 102 requirements. The Chamber requests that the wording of this section be changed limiting the requirement for a PCSM plan only to earth disturbances that require an NPDES permit. (1241, 1278)

Response: This section applies whenever a permit is required either under Chapter 102 or another Chapter administered by the Department authorizing earth disturbance activities, all of which must comply with the requirements of Chapters 93 because they have the potential to cause pollution due to changes in stormwater runoff volume, rate, quality and temperature, and may also require compliance with the requirements of Chapter 92 because they are regulated point sources. The Department believes that to limit the requirements of this section to the NPDES Stormwater Construction permits would leave other sectors vulnerable to legal challenge or uncertainty regarding regulatory requirements and performance standards. Inclusion of these programs under Section 102.8 will facilitate compliance with the antidegradation requirements of Chapter 93 for all regulated activities that may have stormwater discharges after earth disturbance activities. The Department has clarified the provisions in Section 102.8 that accommodate programs such as Mining and Reclamation and Oil and Gas Management recognizing that these programs require site restoration, which will typically meet most of the post construction stormwater management requirements.

51. **Comment:** § 102.8(a) *PCSM requirements* - which would require a PCSM Plan (containing all of the extensive listed requirements) for many small repair activities that do not generate postconstruction stormwater management issues of any type. For example, a small repair to a pipeline or other structure within a stream channel requires a Chapter 105 permit. All Chapter 105 permits require compliance with chapter 102; however, a PCSM Plan would not be appropriate for that activity. Dominion requests that the PCSM Plan requirements apply only to

earth disturbance activity that requires an NPDES or E&S Permit under this chapter by removing the phrase "or other department permit that requires compliance with this chapter". (1152)

Response: This section applies whenever a permit is required either under Chapter 102 or another Chapter administered by the Department authorizing earth disturbance activities, all of which must comply with the requirements of Chapters 93 because they have the potential to cause pollution due to changes in stormwater runoff volume, rate, quality and temperature, and may also require compliance with the requirements of Chapter 92 because they are regulated point sources. The Department believes that to limit the requirements of this section to the NPDES Stormwater Construction permits would leave other sectors vulnerable to legal challenge or uncertainty regarding regulatory requirements and performance standards. Inclusion of these programs under Section 102.8 will facilitate compliance with the antidegradation requirements of Chapter 93 for all regulated activities that may have stormwater discharges after earth disturbance activities. The Department has clarified the provisions in Section 102.8 that accommodate programs such as Mining and Reclamation and Oil and Gas Management recognizing that these programs require site restoration, which will typically meet most of the post construction stormwater management requirements.

52. **Comment:** 102.8 (b) & (f) The management of post construction stormwater shall be planned and conducted to the "extent practicable". The term "*extent practicable*" negates the integrity of the 9 bullet statements under this category. This term will have a totally different meaning and definition to the developer than it will to the Chesapeake Bay activist, the municipal official, the property owner down stream, etc. As an example, when a site fails to adequately percolate to permit stormwater infiltration, how will the "extent practicable" be applied? Will we have different interpretations coming from the DEP Regional Offices? *Eliminate the vagueness that is introduced with terms such as the "extent practicable"*. (1229)

Response: This term has been historically used in Chapter 102, in corresponding federal regulation and guidance and in accepted technical guidance. The term extent practicable will allow flexibility for the designer to develop a plan that will protect water quality while not being tied to limits that may not be practical for the site.

53. **Comment:** 102.8(b). Add to the beginning of the list *Maintain pre-development hydrologic regime* and renumber the plan elements listed. (1208)

Response: The Department believes that compliance with the items currently listed in Chapter 102.8(b) will maintain the pre-development hydrologic regime.

54. **Comment:** 102.8(b)(1) should be revised to read as follows: Preserve the integrity of stream channels and other waters of this Commonwealth and protect the physical, biological and chemical qualities of the receiving waters. (1208)

Response: The eight items listed in Chapter 102.8(b)(1) will protect the quality of receiving waters.

55. **Comment:** 102.8(b)(3) The comment should specifically state the “2-yr” stormwater runoff volume. (1190)

Response: The Department acknowledges the comment. Specific language regarding the “2-year/24-hour storm” can be found in Section 102.8 (g)(2).

56. **Comment:** 102.8(b)(3) This section states that for PCSWM. the applicant is to "minimize any increase in stormwater runoff volume". Does that mean a small increase may be acceptable? What would an acceptable increase be? (1123)

Response: Every site has different conditions and sometimes a small increase is acceptable. What an acceptable increase would be will change with different site conditions.

57. **Comment:** § 102.8(b)(3) and Section 102.11(a)(2) states “...PCSM BMPs to mimic preconstruction”. These two sections should have consistent language. (1268)

Response: The Department believes that the language has the same meaning even though it may not be identical.

58. **Comment:** 102.8(b)(3), (4), (6), and (7). "Minimize" and other similar words do not have much regulatory meaning. (436, 650)

Response: This term has been historically used in Chapter 102. The use of the term gives latitude to the design professional to prepare a plan that is site specific and meets the requirement of the regulations.

59. **Comment:** The wording of the PCSM to "Minimize any increase in stormwater runoff volume" 102.8(b)(3) is practical in lieu of "preventing any increase of stormwater runoff volume" as the guidance is currently interpreted. However, specifics are lacking to define the meaning of "minimize." This could lead to a wide variety of requirements between projects. However, Section 102.8(h), referring to High Quality or Exceptional Value water, which requires that there be no increase in stormwater runoff volume, rate and water quality appears to contradict 102.8 (b)(3). (1223)

Response: Chapter 102.8(b) is a list of general planning concepts. More specific requirements are listed in Chapter 102.8(g). These terms have been historically used in Chapter 102. The use of the terms gives latitude to the design professional to prepare a plan that is site specific and meets the requirement of the regulations.

60. **Comment:** 102.8 (b) (3) states Minimize any increase in stormwater runoff volume. *Definition not provided for minimize. Minimize volume increase from 2 yr storm....50 yr storm....100 yr storm?* (1187)

Response: The Department acknowledges the comment. Specific language regarding the “2-year/24-hour storm” can be found in Section 102.8 (g)(2).

61. **Comment:** 102.8 (b) (4) This is a bit of a numbers game. I can say I originally wanted a 2 acre parking lot....however...I reduced it to 1.5 acres...thereby minimizing my impervious area....when all the time I wanted a 1.5 acre parking lot. Seems more a good guideline than a regulation...how is this enforceable as a regulation? Same question for 3, 5, 6, and 7 in this section. (1187)

Response: The Department acknowledges the comment. Section 102.8(b) lists general guidelines, more detailed design guidelines are listed in Section 102.8 (g) and DEP's Stormwater Best Management Practices Manual (PADEP # 363-0300-002).

62. **Comment:** 102.8 (b) (4) - Depending on the definition for "extent practicable", the expense to comply with 102.8.b.4 through 102.8.b.7 could be cost-prohibitive. (1129)

Response: Chapter 102.8(b) is a list of general planning concepts. More specific requirements are listed in Chapter 102.8(g). This term has been historically used in Chapter 102. The use of the term gives latitude to the design professional to prepare a plan that is site specific and meets the requirement of the regulations.

63. **Comment:** 102.8(b)(5) should be revised to read "Maximize the protection of existing natural drainage features and existing vegetation" (708, 1114)

Response: The Department wants to maintain all drainage features – natural or constructed.

64. **Comment:** 102.8(b)(5) Such as? (1268)

Response: This requirement was added as a project planning and design consideration as a storm water pollution prevention component. Protection of natural drainage features include: swales, watercourses, ephemeral streams and so forth, that manage and maintain natural preexisting drainage of stormwater onsite. There are many benefits of low impact development, better site design and environmental site design approaches, collectively referred to as LID. It is more cost-effective to prevent the pollutants from entering the stormwater or into waters of this Commonwealth than it is to remove the pollutants once they are in the system or in the waters.

65. **Comment:** Section 102.8(b)(8)-If the management of post-construction stormwater is planned and conducted in a manner that prevents an increase in the rate of discharge and minimizing any increase in volume, as in (2) and (3), why would other measures or controls be necessary? Why is an E&S regulation promoting low-impact development (LID)? (1264, 1291)

Response: The Department encourages Low Impact Development (LID), which minimizes the extent and duration of earth disturbance. This decreases potential impacts from erosion and sedimentation.

66. **Comment:** Section 102.8 PCSM Requirements-Sub-section (b)(9). - *Requirement for the applicant to "reclaim and restore" water quality is problematic.* (695) These proposed rule

changes will place the additional burden of restoring impaired waters on new development. (1255, 1306)

Response: Section 102.8(b)(9) has been removed this subsection from the final-form rulemaking. Amending this section does not negate a person's responsibility to utilize BMPs that will "protect, maintain, reclaim and restore" as this provision is also found in the existing definition of "BMP" in §102.1, §102.2(b) and §102.11(a)(1).

67. **Comment:** DEP has not demonstrated that standard E&S and PCSM BMPs will "reclaim and restore the quality of water and the existing and designated uses of waters of the Commonwealth". Unless there is wording to that effect in the manuals prepared to incorporate these BMPs into plan designs, these terms should be deleted.(9)

Response: The language "reclaim and restore" in the definition of BMP and as used in other sections of the Chapter sets forth the performance standards that BMPs must meet and implements statutory requirements in the Clean Streams Law.

68. **Comment:** 102.8(b)(9): This requirement is vague and places too much of the burden for reclamation and restoration of stormwater impaired waterways directly on future developers and owners of future residential and commercial property. How is the need for restoration and reclamation going to be defined? Is this provision going to require that all new development discharging to stormwater impaired waterways be required to provide BMP's over and above what would be required to provide mitigation for their projects? And how are "reclaim and restore" to be defined; and to what degree will individual property owners be responsible for restoration of impairments created by past generations? Since the benefits of restoration accrue to all citizens of the commonwealth, it is inappropriate to place the majority of the restoration burden on the development community including builders, developers, and future commercial or residential property owners. (1255)

Response: Section 102.8(b)(9) has been removed from the final-form rulemaking. Amending this section does not negate a person's responsibility to utilize BMPs that will "protect, maintain, reclaim and restore" as this provision is also found in the existing definition of "BMP" in §102.1, §102.2(b) and §102.11(a)(1).

69. **Comment:** 102.8(b)(9): How are the requirements in 1-9 to be measured? Are they to be reported on to the Dept.? Is it explicitly stated in the plan how these goals will be accomplished? (1268)

Response: Section 102.8(b)(9) has been removed this subsection from the final-form rulemaking. Amending this section does not negate a person's responsibility to utilize BMPs that will "protect, maintain, reclaim and restore" as this provision is also found in the existing definition of "BMP" in §102.1, §102.2(b) and §102.11(a)(1).

70. **Comment** Parties involved in earth disturbance activities should be obligated to protect and maintain the quality and existing designated uses of waters of the Commonwealth during the activity and be obligated to implement best management practices (BMPs) to protect and

maintain the water quality after the construction activities are completed. The restoration and reclamation of the waters in the project area that have not been degraded by the current project should not become the responsibility of the current project. There is, furthermore, no measure or metric in the implementing regulation that defines whether the current project has restored or reclaimed the water quality of the water body in the project area. (1152)

Response: The terms "reclaim and restore," mirrors the language contained in the Clean Streams Law 35 P.S. § 691.1 et. seq.

71. **Comment:** 102.8 Add (b)10 Maintain pre-development hydrologic regime. (693)

Response: The Department believes that compliance with the items currently listed in Chapter 102.8(b) will maintain the pre-development hydrologic regime.

72. **Comment:** 102.8 (c) – delete "and" after "sediment". (1129)

Response: The Department agrees and the change has been made.

73. **Comment:** 102.8 (c) States "relating to erosion and sediment and control requirements" Should read "relating to erosion and sediment control requirements. (946, 1187, 1191)

Response: The Department agrees and has revised Section 102.8(c) to read "relating to erosion and sediment control requirements.

74. **Comment:** Revise 102.8 (c) to read: The PCSM Plan shall be ~~planned, designed and implemented to be~~ consistent with the E & S Plan under 5 102.4(b) (relating to erosion and sediment and control requirements). (693)

Response: The Department acknowledges the comment but doesn't believe that a change is necessary.

75. **Comment:** 102.8(d) should be revised to read as follows: Unless otherwise approved by the Department **or conservation district**, the PCSM Plan must be separate (1208)

Response: The Department believes that this would be an unusual circumstance that this would happen and the Department should make the decision to ensure consistency.

76. **Comment:** 102.8. (d) Add some language about those Districts that have a PCSM delegation agreement relative to an "approved" PCSM plan. (947)

Response: Responsibilities for PCSM delegated conservation districts would be handled under a revised delegation agreement.

77. **Comment:** 102.8. (e) Must be more specific – see previous comments regarding E&S plan preparation. (1268)

Response: The Department disagrees. The Department's regulations cover a broad range of earth disturbance activities, therefore the requirements of a person with training, certification or experience is sufficient.

78. **Comment:** Revise 102.8 (f)(1) to read: The existing topographic features of the project site, ~~and~~ the immediate surrounding area, and areas conveying points of discharge to receiving waters. (693)

Response: The Department believes that the existing language is sufficient.

79. **Comment:** The 102.8 (f) PCSM Plan requirements to provide drawings and other documentation .. ." designed to minimize the threat to human health, safety and the environmental to the greatest extent practicable." These items are not pertinent to post-construction stormwater management. but rather issues to be addressed when planning construction and are fully addressed in the E&S plan. Dominion requests that these requirements be removed from the PCSM Plan. (1152)

Response: The Department believes that these items are pertinent to PCSM and need to be provided.

80. **Comment:** 102.8 (f)(2). "The types, depth, slope, locations, and limitations of the soils and geologic formations." What constitutes a geologic formation? What bearing does this have on BMPs. (436, 650)

Response: An example of a geologic formation that would impact BMP design may be the existence of limestone formations that may be prone to sinkhole development.

81. **Comment:** 102.8. (f) (2) - "The types, depth, slope, locations and limitations of the soils and geologic formations." We are concerned about our poorly drained soils and their inability to meet the two year volume requirements on a consistent basis. Most of our sites do not meet CG -1 requirements. (947)

Response: There are volume reduction BMPs that don't require infiltration. Section 102.8(g)(2)(iv) allows approaches other than CG-1, if it can be shown that it is more protective than CG-1 or will maintain and protect existing water quality and existing and designated uses.

82. **Comment:** 102.8(f)(3) What is the level of detail required? (1268)

Response: The level of detail is dependent on site conditions, project complexity, and other representative site characteristics.

83. **Comment:** 102.8 (f)(4) This should include a demonstration that impaired/TMDL waters would receive adequate protection. (1268)

Response: Projects within impaired waters or an area subject to a TMDL should evaluate the impact of the project on those conditions.

84. **Comment:**102.8 (f)(4). "...net change in volume and rate of stormwater from preconstruction..." Again, under what conditions? Terminology is now "preconstruction" instead of "preexisting. (436, 650)

Response: The specific conditions are given in Section 102.8(g).

85. **Comment:**102.8 (f)(4). Which storm event should the volume and rate of runoff from the project site be presented? (1123)

Response: The specific conditions are given in Section 102.8(g).

86. **Comment:**102.8 (f)(5) Identification of the location of surface waters, which may receive runoff within or from the project site and their classification under Chapter 93 (relating to water quality standards). If this section was added to establish which waters require drainage easements and which waters do not, the regulation should also require the identification of other waters of the Commonwealth that are receiving stormwater.(693)

Response: This section will establish the existing and designated uses that need to be protected.

87. **Comment:**102.8(f)(5) Also include drainage patterns, storm pipes and collection systems. (1268)

Response: The Department has revised the final language in response to the comment.

88. **Comment:** Revise 102.8(f)(6) to read: A written description of the location and type of PCSM BMPs **and** construction details for permanent stormwater BMPs including permanent stabilization specifications ~~and locations~~.(693)

Response: The Department believes that the existing language is adequate.

89. **Comment:**102.8. (f) (8) Please elaborate on what the supporting calculations will be demonstrating. (1268)

Response: The level of supporting calculations is dependent on site conditions, project complexity, choice of BMPs, need to quantify hydrology, hydraulic capacities and other representative site characteristics.

90. **Comment:**102.8(f) (10) How often will the inspections occur? (1268)

Response: The inspection schedule is based on the type and function of the BMP, and is customized in the PCSM for long term operation and maintenance.

91. **Comment:** 102.8(f)(10) Add "and inspection". (1268)

Response: Inspection is already included in the rule.

92. **Comment:** Section 102.8(f)(14) should be revised to read: "and inclusion of BMPs" (693, 946, 1191)

Response: Section 102.8(f)(14) is now (f)(13) in the final rulemaking and has been revised to read: "including BMPs"

93. **Comment:** Section 102.8(f)(14) "...evaluation of potential thermal impacts ..." Again, it is not clear what must be done for this. (436, 650)

Response: The Department has revised the final rulemaking by replacing the requirement of the "evaluation" to "identification". Since each site is different, the Department believes the design professional should be allowed to develop an appropriate response to address thermal impact concerns. In addition to identifying the potential for thermal impacts, appropriate BMPs should be designed to mitigate those impacts. The Department will be establishing additional guidance to assist the design professionals in meeting this requirement.

94. **Comment:** It is unrealistic to expect the Department to have the capacity to inspect the potentially large and dispersed population of sites subject to PCSM Plans with the requisite frequency to assure consistent compliance with the requirements of the PCSM Plans. Therefore, the rule should include a provision requiring the Operator to submit annual reports to the Department, with written notice of the submittal to the landowner(s), summarizing the activities performed to comply with the PCSM Plan. We suggest that the rule specify the submission of the annual reports in electronic form and explicitly authorize the submission of digital photographs of surface BMPs in those circumstances where such photography would effectively demonstrate compliance with the maintenance requirements for the BMP in question. In addition to summarizing the activities performed to comply with the inspection, operation and maintenance requirements of the PCSM Plan, the report should also provide information on any plan to alter the physical characteristics or planned uses of the property covered by the PCSM Plan that would affect the function of the PCSM BMPs. The failure to submit a timely or compliant annual report should be used by the Department as the mechanism for selecting sites for compliance inspections. In addition to the submission of annual reports, the rule should provide for a review and, if necessary, a reassessment of the factors identified in Subsection 102.8(g) every five years. The report of that review and reassessment should include the specification of any required or recommended corrective actions. The report should be submitted to the Department for its review and approval. The review and reassessment must be prepared by a person trained and experienced in PCSM design methods and techniques (see, Subsection 102.8(e)). (1249)

Response: The Department disagrees that annual reports and other documentation need to be submitted on a routine basis. This recommended process could be overly burdensome for the regulated community, conservation districts and the Department. The Department believes that the existing and proposed processes and permit conditions for monitoring, inspection, and reporting on an as-needed or case-by-case is reasonable and practical. The Department, through

this rulemaking has established a statewide baseline standard for stormwater management. This statewide requirement can be adopted by municipalities that do not have a stormwater ordinance. The Department will also use this rule as baseline requirement for Act 167 and MS4.

95. **Comment:** Section 102.8(e) - This language is more general than in other areas of the draft regulation and should be consistent with that found in other portions of the document. The requirement should be phrased in a way that strengthens the expectation that the PCSM plan is prepared by an individual competent to perform these duties. (1264, 1291)

Response: The language in § 102.8(e) is similar to the E & S portion of the regulation in 102.4(b)(3) and has been in use for many years. More specific credentials may exclude designers who are not licensed by the Commonwealth and potentially increase development costs. The language was retained in the final-form rulemaking, but the Board did include additional language to qualify that the level of expertise needed is relative to the size and scope of the project being designed.

96. **Comment:** 102.8 (f) states "The PCSM Plan must contain drawings and narrative requirements as described with this chapter.. ." should be revised to, "The PCSM Plan must contain drawings and a narrative per the requirements described within this chapter.. ." (708, 1114)

Response: The Department agrees. Section 102.8 (f) has been revised to read, "The PCSM Plan must contain drawings and a narrative consistent with the requirements of this chapter.. ."

97. **Comment:** 102.8 (f) The language should be modified to clarify that the applicant can transfer the responsibility of long term operation and maintenance of the PCSM Plan to an appropriate steward, such as a home owners association, a municipality, a home owner, etc. Requiring a permittee to be responsible in perpetuity is unreasonable. (1245)

Response: Section 102.8 (m) allows the applicant to designate the person or entity who will be responsible for operation and maintenance. The operation and maintenance requirement is for the PCSM BMPs that are installed as part of the PCSM management plan. In order for these BMPs to function efficiently, they must be maintained in perpetuity or until the land use changes.

98. **Comment:** 102.8(f)(2) states that the PCSM Plan describe "...limitations of the soils and geologic formations." Soils information in the PCSM Plan should be specific to properties that affect the performance of PCSM BMPs. PennDOT requests that this section be modified to indicate which soils properties and geologic formations are to be noted. (708, 1114)

Response: Different projects and different site locations would determine which soil limitations are appropriate to specify.

99. **Comment:** Section 102.8(f)(2-4)-The PCSM plan should not require information on geologic formations. It should specify how far into the past that information will be required on

past land uses on a project site, and the net change in the volume and rate of stormwater should be identified for each significant drainage area, not every drainage area. (1264, 1291)

Response: The Department disagrees, characteristic of the soil or geology that would not allow it to perform as needed in the site design is important information. Limitations are generally listed in the county soil surveys and geologic mapping. This is similar to the existing requirement for the E & S plan included in Section 102.4(b)(5)(ii), and has been in place for years in submitting E&S plans. Past land use may have caused pollutants to be found in the soil that the person proposing the earth disturbance must be aware of so those pollutants and potential disturbance are considered. The Department historically has requested that permit applicants use due diligence for a 50 year period when such records are reasonably available, however the designer is encouraged to select the time period most appropriate for that site and the potential for pollutants to be present.

100. **Comment:** 102.8(f). The list of PCSM plan components should include an additional item, inserted between numbers (2) and (3), and the list renumbered: An alternatives analysis to find practicable alternatives to the discharge of stormwater, the creation of impervious surfaces and the degradation of waters of the Commonwealth. The alternatives analysis must demonstrate that pre-development hydrologic regimes are maintained to the greatest extent possible. (1208)

Response: These concepts are covered in section 102.8(b) and are more of a planning and design procedure that would happen before plans are drawn.

101. **Comment:** 102.8(f)(4) should be revised to read as follows: Identification of the net change in volume and rate of stormwater from pre-construction hydrology to post construction hydrology for the entire project site and each sub drainage area. (1208)

Response: The Department believes that the existing language is adequate.

102. **Comment:** 102.8(f)(4) *The comment should specifically state 2-yr for volume and 2, 5, 10, 25, 50, 100-yr for rate control.* (1190)

Response: The Department acknowledges the comment. Specific language regarding the "2-year/24-hour storm" can be found in Section 102.8 (g)(2).

103. **Comment:** 102.8(f)(4) states that the stormwater volume and rate changes be identified "for the entire project site and each drainage area". This should be restated to read, ". . .for the entire project site and each drainage area within the site boundaries." (708, 1114)

Response: The Department disagrees. Sometimes water from off site will drain through the site and needs to be considered in the PCSM design.

104. **Comment:** 102.8(f).... *PCSM Plans must contain at a minimum the following:* This section does not include environmental due diligence. All soil and groundwater samples that

were analyzed as part of the applicant's environmental due diligence should be reflected on the PCSM Plan drawing. (1227)

Response: The Department disagrees. Section 102.8(f)(1) and Section 102.8(f)(2) require the applicant to report results from all soil and groundwater samples in their PCSM Plan.

105. Comment: *Add an additional requirement in Section 102.8(f) for post-construction stormwater management (PCSM) Plan drawings to include specific natural features.* For example: Location and dominant species of significant vegetation patches, including tree stands, meadows, and riparian buffer, Soil type and structure, Prime farmland, unique farmland, or farmland of statewide importance, Locations of prime farmland soils, unique soils, and/or soils of statewide importance, Locations of undisturbed and previously disturbed soils, Direction of overland water flow on-site, predevelopment, Locations of water resources, Assessment and regulatory status of onsite waterbodies (i.e., unassessed, unimpaired, impaired) and designated uses, protected (e.g., WWF, CWF, HQ, EV), Locations for all laydown and storage areas, haul roads and construction vehicle access, temporary utilities and construction trailers, and parking, Describe how areas of all soils will be protected from compaction (e.g., vehicle traffic or storage), Describe treatment details for soils requiring organic matter restoration, including the type, source, and expected volume of materials (e.g., compost amendments, mulch, topsoil, etc.), Outline the footprint of construction buildings, parking, storage areas, and roads. It is of critical importance to carefully limit disturbance of natural features that provide good natural stormwater management and incorporated them into site design. The same list of specific natural features that must be included in E&S Plans should also be incorporated into PCSM Plans. Thus Section 102.8(f) should be revised to ensure that PCSM Plans and drawings include the same list of specific natural features as suggested for inclusion in Section 102.4(b)(5). (1257)

Response: The Department disagrees. Section 102.8(f) provided a list of information consistent with the list of provided in 102.4(b) for E&S Plans.

106. Comment: While we strongly believe in and support the inclusion of PCSM BMP's when land development occurs, as is evidenced by the installation of a demonstration BMP Stormwater Park on our property, we believe that implementation process has many short-falls. Pennsylvania's governmental structure is not currently equipped for oversight and management of PCSM as outlined in the proposed regulations. The PCSM regulations have significant gaps in oversight during the construction process and even greater gaps in the long term Operation & Maintenance provisions. Furthermore, there are no provisions or guidance on how to tie the four levels of government with an interest in stormwater (Federal, State, County and Local) together into a collaborative and coordinated stormwater management program. Historically in Pennsylvania, local governments have been the lead regulatory agency in relation to stormwater management. With the implementation of these regulations there is confusion with layered sets of regulatory controls. Do the local regulations mesh with the PCSM regulations? Who is responsible for inspections? Who is responsible for follow-up and enforcement with failed BMP's? All of these are unanswered questions. Local government has been left out of this process but down the road when problems occur with PCSM BMP's, they will in all probability be the ones called upon to remedy the concerns. These proposed PCSM regulations are not ready for implementation. (1229)

Response: The Department appreciates the support expressed for including PCSM BMPs in land development, however disagrees that there are significant gaps. The Department, through this rulemaking has established a statewide baseline standard for stormwater management. This statewide requirement can be adopted by municipalities that do not have a stormwater ordinance. The Department will also use this rule as baseline requirement for Act 167 and MS4.

107. **Comment:** §102.8(f)(1), (2), and (3) These items are not pertinent to post-construction stormwater management, but rather issues to be addressed when planning construction and are fully addressed in the E&S plan. They have little relevance at the post-construction stage of the project. CNX Gas suggests they be deleted in their entirety. (691, 1124, 1250)

Response: The Department disagrees. The information required in Section 102.8(f)(1), (2), and (3) are key aspects to properly addressing PCSM.

108. **Comment:** 102.8(f)(5) should be revised to read as follows: Identification of the location waters of the Commonwealth which may receive runoff.. . (1208)

Response: The Department believes that the existing language is adequate.

109. **Comment:** 102.8(f)(8). The calculations should be limited to show satisfaction of the volume and rate requirements. As stated in DEP's BMP Manual, calculations for particulate pollutants are not required if there is no net increase in runoff volume. See Chapter 8, page 12. Therefore, DEP should continue to let its BMP Manual describe when water quality calculations are required. PennDOT requests the following revision to Section 102(f)(8): "Supporting calculations for volume and rate of runoff." Also, PennDOT requests clarification on what is needed to satisfy the "supporting calculation" requirements. Can the specifications for the BMPs included in DEP's BMP Manual be used? (708, 1114)

Response: The Department disagrees. Supporting calculations may be required for more than volume and rate of runoff. The specifications for the BMPs included in DEP's Stormwater Best Management Practices Manual (PADEP # 363-0300-002) should be used as supporting calculations.

110. **Comment:** §102.8 (f)(10) Many companies are now using electronic compliance inspection scheduling and tracking systems. Electronic documentation of inspections in such systems should serve in lieu of maintaining written paper records. Please delete the requirement for written reports in all cases. (691, 1124, 1250)

Response: The term written doesn't preclude electronic copies of reports. The reports need to be available in a written or printed form upon request of the Department or conservation district.

111. **Comment:** Dominion requests that the inspection and maintenance requirements for PCSM BMPs contained in proposed 102.8(f)(10) not specify that inspection records be maintained by use of a "written" report. Many companies are now using electronic compliance inspection

scheduling and tracking systems. Documentation of inspections in such systems should serve in lieu of maintaining written paper records, if the permittee desires. (1152)

Response: The term written doesn't preclude electronic copies of reports. The reports need to be available in a written or printed form upon request of the Department or conservation district.

112. Comment: 102.8 (f) (10) & (11) Long term and even short term operation and maintenance is a primary place where the effectiveness of PCSM falls apart. To make this work, it must be assumed that the individual or entity named as the responsible party has a strong environmental ethic and substantial funding. The engineer who designed the project has died, the contractor has gone bankrupt and the homeowners association can either put their limited funds on underground infiltration tanks that you can't see or a new roof on their community center. These are real life possibilities that will render an operation and maintenance plan a meaningless document. Who will be the enforcer when the BMP's fail and the neighbor down the hill is getting water that he never got before? DEP does not have the manpower, the regulations causing the problem are not the municipalities, and Conservation District will be wise to distance themselves from such actions. Currently we receive more complaints relating to stormwater than from any other concern. Without clearly defined lines of authority and enforcement there will be an increasing stream of complaints that can only be resolved by significant negotiation or litigations. That will overburden the manpower available at all levels of government. (1229)

Response: The Department, through this rulemaking has established a statewide baseline standard for stormwater management. This statewide requirement can be adopted by municipalities that do not have a stormwater ordinance. The Department will also use this rule as baseline requirement for Act 167 and MS4. The Department and conservation districts can coordinate with municipalities to determine which agency will take the lead on any compliance or enforcement action that may be necessary. Lastly, the Department has incorporated revised permit fees with the intent to cover a majority of the cost of the program in Section 102.6 and retains the ability to collect or recover costs and expenses involved in taking an enforcement action under this Chapter.

113. Comment: Section 102.8(f)(10) This proposed requirement states that a PCSM plan must provide for a long-term O&M schedule that provides for the inspection of the PCSM BMPs. Who is doing the inspection? This question would arise in a case in which a plan is being designed to satisfy a given conservation district and the Department, and a municipal official decides he wants something different. In such a situation, whose definition supersedes? The proposed draft regulation needs to provide that BMPs in place at the time of the current version of Chapter 102 need to be grandfathered. (1264, 1291)

Response: The county conservation district inspects the PCSM BMPs during construction. The applicant or another party identified as the person responsible as part of their PCSM O&M Plan, is required to inspect the BMPs to ensure they are working adequately.

114. Comment: Section 102.8(f)(13) According to the proposed draft, the PCSM plan must identify natural occurring geologic formations or soil conditions that may cause pollution after

earth disturbance activities are completed and PCSM BMPs are operational. What is included here? This could be something as potentially innocuous as a depression at a given project site that could indicate a sinkhole. What does the Department mean in this case, and is there a difference in the treatment of pre- and post-construction BMPs? (1264, 1291)

Response: DEP has chosen to keep this section generalized because geologic conditions vary greatly across the Commonwealth. Conditions like karst identification or steep slopes affect stormwater permeability as does compacting the soil during the construction phase. A site-specific investigation should be completed by a qualified professional to determine how the geology affects stormwater management.

115. **Comment:** 102.8(f)(14). This item requires that the PCSM Plan "evaluate the potential for thermal impacts to surface waters from post construction stormwater and include BMPs to avoid, minimize, or mitigate potential pollution from thermal impacts." New impervious surface areas could warm contacting stormwater. However, we suggest that this would not normally be a problem if the regulations are followed and suggest the regulations, or subsequent guidance, discuss situations where thermal pollution of surface waters might be a consideration. (1316)

Response: The Department has revised the final rulemaking by replacing the requirement of the "evaluation" to "identification". Since each site is different, the Department believes the design professional should be allowed to develop an appropriate response to address thermal impact concerns. In addition to identifying the potential for thermal impacts, appropriate BMPs should be designed to mitigate those impacts. The Department will be establishing additional guidance to assist the design professionals in meeting this requirement.

116. **Comment:** Section 102.8(f)(14) There is no guidance for evaluating thermal impacts (944, 1204)

Response: The Department has revised the final rulemaking by replacing the requirement of the "evaluation" to "identification". Since each site is different, the Department believes the design professional should be allowed to develop an appropriate response to address thermal impact concerns. In addition to identifying the potential for thermal impacts, appropriate BMPs should be designed to mitigate those impacts. The Department will be establishing additional guidance to assist the design professionals in meeting this requirement.

117. **Comment:** 102.8(f)(14): This requirement is too vague to be a practical requirement. While it is acknowledged that thermal impacts are possible, there is insufficient scientific data available to adequately define the extent of any thermal impacts from the variety of site conditions that are possible in development proposals (relative size of site vs. size of tributary stream, etc). And likewise, there is less data available to document the actual impact of thermal impacts from development activities. More scientific data and analytic tools defining the real thermal impacts are necessary prior to codifying a thermal impact requirement. At a minimum, this rule should be qualified to recognize the lack of data, and explicitly state that only a simple qualitative type of analysis be presented. (1255)

Response: The Department has revised the final rulemaking by replacing the requirement of the "evaluation" to "identification". Since each site is different, the Department believes the design professional should be allowed to develop an appropriate response to address thermal impact concerns. In addition to identifying the potential for thermal impacts, appropriate BMPs should be designed to mitigate those impacts. The Department will be establishing additional guidance to assist the design professionals in meeting this requirement.

118. **Comment:** 102.8 (f)(16) - The ability of the Department to require additional information and/or BMPs whenever it deems it necessary to protect water quality seems overly broad and open to misuse. Language should be included to provide for a clear, predictable process that the Department must follow before it is allowed to exceed the existing regulatory requirements. An appeal process for the applicant should be incorporated. (695)

Response: The Department disagrees with this statement because it is the sole authority that regulates water quality and is allowed to exercise its authority when water quality could become compromised. Since every site is different, it is impossible to list every item that may be required in a plan. The applicant is always welcome to discuss their plan with the Department.

119. **Comment:** 102.8(f)(16) should be revised to read as follows: Additional information requested by the Department or conservation district. (1208)

Response: This condition is to cover additional information not normally requested of an applicant to unique or unusual conditions. The Department should be involved in this decision to create consistency across the state. This doesn't cover information normally requested of an applicant but was deficient.

120. **Comment:** The volume control standards set forth in Section 102.8(g) should be complemented with clear standards that require the mimicking of predevelopment hydrology. In order to achieve protection of rivers and streams from stormwater runoff, the Chapter 102 regulations must require developers to implement true low impact development (LID). Thus the volume control standards must be complemented by a requirement that all regulated development projects be carried out in a manner so as to mimic the predevelopment hydrology on the site. Further, the regulations should mandate the use of the LID (environmental site design) process throughout all phases of the project, from site selection and planning to design to implementation, so that stormwater runoff is minimized through limiting disturbance and where created it is managed and treated at the source. (1257)

Response: We agree with your comments and certainly encourage the use of LID, however, some municipal ordinances do not currently allow LID.

121. **Comment:** 102.8 (2) "If required to develop a PCSM plan ..." to "mimic preconstruction stormwater runoff conditions" ... We do not feel that most plan submissions will be able to meet this requirement of mimicking preconstruction stormwater runoff conditions. In addition, we have concerns if the Department will support us when take a position that the plan does not mimic pre-construction runoff conditions. (947)

Response: This section references the applicant to the Stormwater Best Management Practices Manual (PADEP # 363-0300-002) for the selection of BMPs and design standards to achieve this requirement. A plan that follows the Manual should be appropriate.

122. **Comment:** §102.8(g) This section of the proposed rule making is an attempt to codify the guidance runoff volume control standard included in Chapter 3 of the Pennsylvania Stormwater BMP Manual (BMP Manual). The volume control standards in Chapter 3 of the BMP Manual, referred to as CG-1, were originally intended as only guidance standards. Mr. Scott Brown of our staff participated on the Oversight Committee during the development of the BMP Manual. According to Mr. Brown, a significant majority of the technical and scientific representatives on the BMP Manual Oversight Committee would never have agreed to these standards if they would not have been proposed as only "guidance" in nature. They were intended as just one method to demonstrate that the stream water quality requirements in Title 25, Chapter 93.4 of the Pennsylvania State Code ... the "anti-degradation" regulations ... were being met. These anti-degradation regulations state that, depending on stream classification, a waterways use or water quality cannot be degraded. The purpose of the volume control standard CG-1, as originally intended in the BMP Manual, was to provide a somewhat simplified analytical method that could used to assess whether a site development met the anti-degradation regulations in Title 25, Chapter 93.4. It was clearly not the intent of the oversight committee to rule out other analysis methods, or that alternate methods or additional analysis may be necessary to demonstrate that a site design was in compliance with the anti-degradation regulations. The oversight committee recognized that one guidance standard could never fit all the complex geologic, soils, and surface cover conditions within the state. In addition, CG-I sets the bar too high, and in many instances may actually pose an increased risk of economic loss as a result of its application. The PA BMP Manual speaks to this issue in Chapter 7, identifying special management areas where strict compliance with CG-1 may not be appropriate. These areas include Brownfield's, highways and roads (linear projects in limited right-of-way), karst areas (areas underlain by limestone or dolomite), mined lands, areas near potable water supplies(wells and or surface supplies), and highly urbanized areas. Also, Subparagraph (ii) creates an arbitrary requirement that new development over-design onsite stormwater management controls to help mitigate stormwater Impacts created by developments that were built before the need for stormwater volume control was recognized or a part of regulatory requirements. This is simply another attempt to get the development community to "restore and reclaim" the water quality in stormwater Impaired streams. A benefit (as identified above) accrues to all residents of the Commonwealth. It is unfair and inappropriate to place this burden on future developers and owners of new commercial and residential properties. Additionally, subparagraph (ii) conflicts with the PennDOT Antidegradation Policy. How will this conflict be resolved? It is suggested that a performance based standard defining the intent of the anti-degradation regulations in Title 25, Chapter 93 be used in its place. (1255)

Response: Language has been added to the final rulemaking in section 102.8(g)(2)(iii) and (iv) and 102.8(g)(3)(iii) to recognize other approaches that would be more protective or will maintain and protect existing water quality.

123. **Comment:** Revise §102.8(g)(2) to read "...or manage on-site the net change..". (1268)

Response: The Department disagrees; the suggested language does not provide any additional clarity.

124. **Comment:** §102.8(g)(2) how is the 2-year/24 hour storm event measured/defined?...". (1268)

Response: The Pennsylvania Stormwater BMP Manual provides guidance on design methodologies including the 2 year/24 hour criteria.

125. **Comment:** §102.8(g)(2)(i) and (ii) and (g)(3) Both of these requirements go beyond the requirement to insure that the activity does not degrade from pre-construction conditions, indeed, they mandate improvement from preconstruction conditions. The need for these burdensome requirements has not been justified by the Department for all proposed activities. Although this will codify current requirements, those requirements were imposed through permit application form changes without any opportunity for public participation and without supporting regulation. Construction of utilities, other pipelines, and many oil and gas facilities generally occurs on private land owned and often maintained by others (such as lawns and agricultural fields). There is little or no opportunity to change land use or install engineered, constructed PCSM BMP structures on these properties. In these cases, site conditions do not offer the opportunity to reduce the increase in run-off volume. CNX Gas suggests these subsections be deleted in their entirety. (691, 1124, 1250)

Response: The department disagrees. Although the current recommended criteria are provided as technical guidance, this guidance went through comprehensive public participation and public comment. Both the existing guidance and the proposed rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection. The Department has clarified the final rulemaking to include references to pipelines and other utility construction that restores or reclaims sites back to natural conditions.

126. **Comment:** §102.8(g)(2) and (3). Include requirements for analysis of volume reduction, water quality and adherence to the stormwater management watershed plan. These requirements go beyond measures to insure that the activity does not degrade from pre-construction conditions, indeed, they mandate improvement from pre-construction conditions. This section should be removed. (1152)

Response: The Department disagrees. Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection. Adherence to the Act 167 stormwater management watershed plan ensures that the activities have been considered at the local level and that the cumulative impacts and effect have been considered for the watershed.

127. **Comment:** The Energy Association of Pennsylvania requests that the Department recognize the uniqueness of a linear project in the implementation of the post-rain event

inspection requirements of the proposed rulemaking and identify an endpoint for those requirements, such as once the site is restored and permanently stabilized. (1267)

Response: The Department has clarified the final rulemaking in 102.8(g) and (n) to include references to pipelines and other utility construction that restores or reclaims sites back to natural conditions.

128. **Comment:** §102.8(g)(2)(i) How is the predevelopment for agricultural usage areas evaluated? (1268)

Response: Predevelopment conditions for an agricultural site proposed for construction are considered as meadow in good condition or its equivalent.

129. **Comment:** §102.8(g)(1). "Analytical testing and assessment of soil, geology, ..." What does "analytical" testing of geology and soils entail? (436, 650)

Response: This section has been revised in the final rulemaking to improve clarity. The "analytical testing and assessment" language has been removed and replaced with "predevelopment site characterization and assessment" as these terms are commonly used by the professional consultant community.

130. **Comment:** § 102.8(g) - Requirements for Additional Information for PCSM Plans §102.8(g)(1) requires the "analytical testing and assessment of soils, geology, and other pre-development site characteristics including infiltration and geotechnical studies that identify location and depths of test sites and methods used." Compliance with this proposed regulation would impose onerous burdens on the actual start of the construction project. Additional costs of \$50,000 to \$100,000 and upwards of three months to gather and compile the necessary information would be incurred. This would cause delays in implementation of the start of the construction projects. At a higher strategic level, the imposition of these requirements would discourage economic development, be it residential, commercial, or industrial, within the Commonwealth. (1278)

Response: This section has been revised in the final rulemaking to improve clarity. The "analytical testing and assessment" language has been removed and replaced with "predevelopment site characterization and assessment" as these terms are commonly used by the professional consultant community.

131. **Comment:** §102.8(g)(2). Define "current" in "current Act 167". Does that mean an Act 167 plan approved after a specific year or a plan that contains certain criteria? (1123)

Response: The NPDES application specifies an Act 167 plan approved on or after January 2005 and contains criteria that is at least as stringent as these regulatory requirements.

132. **Comment:** §102.8(g)(2). "...or manage the net change for storms.. .when compared to preconstruction runoff volume and water quality." What does "manage" mean? It appears to mean that the increased volume cannot be discharged. If so, this is a very rigorous standard and

there should probably be some exemptions for difficult site conditions (poor soils, high water table/bedrock, etc.) Again, we are not sure what "the net change" in water quality for storms would mean in practice. Again, the term "preconstruction" is used while the subsection immediately following uses "predevelopment" (g.2.i.). (436, 650)

Response: Manage would mean to maintain the runoff rate and volume consistent between pre and post development conditions. An analysis of the possible increase in volume or rate, the application of appropriate BMPs and the site conditions would determine whether this would cause degradation or not.

133. **Comment:** §102.8(g)(1) proposes analytical testing and assessment of soil, geology, and other predevelopment site characteristics, but does not mention what tests, other than an infiltration test, need to be performed. The vagueness of this section leaves the chapter open to a multitude of interpretations that will serve only to create uncertainty, arbitrary interpretations and additional expense for developers. It will also introduce significant delays in the approval process while the Department demands more and more additional information. Testing criteria (frequency, parameters and methodology) should be set for different site categories to encourage buy-in by reviewers and applicants. (1223)

Response: This section has been revised in the final rulemaking to improve clarity. The "analytical testing and assessment" language has been removed and replaced with "predevelopment site characterization and assessment" as these terms are commonly used by the professional consultant community.

134. **Comment:** 102.8 (g)(2) The requirements to use a 2-year/24 hour storm, a predevelopment condition of "meadow", and an assumption that 20% of existing impervious area be considered meadow are unreasonable. The Department should remove references to specific stormwater standards and instead rely on guidance provided through the SWM BMP Manual. Furthermore, the Department should sponsor an effort to convene a consortium of consulting engineers to review the effectiveness and appropriateness of the current BMP Manual, and to use their professional experience to recommend revisions to the current BMP Manual. (1245)

Response: Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection.

135. **Comment:** 102.8 (g)(2) The requirements to use a 2-year/24 hour storm, a predevelopment condition of "meadow" and an assumption that 20% of existing impervious area be considered meadow are unreasonable. Actual pre-development site conditions should be utilized. In particular, the pre-existing impervious requirements have a significant adverse impact to re-development projects. (423)

Response: Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection.

136. **Comment:** The proposed requirement that 20% of existing impervious areas be considered meadow is particularly onerous to brownfields sites. Existing sites can't easily be retrofitted to handle storm-water management facilities, so costs are exponentially higher. As a result, these proposed regulations will not only scare away developers but also make it financially impossible for them to present "smart growth" in urban areas. This issue would be much better handled at a local level where applicants can work with municipal officials to find creative solutions to managing storm-water runoff and protecting the environment while preserving yield. (422, 428, 429, 940, 1122, 1126, 1132, 1133, 1136, 1278)

Response: The Department agrees that flexibility is needed in developed areas. Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection. Further, Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects. The rulemaking is a codification of existing requirements which have been effectively implemented on brownfield sites.

137. **Comment:** 102.8 (g)(2) If there is conflicting criteria in the Act 167 plan and Chapter 102, which one controls? For example if the ACT 167 plan contains no stream buffer or a 50' buffer for all streams, will Act 167 control or will Chapter 102 control and require no buffers except for a 150' buffer in EV watersheds? (1123)

Response: The expectation is that an approved and current Act 167 plan needs to at least be as stringent as state regulatory requirements. If a demonstration can be made that the alternative requirement, including the more stringent requirement protects water quality, no additional requirements would be needed. One of the advantages of the Act 167 program planning process is the consideration of local water needs, goals and objectives that complement state regulatory requirements.

138. **Comment:** 102.8(g)(2) - Please clarify whether or not the volume reduction and water quality PCSM BMPs must meet either the requirements of an applicable approved Act 167 stormwater management plan or manage the net volume difference for a 2-yr 24hr storm event. It has come to our attention that some are interpreting the word "or" to mean "and". (1129)

Response: The expectation is that an approved and current Act 167 plan needs to at least be as stringent as state regulatory requirements. If a demonstration can be made that the alternative requirement, including the more stringent requirement protects water quality, no additional requirements would be needed. One of the advantages of the Act 167 program planning process is the consideration of local water needs, goals and objectives that complement state regulatory requirements. Also, in terms of regulatory structure, the use of "or" could mean either.

139. **Comment:** Section 102.8.g.2 & g.3 As Act 167 plans are now being completed by counties, should the word "watershed" be removed and the wording be "Act 167 Stormwater Management Plan"? (1123)

Response: The Department believes that the existing language is adequate.

140. **Comment:** 102.8 (g)(2) Chapter 102 is using control guidance 1 (CG-1) from the 2006 BMP Manual that was never intended to be codified by the members of the BMP Manual Committee! CG-1 over infiltrates in most cases creating many problems including setting a standard that often can't be achieved resulting in uneven and unknown implementation by DEP and Conservation Districts: forcing infiltration above what happens naturally that will likely result in sinkholes, leaking basements, groundwater contamination; and unnecessary design and construction costs. Instead some form of CG-2 from the BMP Manual or capturing 90% (or some other appropriate %) of the average annual rainfall needs to be added as an equal alternative in all cases. There is currently a group of professionals reviewing CG-1 and CG-2 and making recommendations to DEP. It will be a huge mistake to blindly codify CG-1. (1123)

Response: Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection.

141. **Comment:** Revise 102.8 (g)(2) to read: Analysis demonstrating that the PCSM BMPs will ~~meet the volume reduction and water quality requirements specified in an applicable Department approved and current Act 167 stormwater management watershed plan; or~~ manage the net change for storms up to and including the 2-year/24-hour storm event when compared to preconstruction runoff volume and water quality We believe that a Department approved and current Act 167 stormwater management watershed plan is applicable to rate control where detailed studies were conducted to establish the release rates. However, since detailed studies are not done to determine the infiltration requirement contained in 167 plans, the 2-year/24-hour net should be the target for volume reduction and water quality. (693)

Response: The expectation is that an approved and current Act 167 plan needs to at least be as stringent as state regulatory requirements. If a demonstration can be made that the alternative requirement, including the more stringent requirement protects water quality, no additional requirements would be needed. One of the advantages of the Act 167 program planning process is the consideration of local water needs, goals and objectives that complement state regulatory requirements.

142. **Comment:** I agree that past development practices are at fault for the impairment of many waterways in the Commonwealth, however, I don't believe it is appropriate or economically prudent to place this burden entirely on the development community. (1255, 1306)

Response: The Department disagrees as it is the Department's responsibility to ensure that water quality is not only protected and maintained but also restored through both our regulatory and non regulatory programs.

143. **Comment:** Section 102.8(g)(2)(i-ii)-These requirements for the analysis of the 2-year/24-hour storm are not reasonable and should be modified to use actual land use. Not doing so substantially increases the difficulty of the necessary analysis. (1264, 1291)

Response: The Department disagrees. The standard criteria established in the proposed rule are a generally accepted baseline compliance threshold and therefore provides a level playing field for consistency in application and overall environmental results. To ensure antidegradation requirements are met, the Department has established these requirements to ensure that pre-construction conditions used are not currently causing or contributing to pollution or impairment.

144. **Comment:** Revise 102.8 (g)(2)(ii) to read: When the existing project site contains impervious area which does not have stormwater control consistent with this chapter, 20% of the existing impervious area to be disturbed must be considered meadow in good condition or better, except for repair, reconstruction, or restoration of roadways or utility infrastructure when the site will be returned to ~~existing~~ pre-development condition. (693)

Response: The Department has added a new subsection, 102.8(g)(2)(ii) that addresses the comment.

145. **Comment:** Section 102.8(g)(2)(ii)- “disturbed” should be replaced with “removed”. (1129)

Response: The Department believes that the existing language is adequate.

146. **Comment:** We believe the current guidance and the proposed regulation potentially present a significant disincentive to brownfield redevelopment in the Commonwealth. This potential disincentive arises as a result of the requirement to consider “existing predevelopment nonforested pervious areas” as “meadow in good condition or its equivalent.” On brownfields sites, where demolition activities very often are undertaken well before the need for NPDES permitting, sites that were substantially covered with impervious rooftops and paved yards, in recent past, are commonly viewed as “meadow in good condition”. This can result in significant changes in the respective storm water management requirements. The fact that many of these sites have upgraded the storm water management infrastructure to manage the pre-demolition site conditions, further complicates the NPDES storm water permitting and post-construction storm water management (PCSM) compliance obligations. Property developers, who take the initiative to begin readying brownfields for reuse, can ultimately end up at a competitive disadvantage to developers who undertake no positive reuse activities. We believe that this potential eventually should not be promoted and that the proposed regulations should be modified to make sure this does not occur. This can be done through the addition of an explanation of what constitutes the “existing predevelopment” condition of the site. Brownfield redevelopers should be given the opportunity to demonstrate, and the Department should be required to accept, any predevelopment condition that existed on the site based on its previous use. (1150) Rather than prescriptively mandate that earth disturbance activities meet the bright-line standards that are proposed, it may be more appropriate to develop a system that provides incentives to reduce existing stormwater discharges by whatever degree is practicable, taking into account the nature of the sites to be redeveloped and the types of projects that are being proposed. (1256)

Response: Section 102.8(g)(2)(ii) and (iii) has been revised in the final rulemaking to provide more clarity and to give more flexibility in its use. The intent is to provide some

stormwater controls on property that was previously developed with little or no stormwater BMPs. The Department agrees that flexibility is needed in developed areas. Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection. Further, Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects. The rulemaking is a codification of existing requirements which have been effectively implemented on brownfield sites.

147. **Comment:** The requirement of 102.8(g)(2)(ii) relating to considering 20% of the pre-development impervious area as meadow in good condition is confusing and misrepresents many current conditions substituting an overly conservative pre-development analysis. This provision should be stricken. (1223)

Response: Section 102.8(g)(2)(ii) and (iii) has been revised in the final rulemaking to provide more clarity and to give more flexibility in its use. The intent is to provide some stormwater controls on property that was previously developed with little or no stormwater BMPs. The Department agrees that flexibility is needed in developed areas. Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection. Further, Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects. The rulemaking is a codification of existing requirements which have been effectively implemented on brownfield sites.

148. **Comment:** 102.8 Add (g)(2)(iii) Hydrologic routing analysis is required to demonstrate that the volume reduction requirement is met. (693)

Response: The Department acknowledges the comment but believes that the current wording in the final rulemaking is adequate.

149. **Comment:** Section 102.8(g)(3). It seems excessive to require analysis of 6 different design storm events - using the 2-, 10-, 50-, and 100-year storms should be sufficient. (436, 650)

Response: The Department agrees. The Final Rulemaking deletes the 5 and 25 storm analysis requirement in this subsection.

150. **Comment:** Section 102.8(g)(3) How will regulation address off-site mitigation if the net change cannot be managed for all storms and peak rates. See WV MS4 permit for example language. (1268)

Response: These regulations do not address off-site mitigation or compensation for PCSM.

151. **Comment:** Section 102.8(g)(3). The BMP Manual suggests controlling the peak rate of runoff for the 1-year storm in addition to the other storms. Should the 1-year storm be added to this Section? (1123)

Response: The Department believes that control of the rate for the 2-, 10-, 50- and 100-year storms is adequate.

152. **Comment:** Section 102.8(g)(3)(i). Are there any details on the type of routing required or is that completely up to the applicant? (436, 650)

Response: That would be up to the applicant to use an accepted engineering practice.

153. **Comment:** 102.8(g)(3): This section of the proposed rule making is an attempt to codify the guidance peak runoff rate control standard included in Chapter 3 of the Pennsylvania Stormwater BMP Manual. Although less flexibility is required in peak rate control methods, there are dangers in codifying any analytic standards since there may be instances where it is more appropriate to use some other standard. In addition, it is noted that the 1-year storm is no longer included in the list of design events for which analysis is required. It is also noted that a 24-hour precipitation event is specified, which rules out the use of peak computation methods that use a rainfall intensity instead of a 24 hour rainfall depth for analysis. Please address each of these issues. (1255)

Response: Section 102.8(g)(3)(iii) has been added to give the applicant the flexibility to use an alternate approach that will give similar protection.

154. **Comment:** 102.8 (g)(3)(ii) Exempt from this requirement are Department-approved direct discharges to tidal areas or Department-approved no detention areas. (6)

Response: In those two situations, peak rate control is not necessary.

155. **Comment:** Section 102.8(g)(6) This provision states that the Department, or a conservation district consulting with the Department, may require additional information needed to review a PCSM plan, or additional BMPs, on a case-by-case basis. The potential requirement for additional information is extremely open-ended, allowing for additional BMPs to be imposed after a project is built based upon an approved stormwater management plan (including BMPs), and raising the possibility that new requirements could be added even after it seems that a plan is finalized. (1264, 1291)

Response: If a permit expires prior to the completion of the activity and termination of the permit, the permittee would need to demonstrate that they are in compliance with the new requirements or provide revisions based on the regulations and permit conditions in place at the time of the permit renewal. Once a permit is issued and is still valid, the Department cannot issue additional restrictions. If a permit expires, the Department would review it as a new application and based on the regulations in place at that time.

156. **Comment:** The proposed regulation requires post-construction stormwater management (PCSM), as well as hydrologic analysis. If permits in this area are administered by conservation districts, a question exists as to whether or not they are capable of doing the necessary reviews. In particular, concerns have been raised about the potential for non-engineers to review and demand changes to work performed by engineers. (1264, 1291)

Response: Some conservation districts are delegated to conduct reviews of PCSM plans. Districts that employ the services of an engineer can do an engineering review. Those districts that do not have an engineer have been provided training and follow Department guidance. An engineer may conduct a technical review of the PCSM plan using a checklist developed by the Department, and DEP engineers ensure that all required items are present in the permit application and compliant with the permit conditions, Department regulations, and the laws of the Commonwealth.

157. **Comment:** 102.8 (g) (2) this section references managing volume for the 2 yr/24 hour storm. 102.8(a) (3) references minimizing any increase in stormwater runoff volume. Should there be consistency between the two? (1187)

Response: Items listed in 102.8(b) are general items whereas items listed in 102.8(g) are more detailed items needed in a PCSM plan.

158. **Comment:** 102.8 (g)(6) The ability of the Department to require additional information and/or BMPs whenever it deems it necessary to protect water quality seems overly broad and open to misuse. Language should be included to provide for a clear, predictable process that the Department must follow before it is allowed to exceed the existing regulatory requirements. An appeal process for the applicant should be incorporated. (1245)

Response: This provision is designed to allow the Department to request information in unusual or unique situations that can not be anticipated. The Department, rather than the conservation districts, reserves the authority to make this request to ensure consistency across the State. These requests could be discussed among the applicant and the Department to maintain reasonableness. Once the Department makes a permit decision, those actions can be appealed

159. **Comment:** 102.8 (g) (6) This implies the county conservation districts must consult with the department before requiring additional information to adequately review a PCSM Plan. Districts should be able to make the request for additional information without consulting with the department. (693, 1187, 1208)

Response: The Department disagrees with this comment. Conservation districts have been provided with a checklist by the Department in order to conduct reviews of NPDES permit application plans. If a District believes they need additional information, that request should go through the Department to maintain statewide consistency in how we do plan reviews.

160. **Comment:** Revise Section 102.8(g)(6) to read "... when necessary to ensure the restoration, maintenance ..." (1268)

Response: The Department agrees, and has made the suggested revision.

161. **Comment:** Delete Section 102.8(f)(14). (9)

Response: The Department disagrees. Thermal impacts are considered pollution and the regulations must address these impacts.

162. **Comment:** 102.8(f)(14) requires that the PCSM Plan include an evaluation of the thermal impacts from the post construction stormwater to surface water. The December 27,2007 PennDOT Policy on Anti-degradation and Post Construction Stormwater Management on page 13-33 lists seven strategies to reduce potential thermal impacts (i.e. limit the use of curbing). The December 27,2007 Policy also provides that in most cases, a narrative discussing the BMPs located between the impervious surface and surface water will be sufficient. PennDOT requests that DEP confirm that if PennDOT is in compliance with the December 27,2007 Policy, additional evaluation will not be necessary. PennDOT also requests that DEP clarify that calculations related to thermal impacts are not required under this section. (708, 1114)

Response: Section 102.8(f)(14) is now numbered as (f)(13) and has been revised in the final rulemaking to improve clarity. DEP agrees that this section does not mandate calculations. DEP may require calculations however on a case-by-case basis under this section.

163. **Comment:** §§102.8(g) and (h). We recommend that all stormwater management technical criteria be removed from the document and instead that the regulation point to guidance manuals, which can be modified as the supporting science continues to improve. In its effort to incorporate stormwater management into the Chapter 102 document, we believe that the Department has made a critical error, which will plague land development activities due to an unrealistic and flawed use of the Pennsylvania Stormwater Best Management Practices Manual control guidance (from here-on referred to as the Stormwater BMP Manual). The concept of a “*Nondischarge Alternative*” is *fundamentally flawed and will allow future litigation to stop any project through overzealous litigation*. The reason is that the Department’s definition of the Waters of the Commonwealth is:

“Waters of the Commonwealth shall be construed to include any and all rivers, streams, creeks, rivulets, impoundments, ditches, water courses, storm sewers, lakes, dammed water, ponds, springs and all other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.”

By this definition, underground water includes groundwater or perched soil water. Using this definition, it is physically impossible not to change the Waters of the Commonwealth by almost any development activity. The Department’s definition of a Nondischarge Alternative is something that is intended to eliminate the net change from preexisting stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm. However, the Department’s guidance overemphasizes the use of artificial or engineered infiltration to protect surface waters that will create a distinct change in groundwater and/or soilwater. Once groundwater is contaminated, baseflow will be contaminated resulting in future surface water contamination. Additionally, the Department has assumed that meeting the Stormwater BMP Manual Control Guidance 1 (used in the proposed Chapter 102 change), ensures the anti-degradation of streams. However, this was not found to be defensible in the Environmental

Hearing Board's Crum Creek Neighbors decision (EHB Docket No. 2007-287-L, Issued: October 22, 2009).

The Stormwater BMP Manual guidance was never intended to be regulatory document (refer to Stormwater BMP Manual meeting minutes) due to the lack of sound science. Additionally, it was concluded by the Stormwater BMP Manual Oversight Committee that the Stormwater BMP Manual and guidance should be a continuously changing document. By simply inserting the guidance criteria into Chapter 102, allowing change or better science to be used has been negated. Additionally, by inserting the Stormwater BMP Manual control guidance directly into the regulation, DEP is removing all checks and balances in the State's 2006 BMP Manual, which could significantly impair groundwater. The proposed Chapter 102 does not provide for engineering judgment to be used in karst, brownfields, mined lands, superfund sites, or in areas of water supplies when artificial infiltration is not safe or justified. Section 7.4.1 of the BMP Manual states: "Karst aquifers are vulnerable to contamination when the natural filtration capability of soil is bypassed due to thin soils, sinkholes or subsurface open fractures and voids. Contaminants can enter the karst system and travel long distances over a relatively short period of time." Section 7.4.2 of the Stormwater BMP Manual states: "A decision must be made to either promote infiltration at a karst site or eliminate infiltration altogether as an attempt to curb sinkholes or contamination liability." The Chapter 102 regulation should clearly state that in areas where karst, brownfields, superfund sites, or mined lands exist; or in areas close to public water supplies, the volume requirements should be waived or reduced. Instead of using the Stormwater BMP Manual Control Guidance 1 criteria, the Department should indicate how someone can meet the definition of anti-degradation. (944, 1204)

Response: The Department disagrees. These provisions are necessary to ensure adequate planning, implementation and maintenance is conducted to ensure protection and restoration of the Commonwealth's waters. Antidegradation provisions apply to the protection of surface waters of this Commonwealth and this rulemaking is consistent with those provisions. Further, the final rulemaking has been revised at Section 102.8(g)(2)(iv). The rulemaking incorporates the option for the applicant to demonstrate alternative approaches that will be either more protective than utilizing the regulatory criteria or will maintain and protect existing water quality and existing and designated uses by maintaining the site hydrology and erosive impacts. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

164. **Comment:** 102.8(h). "...achieve no net change. .." This says that there cannot be an increase or decrease in volume - it is difficult if not impossible in practice to exactly match "preconstruction discharges.. during storm events up to and including the 2-year ..." Again, "no net change" in water quality is a confusing concept. This section also includes the terms "nondischarge" and "ABACT" which are not clearly defined. (436, 650)

Response: This section has been revised in the final rulemaking to improve clarity.

165. **Comment:** 102.8(g)(1) & (2) requires "[a]nalytical testing and assessment of soils, geology, and other predevelopment characteristics including infiltration and geotechnical studies...". PennDOT has concerns about having to do analytical testing for all projects, e.g., bridge replacement over water < 200' on new alignment; bridge replacement over water > 200' long on ex. alignment with > 25% over land (e.g., viaduct bridges); bridge replacement over land; increase width of travel lanes or shoulders; extension of acceleration/deceleration ramps in shoulder areas; intersection improvements (e.g., channelization, addition of turning lanes); improve horizontal or vertical alignment; and new pull-off areas. This would increase the design and construction costs of our projects. PennDOT requests that the language be revised as follows: "analytical testing, assessment, or other data on soils, geology, and other predevelopment characteristics which may include infiltration and geotechnical studies. . . ." (708, 1114)

Response: The Department agrees. Section 102.8(g)(1) has been revised to read "predevelopment site characterization and assessment of soil and geology including appropriate infiltration and geotechnical studies that identify location and depths of test sites and methods used "

166. **Comment:** Section 102.8(g)(2)(i) addresses the cover type for non-forested pervious areas. For purposes of calculations, the cover type for PennDOT projects should be the existing cover type and not automatically meadow in good condition. PennDOT would be severely penalized for pervious areas within its existing right-of way that are not meadow in good condition which would result in increased project costs. PennDOT requests that the following exception be added to this section also: "except for repair, reconstruction, or restoration of roadways or utility infrastructure when the site will be returned to existing function." (708, 1114)

Response: The Department agrees and has made the change in the final rulemaking. Sections 102.8(g)(2)(i), (ii) and (iii) were modified in the final-form rulemaking to exclude repair or reconstruction of roadways or rail lines, and to consider public health, safety and environmental limitations.

167. **Comment:** Section 102.8(g)(2)(ii) requires that when the project site contains impervious area, 20% of the existing impervious area to be disturbed must be considered meadow when calculating the predevelopment runoff volume. The revisions do include an exception for the repair, reconstruction, or restoration of roadways when the site will be returned to existing condition. When applying this exception to projects involving the addition of impervious surfaces, PennDOT requests clarification that the existing impervious surfaces associated with the roadway will not be subject to the 20% meadow requirement even when the existing roadway will be repaved or repaired. This clarification could be achieved by changing "existing condition" to "existing function" as described above. PennDOT is also seeking verification that the following cover types would be considered impervious: previously constructed embankments, drainage slopes, and unpaved shoulders. (708, 1114)

Response: The Department agrees and has made the change in the final rulemaking. Sections 102.8(g)(2)(i), (ii) and (iii) were modified in the final-form rulemaking to exclude repair or reconstruction of roadways or rail lines.

168. **Comment:** Section 102.8(g)(3) requires that post-construction peak rates must be demonstrated to be no greater than pre-construction peak rates for the 2-, 5-, 10-, 25-, 50-, and 100-year/24-hour storm events or they must be consistent with an approved and current Act 167 plan. This standard is different from the DEP BMP Manual in that the 24-hour storm event is to be analyzed. This means that a full hydrograph procedure must be used to produce pre- and post-peak rates, thus eliminating the Rational method and TR-55 graphical method. Analysis of a 24-hour storm event should only be necessary when hydrograph routing is needed (e.g., BMPs with storage, combination of multiple sub-areas). (708, 1114)

Response: The Department agrees. Section 102.8(g)(3) has been revised to remove the 24-hour storm event

169. **Comment:** 102.8 (h) We feel that there should be no difference between the requirements for PCSM plans in High Quality "and" Exceptional Value watersheds instead of "or." (947)

Response: The Department believes that the existing language is appropriate.

170. **Comment:** Section 102.8(h) This section should read: "Persons proposing an earth disturbance activity located in watersheds containing waters of this Commonwealth that have a designated or existing use of exceptional value or high quality shall maintain and protect those waters as required by 25 Pa. Code 93.4a and follow the procedures set forth in 25 Pa. Code 93.4c. Without limiting the foregoing, the Persons shall use the BMPs and design standards listed in the *Pennsylvania Stormwater Best Management Practices Manual*, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated, with particular attention to section 7.7 on pages 20 and 21 of Chapter 7 in satisfying these requirements and in following these procedures." (946, 1191)

Response: Section 102.8(h) has been revised in the final rulemaking to clarify the antidegradation implementation process for NPDES stormwater construction or E&S permit applications for projects proposed in special protection waters. The Department retained the reference to the Stormwater BMP Manual as identifying acceptable nondischarge alternatives and ABACT BMPs to meet the requirements.

171. **Comment:** 102.8(h) should be revised to read as follows: When a PCSM Plan is being developed for an activity that may result in a discharge to a water of this Commonwealth classified as High Quality or Exceptional Value under Chapter 93, the person proposing the activity shall use **site design**, nondischarge and ABACT BMPs to maintain and protect water from degradation. Specifically, the person proposing the activity shall use PCSM BMPs that collectively **maintain pre-development hydrologic regime** and achieve no net change when compared to preconstruction discharges ... (1208)

Response: Section 102.8(h) has been revised in the final rulemaking to clarify the antidegradation implementation process for NPDES stormwater construction or E&S permit applications for projects proposed in special protection waters. The Department retained the

reference to the Stormwater BMP Manual as identifying acceptable nondischarge alternatives and ABACT BMPs to meet the requirements.

172. **Comment:** Revise 102.8 (h) to read: When a PCSM Plan is being developed for an activity that may result in a discharge to a water of this Commonwealth classified as High Quality or Exceptional Value under Chapter 93, the person proposing the activity shall use nondischarge, **site design** and ABACT BMPs to maintain and protect the water from degradation ... (693)

Response: Section 102.8(h) has been revised in the final rulemaking to clarify the antidegradation implementation process for NPDES stormwater construction or E&S permit applications for projects proposed in special protection waters. The Department retained the reference to the Stormwater BMP Manual as identifying acceptable nondischarge alternatives and ABACT BMPs to meet the requirements.

Comment: 102.8 (h) The ABACT BMPs are referenced to the PABMP Manual which is a different reference then in Section 102.4.b.6 (E&S Manual). (1123)

Response: Stormwater ABACT BMPs are referenced in the NPDES application and the Pennsylvania Stormwater Best Management Practices Manual (PADEP # 363-0300-002). E&S ABACT BMPs are referenced in the NPDES application and will be referenced in the updated Erosion and Sediment Control Program Manual that is being updated concurrently with the Chapter 102 updates.

173. **Comment:** 102.8 (i) *This is a good addition.* (693)

Response: The Department acknowledges the comment and appreciates the support.

174. **Comment:** 102.8 (i) implies that the PCSM must be submitted "Upon complaint or site inspection." I do not see any other paragraph that requires that the PCSM be submitted for review by the Department or Conservation District. Is it true that the proposed revisions do not require PCSM submittal, review and approval before the start of the project? This appears to contradict other sections of the proposed rulemaking. (1223)

Response: Section 102.8(i) specifically references sites that were discovered from a complaint or a site inspection. These sites may not have needed a permit or may have not gotten a permit and need to come into compliance.

175. **Comment:** Although the PCSM requirements are significant, the inclusion of such requirements do not constitute water quality improvement or protection if the requirements are not reviewed by the local regional office of DEP. Currently, the PCSM plans received by the conservation districts in the Southwest Region are not reviewed for a General NPDES permit, they are only required with the application. If the department does not review the Stormwater prior to development activities this will cause extensive work for the local conservation districts, municipalities and counties once a field inspection or complaint occurs to correct the problems that need addressed. This work will take away from the field activities that should be occurring inspecting other sites. Changes during construction will also cost the permittee. Problems with

permit applications that are caught upfront during the review process pose less costs to those involved and time from inspection routines that are needed. No where does this provision call for approved PCSM plans. It is better to be proactive than reactive during the planning process. (1226)

Response: The Department agrees that identifying problems early in the review process is preferred. The Department however disagrees that a review is not required for activities that require general permit coverage. The Department has established a permit application package that is reviewed to the level necessary for taking action for determining permit coverage. Although a detailed engineering or technical review may not be conducted, Department processes and procedures provide a structure for the standards established in the permit conditions.

176. **Comment:** § 102.8 (i) Can a non-PCSM delegated conservation district require a PCSM plan be submitted to PA DEP for review for General NPDES permitted sites? (1315)

Response: Yes. Any conservation district can ask the Regional Office for technical help when reviewing a PCSM plan, especially if there appears to be obvious concerns.

177. **Comment:** Section 102.8(i)- A PCSM plan should already be completed and on file before a project commences. (1264, 1291)

Response: The Department agrees, but occasionally projects are commenced without a permit when one is required. As part of the permit application package, a PCSM plan is required to be submitted and reviewed.

178. **Comment:** 102.8(j) The PCSM Plan, inspection reports and monitoring records should also be available upon request to EPA or the MS4. (1268)

Response: EPA has the authority to request such documents for activities authorized under an NPDES permit. Municipalities should have similar authority under a MS4 municipal ordinance.

179. **Comment:** 102.8(k) should be rewritten. Grammatically, it is not well structured (708, 1114)

Response: The Department agrees. Section 102.8(k) has been revised to read "A licensed professional or designee shall be present onsite and **SHALL** be responsible during critical stages of implementation of the approved PCSM plan. **THE CRITICAL STAGES MAY INCLUDE THE INSTALLATION OF...**"

180. **Comment:** Section 102.8(k) Requiring a licensed professional on site to be responsible may transfer liability to that licensed professional from a non-licensed plan preparer or property owner. (1141)

Response: The licensed professional would only be responsible for reporting and observing what happens during the construction phase. Many construction projects have construction inspectors who sometimes are different from the plan designer.

181. **Comment:** Regarding a schedule of inspections, it's unclear who is intended to perform these inspections or what the definition of a critical inspection is. We work with multiple conservation districts that have already asked for unreasonable inspections on the developer's dime. Either a definition for critical inspections should be included or they types and specific inspections should be enumerated. (1289)

Response: Section 102.8(k) lists examples of the PCSM plan implementation critical stages.

182. **Comment:** 102.8(k) should be revised to read as follows: A licensed professional or a designee **trained and experienced in PCSM BMP construction methods** shall be present onsite and be responsible or other BMPs as deemed appropriate by the Department **or conservation district**. (1208)

Response: The conservation district was added to the language in the final rulemaking. The Department believes that the term "licensed professional or a designee" means the professional or a person working under his charge and supervision.

183. **Comment:** 102.8(k) "A licensed professional ... shall be present onsite and be responsible during critical stages ..." This implies that the licensed professional has direct control over the contractors which is generally not the case. Typically we are present to observe, offer guidance, and document - not to be "responsible." This may require a significant change in contracting procedures. (436, 650)

Response: The Department believes that the term "shall be responsible" means that they are responsible to the person that they are working for, typically the applicant. They would be responsible to notify that person of deficiencies for further attention.

184. **Comment:** 102.8(k) Who is responsible for ensuring that a licensed professional is present during critical stages of implementation? The design engineer may not be under contract with the developer at the time of construction. In addition, who determines what "critical stages of implementation" are? (1123)

Response: Section 102.8(k) lists examples of the PCSM plan implementation critical stages. It would be the responsibility of the applicant to ensure that the proper person is available to do this requirement.

185. **Comment:** 102.8(k) - The requirement to have a licensed professional onsite during the construction of the specified BMPs could be very expensive depending on the Department's expected frequency and duration of construction observation. The Department's expectations should be clarified to prevent different interpretations by various regional offices and/or conservation districts. (1129)

Response: Section 102.8(k) lists examples of the PCSM plan implementation critical stages. During the pre-construction meeting, the applicant and Department or conservation district should discuss the expectations that they each have to fulfill this requirement.

186. **Comment:** 102.8(k). This should read "A qualified licensed professional ... " Licensed professionals are not necessarily qualified in all areas of science associated with their license. (1255)

Response: The Department believes that the licensed professional under the authority of their registration is responsible to work within their area of expertise. If the licensed professional does not, it is a violation of their registration.

187. **Comment:** We question the use of an engineer, hydrologist or landscaper hired by the developer to certify their own E&S and PCSM plans. This seems more like a regulation that would be suggested by developers rather than this regulating agency. This not in the best interests of environmental protection. (1290)

Response: The Department disagrees. A licensed professional would be violating their license requirements by certifying construction that does not meet the approved plan.

188. **Comment:** Section 102.8(1) should be revised to read: "Department of Environmental Protection" (946, 1191)

Response: The Department agrees. Section 102.8(1) has been revised to read: "Department of Environmental Protection"

189. **Comment:** Moving the focus of the regulatory environment from the design to the completed project would be considered a more protective practice. This would enhance the experience of the design professionals by involving them in the construction process, and this experience coupled with the flexibility to change designs during construction should result in a better product for both the client and the Commonwealth. I am professionally for advancing this concept. (1207)

Response: The Department agrees and appreciates the support.

190. **Comment:** Section 102.8 (k-1)-These requirements should be removed. Their primary effect will be to create a great deal of additional cost. At the same time, the final certification statement from a licensed professional could be problematic, as despite all best efforts, it is very difficult to install the planned facilities exactly as designed. (1264, 1291)

Response: The Department disagrees. The Department believes that it is important for someone to inspect the construction, preferably the design engineer. Past history indicates that the most common problem with projects is construction deficiencies. The Department understands that plans change in the field. Requiring oversight and record drawings is the best way to ensure that the Department has an adequate record of what was done on the project.

191. **Comment:** 102.8 (k) Who will pay the “licensed professional or designee” that is to be present and responsible during critical stages of construction? Who this individual is paid by and who they answer to will help to define the effectiveness of this action. Will an engineer that is paid by a developer require that an improperly installed BMP be removed and reconstructed when the next several phases of this project are on the drafting tables in his office? It appears that the “fox is watching the henhouse.” An independent inspection offers the best hope for successful installation of the BMP’s. (1229)

Response: The applicant typically would hire the licensed professional and would be the individual who the licensed professional would report to, although this might not always be the case. A licensed professional would be violating their license requirements by certifying construction that does not meet the approved plan or is not sound practice.

192. **Comment:** 102.8 (k) proposes to make the licensed professional or their designee responsible during critical stages of the implementation of the PCSM Plan. While the design professional can observe and report the activities being performed, they cannot be responsible for the correct implementation of the PCSM Plan. The site work contractor is responsible for implementation of the plan. This should be clarified. (1153)

Response: The Department believes that the term “shall be responsible” means that they are responsible to the person that they are working for, typically the applicant. They would be responsible to notify that person of deficiencies for further attention.

193. **Comment:** Section 102.8(1) Submission of record drawings is an undue burden and should be stricken. (1233)

Response: The Department disagrees. It is important to have a final set of correct as-built plans for the records.

194. **Comment:** 102.8 (l) In the written certification, the wording “to the best of my knowledge, information and belief” should be removed. If the engineer never went to the job site, they could still make this statement without perjuring themselves. We are aware that this is a commonly used term in such documents, however, in this certification it may not be appropriate. Also, remember that the engineer completing this certification is working for the developer, not DEP, the local municipal government or the conservation district. DEP has already experienced problems with engineers used an expedited review process for projects. We need to learn from that. Independent oversight is critical if we wish to achieve real management of stormwater. We are all aware that there are many very ethical professional engineer and they would do fine signing such a document. However, we must be equally aware that with some the cost of inspections may compromise the validity of the certification. (1229)

Response: The Department disagrees. The certifying engineer is not going to be on site at all times and can only certify to what they observed when they were there. It is important that the reviewing agency and the applicant have a good understanding of what both parties are expecting from this inspection program.

195. **Comment:** Section 102.8(k) & (l) - (k) states that a "licensed professional or designee shall be onsite and be responsible during critical stages of implementation..." and (l) requires a licensed professional to certify the construction. On nearly all Pennsylvania Department of Transportation projects, the design professional is not permitted to perform onsite inspection due to conflict of interest policies. Therefore it will be impossible for the design professional to meet these permit requirements. *Provisions should be added to allow PennDOT more flexibility for inspection during construction.* (1247)

Response: The licensed professional is not required to be the plan designer, although that would be the preferred option. The Department believes that it is important for a licensed professional to inspect the construction. Past history indicates that the most common problem with projects is construction deficiencies.

196. **Comment:** Section 102.8(1) requires that certified "Record Drawings" be presented with the notice of termination. This represents an undue burden on most developers where the contractors frequently do not provide such drawings, even when a partial payment is withheld if the record drawings are not provided. Furthermore there is no description for what the "Record Drawings" are required to contain. This section should be stricken. (1223)

Response: The Department disagrees. It is important to have a final set of correct as-built plans for the records. Section 102.8(1) has been revised to provide more clarity.

197. **Comment:** 102.8(1) How can a licensed professional provide a certification statement on Record Drawings if they are not on-site at all times? Would this certification better be signed by the contractor or permittee, in lieu of a licensed professional? (1123)

Response: The Department believes that it is important for someone to inspect the construction. Past history indicates that the most common problem with projects are construction deficiencies. The certification requires the licensed professional to certify "to the best of my knowledge, information, and belief" which would mean what the licensed professional knows from when they were onsite. It is important that the reviewing agency and the applicant have a good understanding of what both parties are expecting from this inspection program.

198. **Comment:** 102.8(l) As licensed professionals are required to seal drawings, would it be beneficial to have similar qualified licensed professionals review the applications at the Department or conservation district? (1123)

Response: A technical review of the PCSM plan is done by engineers or under the supervision of an engineer at a conservation district or Regional Office. Conservation Districts that don't have the services of an engineer check for completeness following a checklist developed by the Department.

199. **Comment:** 102.8(1)(1) refers to "the approved PCSM Plan," but Section 102.8(i) implies that the PCSM submittal and approval process is only required "Upon complaint or site inspection." (1223)

Response: Occasionally projects are commenced without a permit when one is required. As part of the permit application package, a PCSM plan is required to be submitted and reviewed.

200. **Comment:** §102.8(1) The requirement to submit "record" drawings with a Notice of Termination is unnecessary and not relevant for all projects. "Record" drawings of the type described are typically not created for gas utility, pipeline, and gas well construction projects. This requirement only makes sense when used to record engineered and constructed structures for PCSM management which are not part of all earth disturbance projects. We recommend deletion of this subsection. (691, 1124, 1152, 1250)

Response: The department has retained this provision, but has clarified that regulated activities that require site restoration or reclamation, such as pipeline and other utilities, will satisfy the PCSM plan requirements. The record drawings and certification will simply reflect the "as built" conditions at the restored or reclaimed site.

201. **Comment:** 102.8(1) contains the language ". ..accurately reflect the redline drawings" which should be revised to "accurately reflect as-built conditions" or "accurately reflect field modifications. (708, 1114)

Response: The Department agrees. Section 102.8(1) has been revised to read ". accurately reflect as-built conditions".

202. **Comment:** § 102.8(1) requires the submission of "record drawings" to be submitted with a Notice of Termination, retained with the PCSM plan, and copies provided to the person responsible for the operation and maintenance of PCSM BMPs. Record drawings as described in the proposed regulation are not applicable to all earth disturbance activities. For example, record drawings are not created for many utility or oil and gas activities. The currently proposed requirement is applicable for projects installing engineered and constructed PCSM BMPs. The language of this section should be modified to reflect the appropriate applicability of the record drawing requirement. (1241, 1278)

Response: The Department agrees that record drawings required in Subsection (1) are not applicable to all earth disturbance activities. Certification is required for all projects. This will allow the Department to have an accurate set of plans of what was actually constructed onsite.

203. **Comment:** 102.8(1). We support the inclusion of this important requirement in the regulation as there is currently no reliable mechanism for documenting full implementation of the PCSM Plan. (1208)

Response: The Department acknowledges the comment and appreciates the support.

204. **Comment:** Section 102.8(l)(1) Who will approve the PCSM plan? (1268)

Response: The Department or delegated conservation district where applicable.

205. **Comment:** Section 102.8(l) Final certification statement goes well beyond typical standard of care and may cause the licensed professional to jeopardize his liability insurance. (1141)

Response: The statement "to the best of my knowledge, information and belief" which would mean what the licensed professional knows from when he was onsite should limit their liability from things that happened when they weren't there. It is important that the reviewing agency and the applicant have a good understanding of what both parties are expecting from this inspection program.

206. **Comment:** Section 102.8(1) Requiring the licensed professional to certify "Record Drawings" could be problematic. What happens if they don't? Shouldn't the contractor certify that the plans were followed? The certification language itself could also be improved: "...accurately reflect redline drawings ..." What does that mean? "...the project site was constructed in [add: 'general'] accordance.." (436, 650)

Response: The language in the final rulemaking was changed to improve clarity. If they don't provide the drawings, it would be a violation of the regulation.

207. **Comment:** The PCSM Plan certification statement requires additional clarification. The current certification states that "the accompanying record drawings accurately reflect the redline drawings." The record drawings should reflect the as-built site conditions instead of the red-line markups. We do not see red-line markups identified elsewhere in the document. (1153)

Response: The language in the final rulemaking was changed to improve clarity.

208. **Comment:** Section 102.8(1) and Section 102.15(c)(7) The certification pertaining to Record Plans is too absolute and adds an undue limit of liability to the engineer. (1141)

Response: The statement "to the best of my knowledge, information and belief" which would mean what the licensed professional knows from when he was onsite should limit their liability from things that happened when they weren't there. It is important that the reviewing agency and the applicant have a good understanding of what both parties are expecting from this inspection program.

209. **Comment:** Revise 102.8 (l) to read: The permittee shall include with the notice of termination "Record Drawings" with a final certification statement from a licensed professional, which reads as follows: "I (name) do hereby certify pursuant to the penalties of 18 Pa. C.S.A. § 4904 to the best of my knowledge, information and belief, that the accompanying record drawings ~~accurately reflect the record drawings~~ are true and correct, and are in conformance with Chapter 102 of the rules and regulations of the Department of Environment Protection and that

the project site was constructed in accordance with the approved PCSM Plan." ~~and accepted construction practices~~" (693)

Response: The language in the final rulemaking was changed to improve clarity.

210. **Comment:** Revise Section 102.8(l)(2) to read "... for the operation and maintenance and inspection of the PCSM BMPs." (1268)

Response: The Department has determined that the suggested revision is unnecessary because BMP monitoring and inspection is an inherent function of long term operation and maintenance.

211. **Comment:** 102.8 Insert new section between (l) and (m) which reads as follows: "The person responsible for the construction of approved PCSM BMPs on individual residential lots which receive stormwater solely from the lot in which the PCSM BMP is located shall be identified on the deed as a covenant that runs with the land and that is enforceable by subsequent grantees. A grantor that fails to comply with this requirement shall remain jointly responsible with the grantee for the construction of the PCSM BMPs located on the property." This will solve a large problem with individual lot PCSM BMP installation by holding all parties responsible and providing a way to ensure implementation after an NOT for a residential project with an extended build out period is acknowledged. . . (693)

Response: The Department believes that this concern is covered by other sections in the final rulemaking.

212. **Comment:** Revise 102.8 (m) to read: ~~unless a different person is approved in writing by the Department, operation and maintenance of PCSM BMPs shall be the responsibility of the landowner of the property where the PCSM BMP is located.~~ **The party responsible for the operation and maintenance of PCSM BMPs shall be approved in writing by the department or conservation district.** The deed for any property containing a PCSM BMP shall identify the PCSM BMP and provide notice that the responsibility for operation and maintenance of the PCSM BMP is a covenant that runs with the land and that is enforceable by subsequent grantees. A grantor that fails to comply with this requirement shall remain jointly responsible with the ~~landowner~~ **grantee** for operation and maintenance of the PCSM BMPs located on the property. The original language of this section placed the emphasis on the landowner being responsible for the O&M of the BMP on that individual's property. This is problematic when a BMP, which collects stormwater from multiple lots or areas, is located on an individual's lot because the cost to maintain these facilities is high. This is also a problem because the landowner has little control over the contributing drainage area to the BMP. (693)

Response: The language has been changed in the final rulemaking to improve clarity.

213. **Comment:** 102.8 (m) Dominion requests that the permittee, property owner, developer, operator, tenant, etc. be allowed to determine and propose the appropriate responsible party(ies) to the Department on a case-by-case basis. While we do not disagree that long-term operation and maintenance of certain PCSM BMPs is critical, we urge the Department to provide

flexibility that will allow the responsibility to be assigned to the most appropriate party for each individual situation. (1152)

Response: The language has been changed in the final rulemaking to improve clarity. This would allow an appropriate responsible party to be named for long term operation and maintenance.

214. **Comment:** 102.8 (m) -This section should require written approval by the Department or the conservation district. Additionally in this section, we question why the emphasis is on landowner responsibility for BMP O & M when stormwater may be collecting from multiple lots or areas. The landowner has little control over the contributing drainage area to the BMP. (640)

Response: The language has been changed in the final rulemaking to improve clarity. This would allow an appropriate responsible party to be named for long term operation and maintenance.

215. **Comment:** Section 102.8(m) creates an onerous requirement for the property owners to modify deeds during or after construction. This requirement should be dropped because the Department already has sufficient authority to enforce the PCSM. (1223)

Response: The operation and maintenance requirement is for the PCSM BMPs that are installed as part of the PCSM management plan. In order for these BMPs to function efficiently, they must be maintained in perpetuity or until the land use changes. This maintenance responsibility would remain if the property transfers, therefore the need for a covenant that runs with the land.

216. **Comment:** 102.8(m) We think that this additional language is a good idea in regards to who is responsible for the operation and maintenance of a PCSM plan. From a practical standpoint, we have some concerns about how complicated it will be to do this and how much time it will take. (947)

Response: The Department acknowledges the comment and appreciates the support. The Department has revised this section to clarify the requirements of who is responsible, what legal instrument is required, exceptions and transfer of responsibility by agreement. The time that the process will take could be variable based on the complexity of the project and how these obligations are followed.

217. **Comment:** The person identified as the person responsible for long-term operation and maintenance activities is within the definition of "Operator" (see, Section 102.1 ("Definitions.")). If the designated Operator is a person other than the permittee, the "Operator" would be deemed a co-permittee by operation of the proposed rule (see, Subsection 102.5(h)). Finally, Subsection 102.8(m) provides, in part, that "[u]nless a different person is approved in writing by the Department, operation and maintenance of PCSM BMPs shall be the responsibility of the landowner of the property where the PCSM BMP is located." The specification of the person responsible for the performance of the activities specified in the PCSM Plan (i.e. the "Operator" of the PCSM BMPs) should be reviewed and approved by the Department in every case. In

addition, if the approved Operator is a person other than the landowner of the property where the PCSM BMP is located, the landowner should be jointly responsible for the activities specified in the PCSM Plan so that the landowner has a vested interest in assuring that the Operator of the PCSM BMPs is fulfilling its obligations. (1249)

Response: The decision by the applicant to plan, design and implement a project also requires the responsibility of PCSM and long term O&M. The Department has revised this section to clarify the requirements of who is responsible, what legal instrument is required, exceptions and transfer of responsibility by agreement. The time that the process will take could be variable based on the complexity of the project and how these obligations are followed.

218. **Comment:** Subsection 102.8(m) specifies, in part, that "...The deed for any property containing a PCSM BMP shall identify the PCSM BMP and provide notice that the responsibility for operation and maintenance of the PCSM BMP is a covenant that runs with the land and that it is enforceable by subsequent grantees." It is important that the identification of the PCSM BMPs, as well as the specification of the responsibilities associated with the operation and maintenance of the BMPs, be recorded as promptly as reasonably possible following the installation of the BMPs in order to minimize the chance of other interests (e.g. mortgages, liens, et cetera.) being recorded ahead of the PCSM BMP covenants. In other words, if the PCSM BMPs are installed in connection with earth disturbances by a property owner who does not intend to immediately convey the land, the requisite easement and covenant document should be recorded promptly and not deferred until a deed of conveyance is recorded. (1249)

Response: The decision by the applicant to plan, design and implement a project also requires the responsibility of PCSM and long term O&M. The Department has revised this section to clarify the requirements of who is responsible, what legal instrument is required, exceptions and transfer of responsibility by agreement. The time that the process will take could be variable based on the complexity of the project and how these obligations are followed.

219. **Comment:** Section 102.8 (m) requires a covenant that runs with the land regarding the operation and maintenance of the BMP be placed on the property with the BMP. For PennDOT projects, most BMPs are adjacent to the roadway and within the right-of-way.' Any restrictions placed on the right-of-way could pose problems for future improvement to the roadway. PennDOT requests an exception for filing a covenant for BMPs on Commonwealth-owned property adjacent to roadways. Under the regulations, PennDOT will be required to submit an operation and maintenance plan. This plan can address the steps taken if the property with the BMP is ever transferred. (708, 1114)

Response: The operation and maintenance requirement is for the PCSM BMPs that are installed as part of the PCSM management plan. In order for these BMPs to function efficiently, they must be maintained in perpetuity or until the land use changes. This maintenance responsibility would remain if the property transfers, therefore the need for a covenant that runs with the land. Section 102.8 has been revised to state that for Commonwealth owned-property, a covenant that runs with the land is not required until the transfer of the land containing a PCSM BMP occurs. Upon transfer of the Commonwealth owned-property containing a PCSM BMP, the deed shall comply with the requirements of Section 102.8(m).

220. **Comment:** The Proposed Rulemaking should require the recording of an environmental covenant to address responsibility for the long-term O&M of PCSM BMPs (including riparian buffers). Section 102.8(m) of the Proposed Rulemaking should be revised accordingly. (946, 1191)

Response: Section 102.8 has been revised to state the permittee or co-permittee shall record an instrument with the recorder of deeds which will assure disclosure of the PCSM BMP and the related obligations in the ordinary search of the subject property. The recorded instrument must identify the PCSM BMPs and provide notice that the long term operation and maintenance of the PCSM BMP is a covenant that runs with the land that is binding upon and enforceable on subsequent grantees. 102.14 has been revised to state existing or newly established buffers, including access easements must be protected in perpetuity through deed restriction, conservation easement, local ordinance, permit conditions or other mechanisms that ensure the long term functioning and integrity of the riparian buffer.

221. **Comment:** Section 102.8(m) This requirement states that operation and maintenance of the PCSM BMPs shall be the responsibility of the landowner of the property where the PCSM BMPs are located (unless a different person is approved in writing by the Department). This should also be a deed requirement. The Department has also proposed language stating that responsibility for a PCSM BMP is a covenant that runs with the land and is enforceable by subsequent grantees. This is a benefit to the grantor and grantee, not to the Department, and should be done instead as an easement. (695, 1245, 1264, 1291)

Response: This section has been revised to state that the permittee or co-permittee shall record an instrument with the recorder of deeds which will assure disclosure of the PCSM BMP and the related obligations in the ordinary search of the subject property. The recorded instrument must identify the PCSM BMPs and provide notice that the long term operation and maintenance of the PCSM BMP is a covenant that runs with the land that is binding upon and enforceable on subsequent grantees.

222. **Comment:** The permittee should bear legal responsibility for ensuring the long-term operation and maintenance of post-construction storm management BMPs. (1307)

Response: The decision by the applicant to plan, design and implement a project also requires the responsibility of PCSM and long term O&M. This responsibility can be transferred at the Notice of Termination for the permit to a willing party.

223. **Comment:** §102.8 (m) CNX Gas requests that the permittee, property owner, developer, operator, tenant, etc. be allowed to determine and propose the appropriate responsible party(ies) to the Department on a case-by-case basis. The proposed rulemaking appears to focus only on traditional commercial and residential development types and assumes that there will always be engineered PSCM BMPs that will require long-term operation and maintenance. By contrast, most pipeline projects, do not result in grade changes or increased impervious surface area - and once restoration is complete, do not require installation or maintenance of PSCM BMPs. These installations occur on "rights-of-way" not owned, and sometimes not even maintained by the

permittee. While we do not disagree that long-term O&M of certain PSCM BMPs is critical, we urge the Department to provide for flexibility that will allow the responsibility to be assigned to the most appropriate party for each individual situation. (691, 1124, 1250)

Response: The Department agrees. This section allows a different person to be responsible for BMP O&M. If there are no PSCM BMPs, there would not be any O&M required.

224. Comment: Currently, the NPDES Permit is required to be terminated by the acceptance of the NOT after an inspection by the conservation district that deems a site satisfactorily stabilized. FirstEnergy and the Energy Association of PA request that the Department define an end point for conducting inspections of a stabilized utility line construction site. There is no value in continuing inspections and maintaining inspection records of a site that has no PSCM BMPs. The Department should continue the practice of terminating the permit after the site has been uniformly covered with 70% perennial vegetation or stabilized with another acceptable BMP, in lieu of the perpetual long-term operation and maintenance of the site, as stated in 102.8(m). (1115, 1267)

Response: The permit would be terminated once earth disturbance activities have been completed and the site is stabilized with minimum uniform density coverage of 70% perennial vegetative coverage. If a utility line project will restore the original contours and not use PSCM BMPs there would be no need for long term operation and maintenance of the project site.

225. Comment: On private work, these requirements add unreasonable risk to the design professional for actions of the owner/permittee and contractor because the design professional has no legal control of the work. (1247)

Response: The licensed professional or their designee shall be present onsite and shall be responsible for the to provide oversight of the critical stages of construction which may include underground treatment or storage BMPs, structurally engineered BMPs, and other BMPs as deemed appropriate by the department.

226. Comment: 102.8(m). We suggest three subsections here: The first subsection should address overall responsibility of permittees for long-term O&M of commonly-owned stormwater infrastructure; revise current section 102.8(m) to create 102.8(m)(i) to read as follows: (i) **The party responsible for operation and maintenance of both structural and nonstructural BMPs shall be approved in writing by the Department or conservation district.** The deed for any property containing a PSCM BMP shall identify A second subsection should be added to address the significant issue of accountability for construction, operation and maintenance of individual lot BMPs in residential subdivisions to ensure PSCM implementation beyond the life of the permit. In this region, build-out of lots in residential subdivisions may not happen for decades. (1208)

Response: The Department has broken 102.8 (m) into five separate subsections (1-5), each identifying a separate condition. This will help to clarify and make the requirements easier to read and understand.

227. **Comment:** Create 102.8(m)(ii) as follows: (ii) The person responsible for the construction of approved PCSM BMPs on individual residential lots which receive stormwater solely from the lot in which the PCSM BMP is located shall be identified on file deed as a covenant that runs with the land and that is enforceable by subsequent grantees. A grantor that fails to comply with this requirement shall remain jointly responsible with the grantee for the construction of the PCSM BMPs located on the property. (1208)

Response: The Department has broken 102.8 (m) into five separate subsections (1-5), each identifying a separate condition. This will help to clarify and make the requirements easier to read and understand.

228. **Comment:** A third subsection should be added as follows: (iii) Operation and maintenance plans must include permanent protections for both structural and non-structural BMPs (i.e. open space, riparian buffers and other natural drainage features, sensitive areas, revegetated/reforested areas) used to meet the volume/rate/water quality requirements of permits or authorizations under this chapter. (1208)

Response: The Department has broken 102.8 (m) into five separate subsections (1-5), each identifying a separate condition. This will help to clarify and make the requirements easier to read and understand.

229. **Comment:** 102.8.(m) (2) "If required to develop a PCSM plan.. ." seems to imply that sometimes it is not required. This language should be clarified. (947)

Response: Some earth disturbance activities that require permits such as timber harvesting and oil and gas activities may not be required to develop a PCSM plan if the project will be restored to its approximate original contours, is permanently revegetated or otherwise stabilized with pervious materials, and PCSM BMPs will be employed which use natural measures and does not require extensive construction or maintenance efforts.

230. **Comment:**102.8.(m) (2 and 3) The first section of both of these sections is not a sentence but a phrase, (947)

Response: There is no section 102.8(m) (2) and (3) in the draft regulations for comment. I believe the commentator was referring to 102.11 (a) (2) and (3) which are finishing statements that are part of the continuation of the sentence that starts in section (a).

231. **Comment:**102.8(n). Pike County Conservation District believes that PCSM Plans for oil and gas activities or mining activities which create impervious cover in the form of roads, parking or staging areas, soil compaction from heavy equipment. etc. should be held to the same standards as those for construction activities. Subsections (a), (d), (g), (g), (j), (l) should be added to the list at the end of this section. (1208)

Response: The Department disagrees with this statement. Due to the nature of oil and gas activities and the site restoration requirements oil and gas activities may not be required to

develop a PCSM plan if the project will be restored or reclaimed, is permanently re-vegetated or otherwise stabilized with pervious materials, and PCSM BMPs will be employed which use natural measures and does not require extensive construction or maintenance efforts.

232. **Comment:** 102.8 (n) The portion of a site reclamation or restoration plan that identifies PCSM BMPs to manage stormwater from oil and gas activities or mining activities permitted in accordance with Chapters 77 and 86- 90, or a plan for abandoned mine land reclamation activities may be used to satisfy the PCSM Plan requirements of this section if the reclamation plan meets the requirements of subsections (b), (c), (e), (f), (g), (h), (i) , (j) and (m). These activities which require an E&S permit should also provide a PCSM Plan in accordance with subsections (g) and (j) due to permanent changes in cover and runoff characteristics. (693)

Response: Some earth disturbance activities that require permits such as timber harvesting and oil and gas activities may not be required to develop a PCSM plan if the project will be restored or reclaimed, is permanently re-vegetated or otherwise stabilized with pervious materials, and PCSM BMPs will be employed which use natural measures and does not require extensive construction or maintenance efforts.

233. **Comment:** Sections 102.9 and 102.10 are missing in the proposed regulation. Should these sections be included as reserved? (1208)

Response: No, these have not yet been utilized, and would not be appropriate to be reserved.

234. **Comment:** Responsibility for long-term PCSM operation and maintenance (O&M): A site-specific and enforceable operation and maintenance plan for both structural and non-structural BMPs is critical for meeting stormwater management goals. Comments are provided regarding legal instruments to better define O&M responsibilities, but those options are only as good as the will and resources available to enforce them, especially after permits expire or are terminated and properties change hands. Rather than focusing on complex O&M schemes that ultimately depend on non-existent enforcement mechanisms, a better approach would be to produce a regulation requiring sustainable development strategies and site design that limit the amount of stormwater that must be managed and reduce reliance on maintenance-intensive structural PCSM BMPs. (1208)

Response: Applicants are encouraged to utilize non-structural BMPs and use sustainable development strategies and site design that limit the amount of stormwater that must be managed.

235. **Comment:** Codification of Post Construction Stormwater Management Plan requirements we support the inclusion of post construction stormwater management requirements in the proposed regulation as a codification of existing requirements in the NPDES stormwater permitting program. However, we believe the proposed regulation fails to take full advantage of site design and nonstructural BMP approaches to meet erosion control and post-construction stormwater management and antidegradation goals and reduce long-term operation and maintenance problems. (1208)

Response: Applicants are encouraged to utilize non-structural BMPs and use sustainable development strategies and site design that limit the amount of stormwater that must be managed.

236. **Comment:** Codification of Post Construction Stormwater Management Plan requirements Pike County Conservation District supports the inclusion of post construction stormwater management requirements in this proposed regulation as a codification of existing requirements in the NPDES stormwater permitting program. We acknowledge the value of incorporating provisions which establish performance criteria for PCSM BMPs and strengthen construction oversight and certification of PCSM plan implementation. However, we believe the proposed regulation fails to take full advantage of site design and nonstructural BMP approaches to meet erosion control and post-construction stormwater management and antidegradation goals and reduce long-term operation and maintenance problems. Ironically, many of the low impact development principles incorporated in the PBR (for example 102.15(c)(2)(i) and (ii), 102.15(f)(3) and (4), 103.15(g)(1), 102.15(h)(1) and (2)) and which are known to be of real benefit in meeting these goals, are not included as requirements for other projects needing permits under the proposed regulation. We urge that this oversight be addressed in the final regulation. (1208)

Response: Applicants are encouraged to utilize non-structural BMPs and use sustainable development strategies and site design that limit the amount of stormwater that must be managed.

237. **Comment:** Long-term PCSM Operation and Maintenance (O&M) A site-specific and enforceable operation and maintenance plan for both structural and nonstructural Best Management Practices (BMPs) is critical for meeting volume control, rate control and water quality protection goals beyond the end of project construction. We doubt whether long-term operation & maintenance can be adequately addressed solely through the proposed rulemaking, but with the recent zeroing out of the Act 167 Stormwater Management Program in the Commonwealth budget, this regulation revision may be the best shot at dealing with a growing problem. Some comments are provided later about the need for legal instruments to better define O&M responsibilities for projects requiring NPDES permits, but those options are only as good as the will and resources available to enforce them, especially after permits expire or are terminated and properties change hands. Rather than focusing on development and implementation of complex O&M schemes that ultimately depend on non-existent enforcement mechanisms, a better approach would be to produce a regulation more focused on requiring sustainable development strategies (including riparian buffers) and site design that limit the amount of stormwater that must be managed and reduce reliance on maintenance-intensive

Response: Applicants are encouraged to utilize non-structural BMPs and use sustainable development strategies and site design that limit the amount of stormwater that must be managed.

238. **Comment:** An over reliance on infiltration causes problems such as groundwater mounding, poorly draining BMPs and the discharge of groundwater in unintended locations. (1269)

Response: The Department agrees. Infiltration is only appropriate where soil and geologic conditions would allow its use. There are other volume reduction BMPs that can be used where infiltration is not appropriate.

239. **Comment:** If this section is intended to prescribe construction methods could DEP or the Conservation Districts require an explanation of the construction methods used to excavate infiltration facilities? Once an infiltration area has been compacted, the damage can not be undone. (3)

Response: In the Stormwater Best Management Practices Manual (PADEP #363-0300-002), there is an explanation of construction methods used to excavate infiltration facilities and these should be used as a reference.

240. **Comment:** Notices of Termination are not always submitted after project completion. With this added requirement for a certificate of conformity, even fewer will be submitted. The regulations should contain a method to encourage that Notices of Termination are always filed. Perhaps a bonding of the project would provide the necessary incentive. (3)

Response: Until the Notice of Termination is submitted and acknowledged by the Department, the applicant is responsible for violations on the site.

241. **Comment:** PCSM require Biological and Chemical Qualities - Preamble needs to be thoroughly discussed and understood before being included. The preamble to this section says it is intended to preserve the integrity of stream channels and protect the physical, biological and chemical qualities of the receiving stream. This implies that these parameters are known, or must be determined. Determining these parameters require specialists in biology and chemistry, which add considerable cost in the preparation of a PCSM report. (9)

Response: The Clean Streams Law and Chapter 93 require the physical, chemical, and biological properties of a stream to be maintained and restored. The parameters are listed in Chapter 93.4(b) and if a stream is impaired, those parameters would also be monitored.

242. **Comment:** PCSM require Analytical Testing – geologist determination of site characteristics for small projects not necessary. (9)

Response: A site-specific investigation should be completed by a qualified professional to determine how the geology affects stormwater management regardless of the size of the site in order to prevent geological hazards from occurring.

243. **Comment:** PCSM Plan Implementation – This puts the burden of proper construction onto the design professional, where the burden of proper construction should be on the contractor. (9)

Response: All parties involved in the implementation of a PCSM plan are responsible for proper construction of a BMP. Through the use of a co-permittee form, these parties can be made part of the permit.

244. **Comment:** O&M requirements – The requirements should be more detailed and prescriptive on how this function will be carried out. (9)

Response: Since each site is different, these requirements should be generalized in order to be modified for different site conditions or BMPs.

245. **Comment:** Location of surface waters which receive runoff from a project site – How far down stream will surface waters need to be included? (9)

Response: Any surface waters impacted from the site should be identified.

246. **Comment:** The 20 percent reduction for impervious areas should be stricken from the requirements. This serves only as a punishment for redeveloping blighted areas and promoting urban sprawl. Redevelopment is already more expensive than developing a corn field. (1289)

Response: The Department agrees that flexibility is needed in developed areas. Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection. Further, Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects. The rulemaking is a codification of existing requirements which have been effectively implemented on brownfield sites.

Comment: The PCSM Plan Analysis requires that existing predevelopment non-forested pervious areas be considered meadow in good condition and that 20% of the existing impervious areas be considered meadow in good condition or better. These requirements add undue costs to projects especially when applied at permit renewals when projects are substantially complete and need to be redesigned to meet new guidelines. (9)

Response: Additional language has been added to this section for when an existing site contains impervious areas, and the existing site conditions have public health, safety, or environmental limitations, the applicant may demonstrate to the Department that it is not practicable to satisfy the 20% requirement. However, stormwater volume reductions and water quality treatment must be maximized to the extent practicable. The Department agrees that flexibility is needed in developed areas. Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection. Further, Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects. The rulemaking is a codification of existing requirements which have been effectively implemented on brownfield sites.

247. **Comment:** The proposed requirement that 20% of existing impervious areas be considered meadow is *particularly onerous to brownfields sites*. Existing sites can't easily be retrofitted to handle stormwater management facilities, so costs are exponentially higher. As a result, these proposed regulations will not only *scare away developers* but also make it *financially impossible for them to present "smart growth" in urban areas*. This issue would be much better handled at a local level where applicants can work with municipal officials to find creative solutions to

managing stormwater runoff and protecting the environment while preserving yield. (690, 1132, 1134, 1162, 1172, 1185, 1231, 1232, 1234, 1236, 1244)

Response: Additional language has been added to this section for when an existing site contains impervious areas, and the existing site conditions have public health, safety, or environmental limitations, the applicant may demonstrate to the Department that it is not practicable to satisfy the 20% requirement. However, stormwater volume reductions and water quality treatment must be maximized to the extent practicable.

248. **Comment:** The requirements to use a 2-year/24 hour storm, a predevelopment condition of "meadow", and an assumption that 20% of existing impervious area be considered meadow are unreasonable. Actual pre-development site conditions should be utilized. In particular, the pre-existing impervious requirements have a significant adverse impact to re-development projects. (695)

Response: Additional language has been added to this section for when an existing site contains impervious areas, and the existing site conditions have public health, safety, or environmental limitations, the applicant may demonstrate to the Department that it is not practicable to satisfy the 20% requirement. However, stormwater volume reductions and water quality treatment must be maximized to the extent practicable. The Department agrees that flexibility is needed in developed areas. Both the existing guidance and the final rulemaking allow the applicant to utilize alternative criteria provided that they demonstrate that the alternative criterion provides a comparable level of water quality protection. Further, Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects. The rulemaking is a codification of existing requirements which have been effectively implemented on brownfield sites.

249. **Comment:** Responsibility of Local Government – Develop regulation guideline to tie the local governing bodies into post construction stormwater, by requiring them to develop guidelines consistent with the state's requirements. (256)

Response: Municipalities should adopt a stormwater management ordinance from an approved Act 167 plan. An Act 167 ordinance addresses this issue.

250. **Comment:** Question staff's ability to soundly and professionally review stormwater designs. Question "trained and experienced (but unlicensed by any agency) in PCSM design methods, an unpublished criteria, can be held responsible for or satisfactorily meet the subsequent design standard of: "designed to minimize the threat to human health, safety and the environment"? Very few conservation districts have staff which fully comprehend or are versed stormwater, let alone have adequate professional licensure. (9, 1289)

Response: Some conservation districts are delegated to conduct reviews of PCSM plans. Districts that employ the services of an engineer can do an engineering review. Those districts who do not have the services of an engineer conduct a technical review of the PCSM plan using a checklist developed by DEP professional engineers to ensure that all required items are present in the plan.

251. **Comment:** The responsibility for the long-term maintenance of post-construction stormwater has been an ongoing issue. The majority of municipalities won't accept dedication of these facilities. They don't want the maintenance responsibility or the Department breathing down their neck. So long-term, who is responsible for these? Are lot owners expected to be responsible for BMPs for a whole development? If the Department wants to mandate long-term maintenance, then they also need to provide a reasonable solution. (1289)

Response: Under Section 316 of the Clean Streams Law, the landowner is legally responsible for any pollution or the potential for pollution that emanates from their property. These BMPs are in place to protect against pollution or the potential for pollution. Under certain circumstances, it may be appropriate that the permittee considers long term O&M "agreement" with a third party as identified in 102.8(m)(14).

252. **Comment:** The regulation must state explicitly that builders and developers will be able to transfer responsibly for the long-term operation and maintenance of postconstruction stormwater BMPs to another party once the project is completed. (1264, 1291)

Response: The final-form rulemaking has been revised section to clarify that upon permanent site stabilization and installation of BMPs in accordance with E&S and PCSM plan requirements, the permittee or co-permittee must submit a notice of termination that identifies the person who has agreed to be responsible for the long-term operation and maintenance,

253. **Comment:** In order for the proposed construction stormwater management BMPs to work as designed, someone ultimately must take responsibility for the long term operation and maintenance. Some entities are better suited for those purposes than others, and depending upon the locale some entities are more resistant to accepting those responsibilities than others. Therefore, we believe it's important that the process include as much flexibility to allow the landowner to assign that responsibility. In some cases, it may be a homeowner association. Where an HOA doesn't exist, it may be the municipality. Where the municipality resists the responsibility, it may be the individual homeowner. Each site and situation is different and should be treated as such. (695, 736, 1245, 1303)

Response: Under Section 316 of the Clean Streams Law, the landowner is legally responsible for any pollution or the potential for pollution that emanates from their property. These BMPs are in place to protect against pollution or the potential for pollution. Under certain circumstances, it may be appropriate that the permittee considers long term O&M "agreement" with a third party as identified in 102.8(m)(14).

254. **Comment:** The responsibility for the operation and maintenance of PCSM BMPs should be transferable from the then current, Department-approved Operator to another person having the competence and capacity to undertake the responsibilities for performing the obligations of the approved PCSM Plan. A specific provision should be added to Section 102.8 to enable the substitution of one approved Operator for another through a process in which the Department: (1) is provided advance written notice of the proposed transfer (including the specification of the information to be provided for the Department's review of the competence and capacity of proposed transferee); and (2) approves the transfer. If the Department-approved Operator does

not seek the Department's prior written approval, the Operator, as well as the landowner, should remain responsible, together with the purported transferee, until the Department's approval is obtained. (1249)

Response: Under Section 316 of the Clean Streams Law, the landowner is legally responsible for any pollution or the potential for pollution that emanates from their property. These BMPs are in place to protect against pollution or the potential for pollution. Under certain circumstances, it may be appropriate that the permittee considers long term O&M "agreement" with a third party as identified in 102.8(m)(14).

255. **Comment:** Section 102.8 should provide that, as part of the review and approval of the PCSM Plan in the first instance, the permittee shall (1) deliver a copy of the approved PCSM Plan to the specified Operator and landowner(s); (2) obtain written acknowledgements of receipt from the Operator and the landowner(s), on a form to be specified by the Department; and (3) submit the acknowledgements of receipt to the Department for its file. This provision should also apply as part of the process for the Department's prior review and approval of a proposed transfer of the responsibility for performing the activities specified in the PCSM Plan to a new Operator or when the landowner conveys the property to a new landowner. In the transfer scenario, the obligation should also include the transfer of all records created and maintained pursuant to the PCSM Plan (*e.g.*, inspection reports and maintenance and repair records). In the case of land conveyances, the obligation of the landowner to deliver a copy of the approved PCSM Plan, as well as relevant records, to the new owner and to file the executed acknowledgement of receipt form with the Department should be specified in the deed covenant specified in Subsection 102.8(m). (1249)

Response: The Department believes that the amendments to 102.8 as revised after the public comment period address these concerns.

256. **Comment:** Background and Purpose, Codification of PCSM requirements: I support the inclusion of specific PCSM requirements and agree that PADEP has incorporated some requirements through the NPDES program over the last several years. (1274)

Response: The Department appreciates your comment and support.

257. **Comment:** The proposed PCSM requirement (volume control of the 2-year storm) is very rigorous and some sites/projects will have difficulty meeting it. Clearly defined exemptions, off-site mitigation options, or alternative (still protective) standards should be included. (1274)

Response: The regulatory requirement is to protect Water Quality (WQ). Maintaining volume control is one way to meet this requirement. Alternatives that will meet WQ requirements will also be considered.

258. **Comment:** One of two options must be selected for this requirement. To remain as written, these regulations must establish that the work of preparing E&S and PCSM plans meets the definition of "Practice of Engineering" as defined in Act 367, and so applies to the development of E&S and PCSM plans FOR EVERYONE. Also, the inclusion of geologists and land

surveyors must be removed from the definition of "licensed professionals" since they are specifically prevented from undertaking engineering work by that Act. If it is to remain that E&S and PCSM plans may be prepared by "trained and experienced" individuals then the actual plan preparer should be assigned this responsibility. However, it is this writer's strong suggestion that certification of work (notice of termination) should be completed by the contractor who truly bears the responsibility for this certification and carries liability insurance to that effect. (9)

Response: The Department uses the term "Licensed Professional" to recognize individuals who are registered with the Department of State through their state registration board to perform work for which they are qualified to do. The purpose of the final certification statement at the end of the project is for the Licensed Professional to attest to the fact that the record drawings accurately reflect any changes made from the original project plans and that the project site was constructed in accordance with the approved PCSM plan and accepted construction practices. Contractors are not certified to by the Department of State or licensing board to sign such a certification.

259. **Comment:** Sections 102.8 and 102.15 require "retention of services of Professional Engineer, geologist, or landscape architect registered in the Commonwealth to prepare and certify Erosion and Sediment Plans and PCMS plans. Further, Section 102.8 requires a licensed professional or a designee to be present onsite and be responsible during critical stages of implementation of the approved PCSM plan. Why are the regulations silent in requiring the conservation district to have a Professional Engineer on staff to be the professional in responsible charge for the Plan they, the Conservation District, ultimately approve? (1159)

Response: Some conservation districts are delegated to conduct reviews of PCSM plans. Districts that employ the services of an engineer can do an engineering review. Those districts who do not have the services of an engineer conduct a technical review of the PSCM plan using a checklist developed by DEP professional engineers to ensure that all required items are present in the plan.

260. **Comment:** PennDOT requests the addition of a public health and safety exception to Section 102.8 to cover instances when standards may not be satisfied due to health, safety, and welfare issues, such as road stability issues in karst areas. PennDOT requests the addition of a subsection that reads: "(0) The Department will not grant a permit under this Chapter which does not satisfy the applicable standards set forth in Sections 102.8 and 102.14 unless the applicant affirmatively demonstrates and the Department finds in writing that a project is necessary to abate a substantial threat to the public health or safety." (708, 1114)

Response: Language has been added to the final rulemaking that where public health, safety or environmental limitations are identified waivers or exceptions may be granted to the requirements of 102.8 and 102.14.

261. **Comment:** PCSM plan – Suggest having some type of ABACT BMPs for sites discharging into EV/HQ watersheds like the ABACT for E&S. (256)

Response: The application lists ABACT BMPs for both E&S and PCSM that may be used.

262. **Comment:** Long term maintenance should be incorporated in a document that gets recorded with the plan, so when a potential buyer does a title search it will show up as a responsibility to maintain. (256)

Response: Section 102.8(m) specifies that maintenance occur long-term and a legal instrument be filed that would turn up during the ordinary course of a property search.

263. **Comment:** The documentation requirement for long-term inspections should also be clarified. Are the reports intended to be submitted to the Department? It seems unreasonable to have a homeowner maintain boxes of documentation. For commercial facilities records are typically kept off-site which is contrary to all other Department regulations. This needs to be clarified to prevent future hardships on property owners. In the event that a commercial management company is fired or a homeowner's association changes hands, how is the responsibility transferred? (1289)

Response: As part of the PCSM plan, a long-term O&M plan must be provided that identifies who is responsible for the maintenance and the frequency of stormwater BMP inspections. When a change in ownership occurs, the O&M plan is part of the property deed or covenant, therefore, it transfers with the ownership of the property.

264. **Comment:** Please clarify what is meant by "redline drawings". Where are these plans to be stored? (256)

Response: Redline drawings are record drawings that indicate changes to the approved plan. The record drawings are to be submitted to the Department or authorized conservation district at the same the Notice of Termination is submitted along with a final certification statement from a Licensed Professional.

265. **Comment:** Please clarify what is meant by "covenant" (256)

Response: A covenant is a notarized formal agreement between two or more parties.

266. **Comment:** The proposed rulemaking should be revised to provide forestry with the same exemption from permitting, forested riparian buffers and PCSM Plan requirements, as are provided to agricultural activities. (1186, 1221)

Response: Timber harvesting activities are exempt from NPDES permits, however, an ESCP is required for earth disturbance activities greater than 25 acres. If the site restoration or reclamation plan identifies PCSM BMPs to be used at the site the restoration plan may be used to satisfy the PCSM plan requirements of this section.

267. **Comment:** On behalf of the PA Sustainable Forestry Initiative (SFI) program, the primary provider of ongoing training programs for loggers and others involved in the harvesting of trees

across Pennsylvania, I respectfully request that you exercise fairness in considering what revisions may be necessary to our current Chapter 102 Regulations. The changes presently being considered seem to reflect no allowance for which entities or practices are actually and largely NOT responsible for the problems being experienced. Specifically, forestry and timber harvesting are, according to the 2008 Pennsylvania Integrated Water Quality Monitoring and Assessment Report issued by PA DEP, responsible for less than two-tenths of one percent of the state's total impaired stream miles. Among the broad array of training programs we conduct several times each year is our Environmental Logging Training. In fact, it is one of our core training programs, which means that it, along with Logging Safety and First Aid/CPR, is required for logging crews working on timber harvests on state lands managed by both the Bureau of Forestry and the PA Game Commission. This same requirement extends to several forest products industry companies as well. In the EL training, protecting and preserving water quality is the main focal point. We believe this effort is working effectively and the data concerning the causes of water quality degradation bears this out. *We therefore believe that forestry should receive the same exemption from permitting, forested riparian buffers, and PCSM Plan requirements as is afforded to other agricultural activities.*(1237)

Response: Timber harvesting activities are exempt from NPDES permits, however, an ESCP is required for earth disturbance activities greater than 25 acres.

268. **Comment:** I think it is imperative that the individuals reviewing these NPDES applications be given specific training and instruction so that they are able to fully understand the design of the stormwater facilities that they are being asked to review and approve. (938)

Response: The Department is aware of the need for continual training in stormwater management and this training is offered throughout the year.

269. **Comment:** These provisions will have substantial economic costs on landowners and companies engaged in forestry and timber harvesting, without providing any significant improvement related to erosion control. DEP should be making every effort to ensure private forestland owners continue to keep their land under long-term forest management instead of imposing restrictions and fees which may lead some landowners to sell their forest land to developers due to economic loss resulting from the restrictions and fees. (1221)

Response: Unless the forest land owner is disturbing more than 25 acres, there is no permit required.

270. **Comment:** Additionally, the use of the net volume difference between the post-construction 2-year/24-hour storm event to the preexisting 2-year/24-hour as the basis of the best management practices and regulation of the rules requires a capital expense and space availability that constrains municipalities with low tax bases, an existing infrastructure, and highly urbanized development from making the improvements necessary to improve their physical, monetary, and demographic situations. (1218)

Response: The Department disagrees with this statement because it is the sole authority that regulates water quality and is allowed to exercise its authority when water quality could become compromised.

271. Comment: The large land areas and capital expense required for construction and maintenance of post construction storm water best management practices necessary for volume reduction of the 2-year/24-hour storm net volume difference becomes a disincentive for communities that need to make improvements within the existing infrastructure and previous development situations. The requirement becomes an impediment to just making the situation better for the environment, the municipal tax base, and the housing, retail, industrial, and commercial infrastructure of older and low income areas who need assistance and cooperation from the state for needed redevelopment. And, by promoting redevelopment with achievable environmental enhancements, sprawl will be reduced to the benefit of the regional and statewide environment. (1218)

Response: The Department disagrees with this statement because it is the sole authority that regulates water quality and is allowed to exercise its authority when water quality could become compromised.

272. Comment: As a scientific requirement, the net difference in the volume of the 2-year/24-hour post construction to preexisting storm event is an unnecessarily excessive amount of storm water volume required to design, construct, and maintain for the purpose of ground water recharge and enhancement of stream base flow. To promote these objectives, best management practices should be utilized to provide infiltration and evapotranspiration in much smaller volume areas for the majority of rainfall events in a monthly water budget strategy. Efforts should be concentrated on the first quarter inch to half inch of rainfall. In doing so, the best management practices will have a positive volume and rate reduction effect upon the infrequent storms and associated flooding. (1218) I believe the more appropriate design criteria should be to capture and recharge the first 1-inch of runoff from the contributing drainage area (the "first flush", and to allow the inclusion of actual pre-development calculations in the design analysis. (938)

Response: The first flush from a stormwater event carries the most pollutants, but larger storm events like the 2-year/24-hour have significant effect on stream channel erosion, which is also a pollutant.

273. Comment: To require calculations, design, construction, and maintenance of post construction stormwater best management practices requires knowledge of the NRCS storm water methods, variations of the modified rational hydrologic methods, the NRCS soil loss methods, and engineering and construction practices. Either, a more specific and defined manual is required or funding for education of the involved constituencies including designers, builders, regulators, and environmental activists is required so that implementation is consistent, effective, and long lasting. (1218)

Response: The person preparing a plan for E&S control and/or PCSM should be experienced in the design and construction of these BMPs. The Erosion and Sediment Control

Program Manual (PADEP # 363-2134-008) and the Stormwater Best Management Practices Manual (PADEP # 363-0300-002) are guidance documents prepared by the Department to assist applicants in preparing these plans.

274. Comment: PCSM – 2 Year 24 Hour Storm Volume Requirement. It is clear that the sole reliance on the 2 year storm volume requirements (Known as CG-1 in the BMP manual) does not address all sites (Brownfields, Karst areas, low infiltrating soils, ultra urban watersheds, etc.). This standard does not differentiate between watershed size or position (first order streams vs. the Delaware River). It should be noted that the BMP manual committee recommended a second equal CG for this reason, to be used without prejudice. A lot size restriction was added in the process without consideration by the committee, which has in essence eliminated its use. From an observational view, it appears that the majority of projects are unable to meet the current CG's resulting in a negotiation for each permit, which is clearly not in the best interest of the Commonwealth, not protective, and not sustainable considering staffing and resources. It is also clear that the large volume requirements in many areas discourage the use of Green Infrastructure (Green roofs – Rain Gardens – Evaporation, Reuse) in favor of large rock bed systems, and do not balance the components of the hydrologic cycle (infiltration versus evapotranspiration). The choice of BMP needs to be balanced and include consideration of the pollutant loadings, temperature, hydrologic balance, and the inclusion of maintenance and longevity considerations. Due to these factors we recommend three concept approaches with each considered to be equal in protection.

a) CG-1- The original CG-1 should be retained. In many areas it is applicable, appropriate, and the logical engineering choice.

b) CG – LID Similar to that recommended in the BMP Guidance manual, intended to support a LID / Green Infrastructure approach. It would consist of three components

a. Volume reduction. To be set at approximately 85-90% of the yearly annual rainfall volume landing on impervious surfaces (modifications could be added for compacted urban soils). This volume would be required to be removed from all impervious surfaces for both water quality and increased runoff purposes. Note that this is similar to the 1" removal required in Philadelphia which has resulted in an explosion of green roofs. The capture of this volume will meet thermal, water quality and recharge requirements. On average in the Philadelphia region 12 events a year would meet or exceed this value. It is not necessary to require infiltration as economically that would be the most logical option.

b. Extended duration – The one year storm extreme event would be required to be held and detained for 24 hours past the preconstruction peak. Note that this is an extreme event criteria and would focus on the 8- 10% of flow volume not captured by the reduction. Note that the volume reduction facilities would need to be increased by over 250% to address added volume. This radical reduction of flow rates partnered with the volume reduction is intended to greatly reduce the post construction flows to levels that are not erosive. It can be met in many ways to include bio swales, stormwater wetlands, or underground detention, without compromising infiltration systems.

c) CG – Complex – Clearly there are cases where neither CG would apply. An example would include brownfields where no infiltration is allowed, or karst areas where a majority of the runoff directly enters the groundwater. In this case, the engineer would need to prove that the design mitigated the impacts and protected the receiving waters. Examples of approaches may include

stream restoration /channel stabilization, offsite mitigation / trading, large scale water reuse, treatment (sand filter), and many not yet thought of. This option would probably require a multidisciplinary team of professionals, lead by a licensed engineer, and would require a specialized review process.

d) Flooding requirements – A more protective alternative to the peak flow based requirements are those based on continuous flow models. For example Washington State requires that the applicant prove that their site would maintain the same annual flow duration in hours (within 10%) of extreme events starting from 50% of the two year storm to that of the 50 year storm peak. This directly relates to flooding and stream erosion for larger storms. While this would not be applicable to most smaller projects, it could be added to promote more advanced sustainable LID practices in larger projects. It is felt that these practices would greatly increase the program flexibility of the PCSWM, and would increase the level of protection to the Commonwealths waters. (1207)

Response: The Department agrees that more protective alternatives may be available based upon modeling and specific watershed characteristics. The Department's strategy to address these situations is to utilize the Act 167 Stormwater Management Planning Program. Additionally, applicants may choose different methodologies provided they demonstrate to the Department that the methodologies are protective.

275. **Comment:** As these new requirements directly require the use of the current BMP manual, the regulations need to mandate that the manual have a continuous update process. The PCSWM requirements need to be removed from this manual (Codified or included in a second document). This would then be considered a technical engineering manual, that can be updated on a prescribed basis as mistakes are found, and research advances the knowledge base. This would be similar to PennDot technical guidance, and many other state stormwater manuals. It should be remembered that the manual was written as guidance not regulation, it is already 5 years old, contains many errors, and great strides have been made by the profession since its authoring. Note that Act 167 Plans are required to be updated within 5 years, and any plans older then that would not be considered current by this act. As the changes to chapter 102 require the use of the manual, a high standard must be set and met, to prevent the Commonwealth from requiring substandard, harmful, or non sustainable stormwater practices. With the current economic challenges, it is questionable as to whether the resources are available to accomplish this task. *An alternative would be to allow use of knowledge that has passed the rigor of scientific review.* This would include for example refereed journal articles and current manuals of practice of the American Society of Civil Engineers. It should be noted that these are the materials the BMP manual is based upon, and they require a much more rigorous review process. (1207)

Response: The Department agrees that these guidance documents should be regularly updated. Currently, the Erosion and Sediment Control Program Manual is being updated. The Stormwater Best Management Practices Manual will be updated in the near future. As new technology is developed, the Manual will be updated. Additionally, applicants may choose different methodologies provided they demonstrate to the Department that the methodologies are protective.

276. **Comment:** The proposed rule does not include an explicit provision requiring the estimation of the annual cost of performing the long-term activities specified in a proposed PCSM Plan. Such a cost projection and calculation of a net present value is essential to a determination by the Department as to whether the permittee, the operator and/or landowner have the financial capacity to implement the approved PCSM Plan. Such a cost projection/net present value calculation provision should be included in Section 102.8. In addition the rule should provide for the utilization of some form of appropriate financial assurance mechanism in those cases where warranted. (1249)

Response: The Department has provided a cost analysis as part Order in the final rulemaking.

277. **Comment:** Post-construction requirements should also include a requirement of no net increase in pollutants from development proposed in impaired watersheds. As described in more detail in the Pennsylvania Campaign for Clean Water comments to which we are a signatory, the federal Clean Water Act requires that DEP not issue permits for new discharges in impaired watersheds that cause or contribute to the impairment and, for watersheds where Total Maximum Daily Loads (TMDLs) have been approved, NPDES permits are consistent with the waste load allocations (WLAs) set forth in the TMDL. To be consistent with these federal law requirements, Chapter 102 must establish as a PCSM standard in Section 102.8 that construction activities in impaired watersheds shall achieve no net increase in discharge of pollutants, unless the increase is consistent with a WLA for future growth as provided within an approved TMDL. (1257)

Response: The Department agrees that the requirements in 102.8(g) set a PCSM standard for all earth disturbance activities that require a permit including those earth disturbance activities located in watersheds that are failing to meet one or more designated uses, including those waters that do not have a TMDL or are not point sources that need to meet a waste load allocations. All these earth disturbance activities are required to meet water quality requirements.

278. **Comment:** Additional post-construction stormwater management requirements should be added to Section 102.8 in order to minimize pollution from development sites. The following additional requirements should be added to Section 102.8 to ensure that development proceeds in a manner that is protective of the Commonwealth's rivers and streams. a. Minimize site disturbance in design and construction. On all areas of previously undisturbed soils or soils with minimal soil disturbance as identified in the site assessment map, disturbance should be limited to the following:

- 40 feet beyond final building perimeter
- 10 feet beyond surface walkways, patios, surface parking, and utilities less than 12 inches in diameter
- 15 feet beyond primary roadway curbs and main utility branch trenches
- 25 feet beyond constructed areas with permeable surfaces (such as pervious paving areas, stormwater detention facilities, and playing fields) that requires additional staging areas in order to limit compaction in the constructed area.
- Designate the remaining previously undisturbed area on site as vegetation and soil protection zones.

- Soils with minimal disturbance must be restored to meet minimum organic matter content requirements but need not be included within vegetation and soil protection zones. Vegetation and soil protection zones (VSPZ) must meet the following requirements:
- Construction impacts from overall site development shall not decrease the capacity of the VSPZ to support the desired vegetation. For example, construction activities outside of the VSPZ should not change drainage patterns and microclimate effects within the VSPZ.
- VSPZ shall be protected with a fence or other physical barrier that cannot be easily moved that protects the zones during construction from equipment parking and traffic, storage of materials, and other construction activities.
- All construction and maintenance personnel shall be educated about the locations and protective measures of the VSPZ. (reference provide)
- VSPZ boundaries for trees shall extend out from the trunk, to a distance of 2 feet radius (measured at ground level) per inch of diameter at breast height (DBH) or the full lateral extent of the actual root system as determined by ground penetrating radar.
- VSPZ boundaries for shrubs shall extend out from the stem to twice the radius of the shrub. VSPZ boundaries for herbaceous vegetation shall extend to encompass the diameter of the plant. To demonstrate that the designated site disturbance boundaries are not exceeded for areas of previously undisturbed soils and soils of minimal disturbance, the *regulations should require the* permittee to provide a copy of the construction drawings along with information on the site's baseline conditions including information from the site assessment. The extent of all VSPZs should be shown on the drawings. The permittee should also provide a narrative to describe how VSPZs will be preserved during construction (e.g., fence or other physical barrier that cannot be easily moved) and describe efforts to educate all construction personnel about the location and protective measures of the protective zones. The regulations should include requirements to protect soils designated by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) as prime farmland, unique farmland, or farmland of statewide importance to conserve for future generations the most productive farmland in the United States. The following requirements for sites with healthy soils and soils with minimal soil disturbance as identified in the site assessment should be added:
- No soils defined by the NRCS as prime farmland, unique farmland, or farmland of statewide importance shall be stripped from an off-site location for importation to the site.
- At least 95 percent of all prime farmland, unique farmland, or farmland of statewide importance on a site must be designated as a vegetation and soil protection zone (VSPZ). (1257)

Response: Details such as these are located in the Stormwater Best Management Practices Manual as guidance for the design of PCSM plans and are not appropriate for a rulemaking document.

279. **Comment:** The regulations should further require the following documentation as part of the plan submission requirements: Provide site plans showing the location of any on-site soils that have been designated by NRCS as prime farmland, unique farmland, or farmland of statewide importance and the location of new development. Indicate the extent of all vegetation and soil protection zones to demonstrate that at least 95 percent of the total surface area of these soils is protected. Provide a narrative to describe how vegetation and soil protection zones will

be preserved during construction (e.g., fence or other physical barrier that cannot be easily moved) and describe efforts to educate all construction personnel about the location and protective measures of the protective zones. Provide a copy of the section of the site maintenance plan that describes the on-going management activities to protect the integrity of the vegetation and soil protection zones. For any imported soil, provide documentation indicating the source location of the soil and proof the soil is not designated as prime farmland, unique farmland, or farmland of statewide importance. (1257)

Response: Details such as these are located in the Stormwater Best Management Practices Manual as guidance for the design of PCSM plans and are not appropriate for a rulemaking document.

280. Comment: The regulations should require amendment of 100 percent of the soils disturbed during construction with a mature, stable compost material such that the top 12 inches of soil (at a minimum) contain at least 3 percent organic matter or organic matter levels and organic matter depth are comparable to the site's reference soil. The use of sphagnum peat or organic amendments that contain sphagnum peat is prohibited. Compost utilized for soil restoration should meet or exceed:

- A carbon to nitrogen ratio no greater than 25:1; however, higher C:N ratios may be acceptable if specified by a qualified professional to be more appropriate for the type of vegetation to be established.
- U.S. EPA in the 40 CFR Part 503 Biosolids Rule, section 503.13 table 3 "Pollutant Concentrations," or any applicable state or local regulations.
- No detectable weed seeds or invasive plant propagules.

These requirements should apply to all soil areas that are disturbed or compacted during construction, except in areas of prime farmland, unique farmland, or farmland of statewide importance which require a VSPZ. (1257)

Response: Details such as these are located in the Stormwater Best Management Practices Manual as guidance for the design of PCSM plans and are not appropriate for a rulemaking document.

281. Comment: The following documentation should be required to be submitted to demonstrate compliance soil amendment requirements: Provide site plans indicating the full extent of planned disturbed area, including predevelopment soil type, texture, and organic matter. Upon NOT, provide documentation (such as receipts from soil /compost /amendments supplier) to demonstrate that techniques to restore soil occurred. Provide soil test results to demonstrate appropriate levels of organic matter have been achieved. Acceptable test methods for determining soil organic matter include the most current version of ASTM D2974 Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils and TMECC 05.07A Loss-On-Ignition Organic Matter Method. (1257)

Response: Details such as these are located in the Stormwater Best Management Practices Manual as guidance for the design of PCSM plans and are not appropriate for a rulemaking document.

282. **Comment:** The following requirements should be added for soils that have been disturbed by previous development. For previous development sites that will be re-vegetated in whole or part, amend 80 percent of the surface area previously disturbed during with a mature, stable compost material such that the top 12 inches of soil (at a minimum) contain at least 3 percent organic matter or organic matter levels and organic matter depth are comparable to the site's reference soil. The use of sphagnum peat or organic amendments that contain sphagnum peat is prohibited. As required documentation: Provide information on the site's baseline conditions to show the total surface area of soils disturbed by previous development that will be re-vegetated (i.e., areas without buildings and paved areas) and Upon NOT, provide documentation (such as receipts from soil /compost /amendments supplier) to demonstrate that techniques to restore soil occurred. Provide soil test results to demonstrate appropriate levels of organic matter have been achieved. Acceptable test methods for determining soil organic matter include the most current version of ASTM D2974 Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils and TMECC 05.07A Loss-On-Ignition Organic Matter Method. The requirements apply to all soil areas that are disturbed or compacted during construction, except in areas of prime farmland, unique farmland, or farmland of statewide importance which require a VSPZ. (1257)

Response: Details such as these are located in the Stormwater Best Management Practices Manual as guidance for the design of PCSM plans and are not appropriate for a rulemaking document.

283. **Comment:** PennDOT has concerns about the applicability of the December 2007 Antidegradation Policy given the proposed regulations. Specifically, are the stormwater standards contained in its Post Construction Policy (Publication 584, Chapter 14, pages 14-6 through 14-7) for bridge replacement over water < 200' on new alignment; bridge replacement over water > 200' long on existing alignment with > 25% over land (e.g., viaduct bridges); bridge replacement over land; increase width of travel lanes or shoulders; extension of acceleration/deceleration ramps in shoulder areas; intersection improvements (e.g., channelization, addition of turning lanes); improve horizontal or vertical alignment; and new pull-off areas in compliance with Section 102.8(g). These projects involve minor addition of impervious area relative to existing conditions and do not generally change the direction of runoff or the potential for pollutants in the runoff. PennDOT is currently using the standards contained in Pennsylvania Stormwater Best Management Practices Manual for Control Guideline 2. PennDOT is requesting the inclusion of the standards for Control Guideline 2 in regulations as an option for these types of projects. These types of projects make-up a significant percentage of PennDOT's program. Increased requirements and studies for these types of projects will significantly increase project costs which will in turn eliminate funding for other needed projects. (708, 1114)

Response: The Department has included alternative standards in section 102.8(g)(2)(iv) if the applicant demonstrates that the alternative standards will either be more protective or will maintain and protect the existing water quality and designated uses

284. **Comment:** We believe that the potential exists for a polluting post construction discharge to occur to surface waters from non surface waters during a design storm event at the point of discharge from the site. We believe that all post construction discharges should be regulated when they occur to waters of the Commonwealth. (693)

Response: An applicant who is proposing a discharge to non-surface waters must document that the construction and post construction stormwater discharge will not cause accelerated erosion or damage to down slope or adjacent properties.

285. **Comment:** DEP, the Conservation Districts and engineering community all need additional training in the quickly changing stormwater field. This will help with better designs and both quicker and more consistent reviews of PCSM plans. PCSM reviews, however, are taking way too long, in excess of 6-12 months for many applications. especially in Special Protection Watersheds. DEP needs to implement a review process that includes hiring consultants to conduct reviews when the money-back guarantee time period of 150 days can not be achieved for Individual NPDES Permits. (1123)

Response: The Department is aware of the need for continual training in stormwater management and this training is offered throughout the year. The Department continues to establish guidelines and policies to limit review times but has found that many longer plan reviews result from incomplete or poor quality application and plans and the length of time it takes the applicant to submit corrected information back to the Department or conservation district when technical deficiencies are identified.

286. **Comment:** In the case of a timber sale within 150 feet of an Exceptional Value (EV) stream which requires a full blown permit process where: o a PCSW plan, a PPC Plan (Preparedness, Prevention and Contingency Plan), a Buffer Management Plan, and a DCNR approved Forest Stewardship Plan all apply, a \$5,000 permit fee is to be paid along with the additional ten to fifteen thousand dollars to satisfy permit development requirements with Conservation District costs added; it will simply be impossible to manage the buffer and the sale will have to stay 151 feet away from the stream, and the buffer forest will have to be abandoned to the whims of nature with no one responsible for long term maintenance. This is a total failure to address the best interests of the forest, water quality and landowner. (1149)

Response: The regulation has been revised to state that for activities that require a site reclamation or restoration, such as timber harvesting activities, an exemption is granted to the requirements of 102.14.

287. **Comment:** The post-construction stormwater management requirements are excessive and should focus on maintenance of disturbed lands and water bodies. Dominion requests these postconstruction requirements be withdrawn or significantly revised to address only the construction activities covered by the permit rather than restoration of existing impairments which are outside the scope of the current activity. (1152)

Response: The Department disagrees with this comment.

288. **Comment:** The rigorous review of all state stormwater plans by the DEP should also be maintained. The Clean Water Act has clearly established guidelines to promote the quality of the streams in Pennsylvania and all permit review processes should abide by its standards. Any type of abbreviated review of such plans could endanger the health of our streams, particularly "High Quality" and "Impaired" watersheds. (431, 637, 642, 1125, 1127)

Response: The Department is not proposing any changes in how post construction stormwater management plans are currently reviewed as a result of this regulatory change.

289. **Comment:** I agree that long term operation & maintenance responsibility of relevant BMPs should be clearly designated and mandated in the permit process. The mechanics, preferably leaning toward local control, must be put into place to ensure that PCSM Plans are reviewed PRIOR to permit issuance. (1266)

Response: The Department is not proposing any changes in how post construction stormwater management plans are currently reviewed as a result of this regulatory change.

290. **Comment:** There are various attempts by the proposed regulations to impose long-term maintenance, inspection and other implementation requirements on various permittees (i.e., builders, licensed professionals, developers, etc). The proposed regulations should instead clearly identify who is responsible and when, so that compliance responsibility can be redistributed as a development is completed and/or transferred to parties in a better position to ensure that long-term compliance goals are met. (1281)

Response: The operation and maintenance plan of the PCSM plan will identify the responsible person(s) for the long term operation and maintenance of the PCSM BMPs. Once the earth disturbance is complete and the site is permanently stabilized the permittee and co-permittee must file a notice of termination (NOT) form with the Department or delegated conservation district. Upon a final inspection and approval of the NOT the responsibility of the PCSM BMPs will be on the person(s) identified in the O&M plan of the PCSM Plan.

291. **Comment:** The Pennsylvania Oil and Gas Act and regulations at 25 Pa. Code Chapter 78 already establish requirements for restoration of well sites and for erosion and sediment control. There is no need to expand this program. Yet, the proposal adds a new definition for "oil and gas activities". Earth disturbance associated with oil and gas activities occurs when drilling well sites are initially constructed and this activity is completed before drilling rigs are moved onto location, hydraulic fracturing activities are performed or production occurs. Marcellus Shale well sites require approximately three to seven acres of such temporary earth disturbance in the form of a constructed drilling location. Upon completion of well or pipeline development, areas disturbed during construction are stabilized per the Chapter 78 regulations. There is little discharge because the stabilized areas are permeable surfaces and are vegetated. Thus, in our view, the existing Chapter 78 regulatory regime is sufficiently protective. There is no need or justification for additional controls or for PCSM requirements for restored well locations. Similarly, in regard to natural gas collection and transmission pipelines, earth disturbance occurs during the limited pipeline construction and installation phase. After pipelines are placed in excavations, the pipeline route is prompt backfilled and the area is seeded and mulched and

returned to original topography, including permeable natural surfaces. There is no need or justification for additional restrictions or for PCSM requirements. (1184, 1250, 1252)

Response: Due to the nature of oil and gas activities and the site restoration requirements oil and gas activities may not be required to develop a PCSM plan if the project will be restored to its approximate original contours, is permanently revegetated or otherwise stabilized with pervious materials, and PCSM BMPs will be employed which use natural measures and does not require extensive construction or maintenance efforts.

292. **Comment:** As stated in the proposed rule, many of the proposed changes are expressly included to comply with Federal NPDES permit requirements. The federal Energy Policy Act of 2005 exempted oil and gas activities associated with Stormwater discharges from NPDES permitting. Therefore, there should be no imposition of updated Federal NPDES requirements upon the oil and gas industry or included in any permit program affecting construction of oil and gas facilities. (1184, 1250, 1252)

Response: The oil and gas activities are covered under an Erosion and sediment control permit not an NPDES permit.

293. **Comment:** PCSM requirements are not necessary or appropriate because oil and gas construction activities are distinctive and unique in several respects, when compared to other construction activities. There is no need or justification for PCSM requirements for oil and gas activities; such requirements would certainly be burdensome; and imposition of such requirements may be unlawful. (1184, 1250, 1252)

Response: Due to the nature of oil and gas activities and the site restoration requirements oil and gas activities may not be required to develop a PCSM plan if the project will be restored to its approximate original contours, is permanently revegetated or otherwise stabilized with pervious materials, and PCSM BMPs will be employed which use natural measures and does not require extensive construction or maintenance efforts.

294. **Comment:** The proposed regulations should address the hot-button issue of off-site discharges to non-surface waters. (218)

Response: The Department disagrees. This issue is best addressed through Department guidance or informational fact sheet.

102.11. General Requirements.

1. **Comment:** Section 102.11. General requirements. - Clarity. *Mimic* Under Paragraph (a)(2), a person is required to "...maintain PCSM BMPs to mimic preconstruction stormwater runoff conditions...." The word "mimic" is vague. It implies a subjective imitation. We recommend replacing the word "mimic" so that the regulation sets a definable standard. (1322-IRRC)

Response: The Department disagrees that a definable standard is necessary or appropriate in this context related to general PCSM BMP requirements. For purposes of this section, the term "mimic" is consistent with the requirements dictated by requirements of the Chapter overall to utilize BMPs that will ensure that the stormwater runoff from the site after construction is completed and that will replicate the volume, rate and quality of stormwater runoff that occurs at the site before the earth disturbance activity. Like the existing language in 102.11(a)(1), the proposed language in 102.11(a)(2) is general in nature and the applicable standard will be different depending on the classification of the water.

2. **Comment:** The term "Stormwater Control Measure (SCM)" was introduced as a replacement for the term "BMP" at the National Stormwater Conference, held in Philadelphia on 8-12 June. Consider the use of SCM instead of BMP. (1268)

Response: The Department does not believe the term is appropriate to be added at this time.

3. **Comment:** Section 102.11 should require the use of baffles in sedimentation basins and chemical flocculants as mandatory E&S BMPs. Several E&S BMPs are so proven in their effectiveness to minimize sediment runoff that they should be required on every site. First, for those sites that require sedimentation basins, the regulations should require all such basins to employ either solid or porous baffles. Baffles lengthen the flow path of sediment-laden runoff captured in the basin, which can significantly increase the basins effectiveness at removing total suspended solids. Second, the regulations should require all sites to use of chemical flocculants to reduce turbidity, such as polyacrylamide, gypsum, or alum. Flocculants have been shown to be effective at removing small soil colloids from stormwater runoff when applied directly into sediment basins after each rain or incorporated into geotextile materials and coconut fiber. These chemicals have demonstrated no aquatic or sediment toxicity when applied in appropriate amounts. (1257)

Response: The Department acknowledges your comment, but disagrees that these requirements should be in a regulation. The Erosion and Sediment Control Program Manual (PADEP # 363-2134-008) (E&S BMP) would be a more appropriate place to have a discussion about these BMPs. There is detailed information in the E&S BMP Manual about the use of baffles in sedimentation basins where the Length/Width ratio is not sufficient. There is also detailed information about flocculants in the E&S BMP Manual.

4. **Comment:** 102.11 (a) An additional section should be included here stating that: 1. PCMS plans should be prepared by a person trained and experienced in PCSM design methods and techniques. The experience needed should be spelled out and Professional Licensure should be

required, and 2. E&S Plans should be prepared by a person trained and experienced in E&S Design methods and techniques. The experience needed should be spelled out and Professional Licensure should be required. (1255)

Response: Refer to 102.8(k) & (l) which requires a licensed professional to be present during critical stages and prepare a final certification statement. At the current time there is no certification or licensing program in Pennsylvania. Person who prepare E&S and PCSM plans should attend training sessions hosted by conservation districts or the Department and must obtain the training and experience in E&S and PCSM plans applicable to the size and scope of the project being designed.

5. **Comment:** 102.11 (a)(2) It is physically impossible to "mimic preconstruction stormwater runoff conditions." Scientists understand that any and all development activities impact the natural hydraulic balance among the many components that make up this balance including infiltration, soil water holding capacity, deep percolation, evapotranspiration, and surface runoff. The best we can do is mitigate the impacts to this balance resulting from the development activity to the maximum practical extent. The wording of this section needs to be changed to reflect these facts. (1255)

Response: For purposes of this section, the term "mimic" is consistent with the requirements dictated by requirements of the Chapter overall to utilize BMPs that will ensure that the stormwater runoff from the site after construction is completed and that will replicate the volume, rate and quality of stormwater runoff that occurs at the site before the earth disturbance activity. Like the existing language in 102.11(a)(1), the proposed language in 102.11(a)(2) is general in nature and the applicable standard will be different depending on the classification of the water.

6. **Comment:** Mimic preconstruction runoff conditions. Since this requirement also covers brown fields, ag fields, redevelopments, etc. maybe this should reference mimic natural undisturbed conditions. (2)

Response: For purposes of this section, the term "mimic" is consistent with the requirements dictated by requirements of the Chapter overall to utilize BMPs that will ensure that the stormwater runoff from the site after construction is completed and that will replicate the volume, rate and quality of stormwater runoff that occurs at the site before the earth disturbance activity. Like the existing language in 102.11(a)(1), the proposed language in 102.11(a)(2) is general in nature and the applicable standard will be different depending on the classification of the water.

7. **Comment:** 102.11 (a)(2) If required to develop a PCSM Plan, design, implement and maintain PCSM BMPs to mimic preconstruction stormwater runoff conditions and **hydraulic regime** to protect, maintain, reclaim and restore water quality and existing and designated uses ... (693)

Response: The Department acknowledges the comment. This requirement is discussed in more detail in 102.8(b)

8. **Comment:** Revise 102.11 (a) (3) to read: *Riparian buffers shall be incorporated into the PCSM plan in watersheds which drain to High Quality or Exceptional Value streams. If required to develop a riparian forest buffer, design, implement and maintain the buffer in accordance with § 102.14 (relating to riparian forest buffer requirements). Various design, construction, and maintenance standards are listed in the *Riparian Forest Buffer Guidance*, (Buffer Guidance), Commonwealth of Pennsylvania, Department of Environmental Protection, No. 395-5600-001 (2009), as amended and updated.* (693)

Response: The Department acknowledges the comment. This requirement is discussed in more detail in 102.14.

9. **Comment:** 102.11 (a) (3) Is the Buffer Guidance available? Did EPA review it? (1268)

Response: The draft Guidance was published for public comment in the *Pa. Bulletin* on September 26, 2009. The Department received comments from 17 commentators, including the federal Environmental Protection Agency Region III, Water Protection Division. The Buffer Guidance is in development and is expected to be released as final concurrently with the effective date of this regulation.

10. **Comment:** 102.11 (b) BMPs and design standards other than those listed in the Manuals of Buffer Guidance may be used when a person ... demonstrates to the Department or conservation district ... (693, 1208)

Response: The Department acknowledges the comment. The purpose of this clause is to provide state-wide consistency in relation to using new alternative BMPs and design standards.

102.14. Riparian Buffer Requirements.

1. **Comment:** *Mandatory Riparian Forest Buffers* The EQB should explain the need for riparian forest buffers in regulation and why they are mandated in certain circumstances over other potential BMPs. It should also provide a full explanation of their impact including the impact on state government, local government, land owners, lease holders, utilities, and taxes. (1322-IRRC)

Response: Scientific literature supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can do all of the following: Capture and hold the stormwater runoff of the majority of storms on a PA site in a given year; Infiltrate most of that water into the ground and/or pass it underneath and through a forest and forest soils whose capacity to uptake and process contaminants is well documented; Release excess storm flow evenly over a large area of forest capable of infiltrating the excess flow and further processing dissolved and particulate substances associated with it; Sequester carbon at significant levels; Improve the health of the property's stream and increase its capacity to process organic matter and nutrients generated on the site (or upstream of the site). However, the Department recognizes that there may be circumstances under which a riparian buffer may not be feasible and does allow for the consideration of alternative BMPs to be considered in accordance with Section 102.14(d)(2)(vi). Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data and studies regarding E&S Control and PCSM. A list of these references is included as the final section in this Comment/Response Document. A thorough explanation of the impact of the establishment and protection of riparian buffers including the impact on state government, local government, land owners, lease holders, utilities, and taxes has been provided in the order.

2. **Comment:** Section 102.14 Riparian forest buffer requirements. - Need; Economic impact; Reasonableness; Feasibility; Clarity. Need, *reasonableness, and economic and fiscal impact.* This section requires riparian forest buffers for many earth disturbance activities. It encompasses all earth disturbances within 150 feet of EV waters and all permit-by-rule activities. Riparian forest buffers may be required by DEP and upgrades to existing riparian forest buffers may be needed. The rest of the subsections include management requirements, permanent protection and reporting requirements. Commentators believe this section is unjustifiably burdensome and ignores other BMPs. We also question why this BMP is needed in regulation while others are not. The EQB should explain the need for and reasonableness of Section 102.14. In addition, the EQB should explain the full economic impact of this provision and explain why it is cost effective. (1322-IRRC)

Response: The Clean Streams Law provides the department with the Authority to determine the appropriate regulatory mechanisms for preventing pollution to waters of the Commonwealth, and does not in this instance mandate the inclusion of all possible stormwater BMPs. 35 P.S. § 691.402. The Department has determined that post construction stormwater should be managed with BMPs. The PCSM provisions, to a large extent, are a codification of the existing program in Pennsylvania mandated by federal requirements as well as adverse law. In administering this program, the Department has observed that the riparian forest buffers are one

of the most cost effective stormwater management BMPs. Therefore, pursuant to the Department's authority under Section 402 of the Clean Streams Law, DEP has determined that riparian forest buffers are necessary to protect exceptional value and high quality waters of the Commonwealth from land development activities. The Department notes that only 26,215 miles (roughly 30%) of Commonwealth streams miles are classified as special protection (exceptional value or high quality). Further, only 714 (0.8%) of all stream miles are presently classified as special protection and designated as "impaired" For the vast majority of projects – because they will not be located adjacent to impaired special protection waters – riparian forest buffers will not be mandatory, but rather will be an optional BMP that the applicant may choose to manage their post construction stormwater.

Land development activities change natural features and alter stormwater runoff characteristics. The resulting alterations of stormwater runoff volume, rate and water quality can cause stream bank scour, stream destabilization, sedimentation, reductions in groundwater recharge and base flow, localized flooding, habitat modification and water quality and quantity impairment, which constitute pollution as that term is defined in the Pennsylvania Clean Streams Law, 35 P.S. Section 691.1. Riparian buffers play a vital role in mitigating the effects of stormwater runoff from land development activities.

Riparian buffers are useful in mitigating or controlling point and nonpoint source pollution by both keeping the pollutants out of the waterbody and increasing the level of instream pollution processing. Used as a component of an integrated management system including nutrient management along with E&S control practices, riparian buffers can produce a number of beneficial effects on the quality of water resources. Riparian buffers can be effective in removing excess nutrients and sediment from surface runoff and shallow groundwater, stabilizing streambanks, and shading streams and rivers to optimize light and temperature conditions for aquatic plants and animals. Riparian buffers provide significant flood attenuation and storage functions within the watershed. They prevent pollution both during and after earth disturbance activities, and provide natural, long-term sustainability for aquatic resource protection and water quality enhancement.

A riparian forest buffer is a specialized type of riparian buffer. Scientific literature supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can do all of the following: Capture and hold stormwater runoff from the majority of Pennsylvania storms in a given year; Infiltrate most of that water and/or transport it as shallow flow through the forest buffer soils where contaminate uptake and processing occurs; release excess storm flow evenly further processing dissolved and particulate substances associated with it; sequester carbon at significant levels; improve the health of the stream and increase its capacity to process organic matter and nutrients generated on the site or upstream of the site.

The PCSM provisions, to a large extent, are a codification of the existing program in Pennsylvania mandated by federal requirements as well as adverse case law. In administering this program, the Department has observed that the riparian forest buffers are one of the most cost effective stormwater management BMPs. Therefore, pursuant to the Department's authority under Section 402 of the Clean Streams Law, DEP has determined that riparian

forest buffers are necessary to protect exceptional value and high quality waters of this Commonwealth from land development activities.

In addition to Department observation, numerous studies demonstrate that riparian forest buffers are particularly effective in mitigating adverse impacts, due to their proximity immediately adjacent to the surface water and their function as a physical barrier to that surface water. Specifically, riparian forest buffers protect surface waters from the effects of runoff by providing filtration of pollutants, bank stability, groundwater recharge, rate attenuation and volume reduction. Riparian forest buffers reduce soil loss and sedimentation/nutrient and other pollution from adjacent upslope flow (Dosskey et al. 2002). Riparian forest buffers also remove, transform, and store nutrients, sediments, and other pollutants from sheet flow and shallow sub-surface flow and have the potential to remove substantial quantities of excess nutrients through root-zone uptake. (Desbonnet et al, 1994, Lowrance et al 1997, Mayer et al, 2007, and Newbold et al, 2010). Nitrates can be significantly elevated when adjacent land uses are urban/suburban. Further, the buffer's tree canopy shades and cools water temperature, which is especially critical to support high quality species/cold water species – a function not as effectively provided by any other BMP (Jones, 2006).

Other neighboring states have also recognized the value of riparian buffers. For example New Jersey requires buffers along all trout streams and special protection waters; Virginia requires riparian buffers to implement the Chesapeake Bay Preservation Act; and Maryland has buffer regulations to protect tidal waters, tidal wetlands and streams tributary to the Chesapeake Bay. Riparian forest buffers provide other economic benefits and intrinsic value to land.

There are many existing provisions in the regulations found in Title 25 that limit the extent of activities that can occur along streams and wetlands as a means of protecting water quality. A number of these types of controls are in the form of “setbacks”. Although riparian forest buffers also have additional BMP functions, riparian forest buffers are like other regulatory setbacks in that they are a project or facility siting limitation that is included in the regulations as an environmental control. This type of environmental control mechanism is found in numerous other environmental regulations, including but not limited to: Surface and Underground Coal Mining: General, 25 PA Code § 86.102(12), [mining prohibited within 100 feet of a perennial or intermittent stream]; Noncoal mining, 25 PA Code § 77.504, [mining prohibited within 100 feet of a perennial or intermittent stream]; Water Resources: General Provisions, 25 Pa. Code §§ 91.36, 92.5a(e)(1)(i), [stream setbacks and or buffers required for land application of animal manure]; Nutrient Management, 25 Pa. Code § 83.351(a)(1)(v), [surface water and wetland setbacks for manure storage facilities]; Municipal Waste Landfills, 25 Pa. Code § 273.202 [100 foot surface water and 300 foot exceptional value wetland setbacks for municipal waste landfills]; Municipal Waste: Land application of sewage sludge, 25 Pa. Code § 275.202 [land application of sewage sludge prohibited within 100 feet of a perennial or intermittent stream or exceptional value wetland]; Municipal Waste: Construction/demolition waste landfills, 25 Pa. Code § 277.202, [flood plain and wetland setbacks]; Municipal Waste: Resource recovery facilities, 25 Pa. Code § 283.202 [flood plain and wetland setbacks]; Oil and Gas Wells, 25 Pa. Code § 78.63 [100 foot setbacks for land application of residual waste from oil and gas well development]; and Hazardous Waste

Management: Siting, 25 Pa. Code § 269a.29, [hazardous waste treatment and disposal facilities may not be sited in watersheds of exceptional value waters].

3. **Comment:** *Specific activities and areas affected* there are six concerns with Subsection (a). First, commentators are confused about which activities are affected. For example, the Department of Transportation requests four clarifications. The EQB should amend Subsection (a) to clearly identify the activities affected. (1322-IRRC)

Response: Section 102.14(a)(2) has been deleted from the rulemaking. The Department has met with the Department of Transportation (commentator numbers 708 and 1114) and addressed their comments in person as well as in this Comment/Response Document.

4. **Comment:** Clause (a)(1)(ii) includes all permit-by-rule activities regardless of the circumstances. Why did the EQB include all permit-by-rule activities in all circumstances? In addition to evaluating the economic impact, the EQB should justify the need for and reasonableness of riparian forest buffers for all permit-by-rule activities. (1322-IRRC)

Response: Clause (a)(1)(ii) and the permit-by-rule section of Chapter 102 revisions have been deleted from the final rulemaking.

5. **Comment:** Paragraph (a)(1) also raises concern with its application to roadway, gas line and electric transmission line projects. The "boundary" of these projects is narrow and can be miles in length. Under Paragraph (a)(1), these projects would come within 150 feet of multiple rivers, streams, creeks, lakes, ponds and reservoirs. Several commentators question how it would be feasible to incorporate riparian forest buffers for this type of project. We agree that the impact of Paragraph (a)(1) is quite significant for these projects and may limit them. The EQB should explain how it considered this type of project in development of the regulation and why this provision is reasonable for these projects. (1322-IRRC)

Response: The Department agrees that these activities are unique and require flexible consideration. Therefore, Section 102.14(d)(2)(ii) was designed to address exceptions and waivers applicable to linear projects including pipelines, public roadways, rail lines or utility lines.

6. **Comment:** The Energy Association of Pennsylvania commented that the requirements for riparian forest buffers would contradict safety and reliability of gas lines and electric lines. Gas lines and electric lines need to remain clear of trees and other woody plants. The EQB should consider the applicability of Section 102.14 to these projects and consider exempting them from the exclusive use of riparian forest buffers as a BMP. (1322-IRRC)

Response The Department agrees that these activities are unique and require flexible consideration. Therefore Sections 102.14(d)(1)(vi) and 102.14(d)(2)(i) were designed to address exceptions and waivers applicable to gas and electric line activities and construction and public safety.

7. **Comment:** The Department of Transportation requests an exemption for public health and safety. It states that planting trees close to streams can, over time, become a source of flooding from large debris. We presume this concern would also apply to local governments who maintain roadways. The EQB should add an exception for public health and safety concerns. (1322-IRRC)

Response: The Department agrees that public health and safety issues require flexible consideration. Section 102.14(d)(1)(v) and 102.14(d)(2)(ii) addresses exceptions and waivers applicable to road maintenance activities and construction.

8. **Comment:** Subsection (a) provides no allowance or recognition of other BMPs. As commentators stated, activities can occur in dense populations or along cliffs that would not be feasible for a riparian forest buffer. Why is a riparian forest buffer the exclusive BMP that can be used for activities that fall under Subsection (a)? (1322-IRRC)

Response: Scientific literature supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can do all of the following: Capture and hold the stormwater runoff of the majority of storms on a PA site in a given year; Infiltrate most of that water into the ground and/or pass it underneath and through a forest and forest soils whose capacity to uptake and process contaminants is well documented; Release excess storm flow evenly over a large area of forest capable of infiltrating the excess flow and further processing dissolved and particulate substances associated with it; Sequester carbon at significant levels; Improve the health of the property's stream and increase its capacity to process organic matter and nutrients generated on the site (or upstream of the site). However, the Department recognizes that there may be circumstances under which a riparian buffer may not be feasible and does allow for the consideration of alternative BMPs to be considered in accordance with Section 102.14(d)(2)(vi). Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

9. **Comment:** *Other approvals that may require a buffer* Paragraph (a) (2) states: A riparian forest buffer may be required to be incorporated within the boundaries of a project site in accordance with this section by other rules, regulations, order, permit or other approval of the Department. Paragraph (a) (2) is vague and its purpose is not clear. Under what circumstances will DEP require a riparian forest buffer rather than other BMPs? It appears this could be used as a de facto disapproval of a permit by imposing high costs on a project, even if that is not the EQB's intent. The EQB should either delete this paragraph or justify why it is needed. (1322-IRRC)

Response: The Department agrees that Section 102.14(a)(2) may not have been clear, and has deleted it from the rulemaking.

10. **Comment:** *Existing buffer composition and existing site enhancement* Paragraph (a)(4) states: An existing riparian forest buffer must: meet the requirements of

subsection (d); consist predominantly of native trees and shrubs that provide at least 60% uniform canopy cover; noxious weeds and invasive species must be removed or controlled to the extent possible. Paragraph (a) (5) is similar. These provisions go well beyond erosion and sediment control and stormwater management. These provisions impose retroactive regulation on existing buffers and costs. The Pennsylvania Coal Association asked if existing buffers will be grandfathered. We question the feasibility of expecting every landowner with an existing riparian forest buffer to invest the time and resources to analyze and upgrade their buffers. In addition, the provisions are vague by requiring, but not specifying how to comply with requirements for "predominantly" native species, "at least 60% uniform canopy cover" and control of noxious weeds and invasive species "to the extent possible." How can these requirements be reasonably enforced? We recommend deleting Paragraphs (a)(4) and (5). If they are maintained, the EQB needs to justify why they are needed and provide a fully detailed analysis of how many acres of land they affect in Pennsylvania and the costs they impose. (1322-IRRC)

Response: The Department agrees that proposed Paragraph (e)(2) could have been clearer. This paragraph has been replaced with requirements for a riparian forest buffer management plan in Section 102.14 (b) (4).

11. **Comment:** *Buffer establishment* Paragraph (a)(6) states: On sites with no native woody vegetation, a riparian forest buffer shall be established in accordance with this chapter. This would require an upgrade over existing land use. We question why a permit holder who will temporarily disturb the soil would be required to then upgrade an area beyond its preconstruction condition. The EQB should delete Paragraph (a) (6) or explain the need for it. (1322-IRRC)

Response: Paragraph (a)(6) has been deleted and the rule has been revised to require that an existing riparian buffer be upgraded to a riparian forest buffer only on special protection streams that are impaired at the time of permit application or approximately 714 miles (0.8%) of Pennsylvania's 86,000 stream miles. Scientific literature supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can do all of the following: Capture and hold stormwater runoff from the majority of Pennsylvania storms in a given year; Infiltrate most of that water and/or transport it as shallow flow through the forest buffer soils where contaminate uptake and processing occurs; release excess storm flow evenly further processing dissolved and particulate substances associated with it; sequester carbon at significant levels; improve the health of the stream and increase its capacity to process organic matter and nutrients generated on the site or upstream of the site. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

12. **Comment:** *Plan submission* Paragraph (a) (8) requires submission of a "plan for riparian forest buffer management." It is not clear what is required in the plan, other than it is supposed to describe how the plan will meet the requirements of this section. The regulation should set forth what an acceptable plan must include. (1322-IRRC)

Response: The Department appreciates the suggestion, and requirements for a riparian forest buffer management plan have been added in Section 102.14 (b) (4).

13. **Comment:** *Average minimum widths* The Department of Transportation says it cannot comply with Subsection (d) due to ownership and rights issues. The Pennsylvania Chamber of Business and Industry, among others, strongly objects and describes the requirements as unreasonable and unachievable. Several commentators also question why Subsection (d) requires buffers on both sides of streams. The EQB should explain reasonableness of these provisions and how to comply with these provisions without incurring significant and perhaps prohibitive costs. Additionally, it is not clear what "impaired waters" are in Paragraph (d)(2). The EQB should define this term. (1322-IRRC)

Response: The Department agrees that this subsection could have been clearer and has reworked the section. Specifically, Subsection (d) has been deleted. Section 102.14 (b) (2) (iii) includes clarification that the riparian buffer width will be based on the streambank or shoreline within or along the boundaries of the project site. "Impaired Waters" are those water bodies identified as not meeting their designated use on the Pennsylvania List of all Waters. Typically, waters listed as not attaining are found on sections 4a, 4b, 4c and 5 of this list. Additional explanation and a copy of this list can be found at the following link; <http://www.portal.state.pa.us/portal/server.pt?open=514&objID=554008&mode=2>

14. **Comment:** *Management requirements* Paragraph (e)(1) states: Both existing and newly established riparian forest buffers, including wetlands and floodplains, shall be managed and maintained to enhance and maximize the unique value of these resources. This is nonregulatory language and it should be deleted. Alternatively, this provision should be replaced with an enforceable standard. (1322-IRRC)

Response: The Department appreciates the suggestion. This paragraph has been replaced with requirements for a riparian forest buffer management plan in Section 102.14 (b) (4).

15. **Comment:** Paragraph (e)(2) is vague by requiring, but not specifying how to comply with requirements for "predominantly" native species, "at least 60% uniform canopy cover" and control of noxious weeds and invasive species "to the extent possible." The EQB should amend this provision to state clear compliance standards and how to meet them. (1322-IRRC)

Response: The Department agrees that proposed Paragraph (e)(2) could have been clearer. This paragraph has been replaced with requirements for a riparian forest buffer management plan in Section 102.14 (b) (4).

16. **Comment:** The EQB should provide a cost estimate for complying with the five year requirement in Paragraph (e)(2). (1322-IRRC)

Response: The average cost for complying with the five year management requirement is \$130/acre per year (for competition control such as herbicides and mowing) or approximately \$650/acre total (for the five year period of management).

17. **Comment:** Paragraph (e)(3) severely restricts land use in a riparian forest buffer. We agree with commentators that these restrictions will deter landowners from allowing any earth disturbances on their property because they will lose the use of their land. We recommend that the EQB review and reconsider the viability of riparian forest buffers in relation to the prohibitions listed in Paragraph (e)(3). (1322-IRRC)

Response: Paragraph (e)(3) has been replaced with Section 102.14(f)(1). In addition, Section 102.14 (d) has been added to outline exceptions to the requirement for riparian buffers. The Department does not agree that property owners lose the use of their land when a buffer is established. The final regulation contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property. The Department has considered the ramifications of requiring riparian buffers along all streams. This is, in part, why the Department is only requiring riparian buffers in special protection waters (EV and HQ).

18. **Comment:** We have two concerns with Paragraph (e)(5). First, the Department of Conservation and Natural Resources is concerned that it may not be able to handle the volume of approvals required by Clause (iv). The EQB should explain why its regulation requires the Department of Conservation and Natural Resources approval for timber harvesting within riparian forest buffers. Our second concern is that Clause (v) is unclear in allowing "passive recreational activities." What specifically are passive recreational activities? (1322-IRRC)

Response: Clause (iv) has been deleted. Section 102.14 (f) (3) (iii) has been added with a revised explanation of "passive recreational activities" for clarification.

19. **Comment:** *Permanent protection of riparian forest buffers* Paragraph (f)(1) states: Existing and newly established riparian forest buffers including access easements must be protected in perpetuity through deed restriction, conservation easement, local ordinance or permit conditions. It appears that the requirement for protection in perpetuity goes far beyond protecting against erosion and sediment control and possibly stormwater management. We agree with commentators that this requirement is onerous for landowners and may require land acquisition by the permit holder. The EQB should explain how this requirement to protect the buffer in perpetuity is feasible, why it is reasonable to require protection in perpetuity and the cost it will impose on permittees and landowners. (1322-IRRC)

Response: Riparian buffers provide many physical, chemical and biological benefits to the aquatic ecosystem and should be protected in perpetuity. The Department has added clarification to this section that these mechanisms (deed restriction, conservation easement, local ordinance or permit conditions) are to ensure the long term functioning and integrity of the riparian buffers. The economic costs and benefits of protecting riparian are outlined in the Order. Buffers would only be required on property controlled by the applicant and would not be required on adjacent property.

20. **Comment:** Paragraph (f)(2) requires the boundary of the buffer to be clearly marked. The EQB should state in the regulation what is acceptable marking and its cost.
(1322-IRRC)

Response: The Department believes that a marking delineating the buffer is reasonable and appropriate, but is sensitive to varying site conditions and has not mandated any specific type of marking.

21. **Comment:** Pennsylvania has over 83,000 miles of streams. This is an important resource and we need to protect it! This is why the regulations for erosion and sediment control and stormwater management need to include a mandatory stream buffers program, not a voluntary one. Pennsylvania's streams cannot afford more pollution and runoff, and we cannot afford increased flooding and drinking water treatment costs. (17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 245, 246, 247, 248, 249, 250, 252, 254, 255, 256, 257, 258, 259, 260, 262, 263, 264, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 278, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 315, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 426, 427, 431, 433, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 627, 629, 630, 631, 632, 633, 634, 635, 636, 637, 639, 641, 689, 701, 702, 703, 705, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 725, 727, 728, 729, 730, 731, 732, 733, 735, 1116, 1117, 1118, 1119, 1120, 1121, 1142, 1146, 1173, 1193, 1200, 1205, 1209, 1299, 1325, 1326)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

22. **Comment:** Pennsylvania should require forested buffers of at least 100 feet on both sides of every stream in our state, with 150 feet on small headwater streams and 300 feet on Exceptional Value and High Quality streams. (17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 252, 254, 256, 258, 259, 262, 263, 264, 266, 268, 269, 273, 274, 275, 276, 277, 278, 278, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 315, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 426, 427, 431, 434, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 627, 629, 630, 631, 632, 633, 634, 635, 636, 637, 639, 641, 642, 644, 646, 697, 701, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 725, 727, 728, 729, 730, 731, 732, 733, 734, 833, 946, 1131, 1193, 1116, 1117, 1118, 1119, 1120, 1121, 1127, 1128, 1131, 1142, 1146 1173, 1191, 1193, 1200, 1205, 1209, 1219, 1249, 1285, 1286, 1288, 1290, 1293, 1299, 1302, 1310, 1325)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking includes the obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

23. **Comment:** We appreciate the intent of the changes in the 102 regulations, which we believe support and reinforce the importance of riparian forest buffers. Riparian forest buffers play a critical role in filtering sediment and in the uptake of nitrogen and phosphorus. Riparian forests also provide stream bank stability and thermoregulation that is so important to many aquatic species. Furthermore, riparian forests provide essential nutrients for the aquatic food chain, and are vital to the health of aquatic ecosystems. (1275)

Response: The Department appreciates the commentators' support of the benefits of buffers.

24. **Comment:** Pennsylvania should require 300 feet forested buffers on Exceptional Value and High Quality streams. Few things are more important to surface water supply protection than tree cover and stream stabilization. As a drinking water provider, we routinely model the relationship between land cover and water quality. If we were to compare the pollutants found in runoff from forested lands vs. residential lawns, - the turbidity concentration in runoff from lawns is 2 times greater than that from forested Lands - the nitrogen concentration in runoff from lawns is almost 5 times greater than that from forested lands and 3 times greater for phosphorus - the *Cryptosporidium* and *Giardia* concentrations in runoff from lawns is over 30 times greater than that from forested lands, and fecal coliform concentrations are 3,000 times greater (1280)

Response: The Department appreciates the commentators' support of the benefits of buffers. DEP agrees that protection of drinking water and streambank stability are important. The Department believes that the expanded obligation in the final rulemaking to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application is sufficient to enhance and protect water quality. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

25. **Comment:** I am writing to support the requirement of FUNCTIONAL FORESTED BUFFERS of at least 100 feet on both sides of every stream in our state, with 150 feet on small headwater streams and 300 feet on Exceptional Value and High Quality because of the important benefits they offer (267)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

26. **Comment:** PennDOT requests the inclusion of a public health and safety exception to the buffer requirement. PennDOT's compliance with the buffer requirements contained in Section 102.14 can result in public safety issues. For example, Compliance with Section 102.14(a)(4), (5), and (6) may require planting trees. Planting trees close to a stream can result in changing the hydraulic characteristics of the stream over time and become a source of large flood debris. PennDOT requests that the public health and safety exception be added to Section 102.8. (708, 1114)

Response: The Department agrees that public health and safety issues require flexible consideration. Section 102.14(d)(1)(v) and 102.14(d)(2)(ii) addresses exceptions and waivers applicable to road maintenance activities and construction.

27. **Comment:** EV streams are our highest quality streams in Pennsylvania and need greater protection than 150 foot buffers. Buffers of at least 300 feet are needed in these situations. Moreover, by limiting the buffer requirement to only EV streams, the requirements would apply only to 1.6 percent of streams in the entire State of Pennsylvania. EV streams are our highest quality streams in Pennsylvania and need greater protection, much more than 150 foot buffers proposed by DEP (1293, 1297)

Response: The Department appreciates the commentators' support of the benefits of buffers. The Department believes that the obligation in the final rulemaking to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application is sufficient to protect and enhance water quality. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

28. **Comment:** We commend the fact that the plan proposes buffer protections for exceptional value streams. However, these streams make up less than two percent of our total waterways and the plan does nothing to grant better protection to high quality streams or other impaired waterways. (1299)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

29. **Comment:** A 150' forested buffer is also proposed on impaired waters. A majority of the impaired waters are located within urban areas where a 150' forested buffer may not be feasible due to site redevelopment. In these cases an appropriate buffer should be agreed upon with the Department. (1259)

Response: The Department agrees. Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects.

30. **Comment:** The rules also do not address the removal of a water from the impaired waters list - does the buffer reduce to 100'? (1259)

Response: No, the requirement to establish a new riparian forest buffer or protect an existing riparian forest buffer that is 150 feet wide applies only if the waters are designated as HQ or EV and fail to attain their designated use at the time of permit application. If the same waters meet their designated use in the future, new permit applicants would be not be permitted to conduct earth disturbance activity within 150 feet of the water.

31. **Comment:** We urge DEP to replace its proposal for 150-foot buffers on EV streams with our buffers 100 proposal. Forested stream buffers will provide many important benefits for our streams and our communities. They filter pollutants from runoff before it reaches the stream and reduce the volume and rate of runoff. They improve in-stream pollution removal. They reduce stream bank erosion. They enhance habitat for fish and other aquatic life and they cool our streams. Buffers also reduce flood damage, they reduce the cost of stormwater management and protect drinking water and they increase property values. (1302)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

32. **Comment:** Forested Buffers are good for the environment and the economy. Buffers will reduce pollution of our streams, limit erosion of stream banks, improve habitat for fish and keep streams cooler. They will also increase property values for nearby properties, and cut stormwater management costs and drinking water treatment costs. And they will reduce damage from flooding, which costs \$ 6 billion a year. Many municipalities in Pennsylvania already require at least 100 foot buffers, making development better for our communities and the environment. (17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 245, 246, 247, 248, 249, 250, 252, 254, 256, 258, 259, 262, 263, 264, 268, 269, 273, 274, 275, 276, 277, 278, 278, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315,

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Response: The Department appreciates, and agrees with the commentators' support of the benefits of buffers.

33. **Comment:** We need a minimum 100 forested buffer on all streams in Pennsylvania. (13, 15, 251, 420, 648, 696, 698, 699, 700, 704, 707, 709, 710, 734, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 760, 761, 762, 763, 764, 765, 766, 767, 770, 771, 772, 773, 774, 775, 777, 779, 780, 782, 783, 784, 786, 787, 788, 789, 791, 794, 795, 797, 798, 799, 800, 801, 802, 803, 804, 805, 807, 812, 813, 815, 817, 820, 821, 826, 827, 828, 830, 835, 836, 840, 841, 842, 853, 854, 855, 856, 857, 858, 859, 860, 865, 866, 867, 868, 870, 871, 872, 876, 877, 878, 879, 881, 882, 884, 886, 892, 893, 895, 897, 898, 899, 900, 902, 903, 904, 906, 907, 908, 909, 910, 911, 912, 915, 916, 917, 918, 919, 923, 926, 927, 928, 930, 931, 932, 934, 935, 937, 952, 954, 955, 956, 962, 963, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 980, 981, 982 (said we demand at least 100 foot buffers), 984, 985, 986, 987, 988, 989, 997, 998, 1000, 1002, 1004, 1005, 1007, 1008, 1009, 1010, 1011, 1012 (said "keep" buffers), 1013, 1015 (said "protect our streams with"), 1018, 1019, 1023, 1024, 1028, 1030, 1031, 1034, 1035, 1036, 1037, 1043, 1045, 1046, 1047, 1052, 1053, 1055, 1057, 1058, (said "providing"), 1059, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1074, 1075, 1076, 1078, 1079, 1080, 1081, 1084, 1085, 1086, 1087, 1090, 1091, 1092, 1094, 1095, 1098, 1099, 1100, 1101, 1102, 1103, 1107, 1108, 1109, 1110, 1112, 1113, 1130, 1143, 1144, 1145, 1228, 1290, 1318, 1325)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are

required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

34. **Comment:** We support a required/mandatory 100 foot stream buffers program on all streams, not a voluntary one. (1, 11, 267, 758, 759, 768, 769, 776, 785, 790, 792, 793, 796, 808, 809, 810, 811, 814, 816, 818, 819, 822, 823, 824, 825, 829, 831, 832, 834, 838, 839, 843, 848, 849, 850, 851, 852, 861, 862, 863, 864, 873, 874, 875, 880, 883, 887, 888, 889, 890, 894, 896, 897, 899, 901, 920, 921, 922, 924, 929, 950, 951, 952, 957, 958, 959, 961, 976, 977, 978, 995, 996, 1003, 1006, 1014, 1016, 1017, 1025, 1029, 1032, 1038, 1039, 1040, 1041, 1042, 1044, 1048, 1049, 1050, 1051, 1056, 1072, 1073, 1077, 1083, 1088, 1089, 1093, 1096, 1097, 1104, 1105, 1106, 1111, 1219, 1228, 1319, 1320)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

35. **Comment:** We believe the rulemaking should include a provision for mandatory riparian buffers with widths appropriate for protection of designated and existing uses and that buffers should be incorporated for all waters of the Commonwealth, not just rivers, streams, creeks, lakes, ponds, or reservoirs when required by 102.14 (1) and 102.14(2). The Commonwealth should also recognize, after many years of trying to encourage buffers through voluntary programs, that making buffers voluntary doesn't yield buffers. The preamble to the notice of proposed rulemaking states that riparian forest buffers are one of the most effective and efficient BMPs for preventing pollution both during and after earth disturbance activities, and provide natural, long-term sustainability for aquatic resource protection and water quality enhancement. Early drafts of the Chapter 102 revisions acknowledged this in including mandatory riparian buffers. In not including such a provision in the final proposal, the Commonwealth is missing an enormous opportunity to protect and maintain existing and designated uses of waters of the Commonwealth, reduce and mitigate flood impacts, ease streambank erosion and related infrastructure damages, and reap the long-term economic benefits of the ecosystem services known to be provided by buffers. (1208)

Response: The Department appreciates the commentators' support of the benefits of buffers. The Department disagrees with the statement that voluntary programs do not yield buffers. The Department has been tracking buffer establishment since 1997 and has documented 53,000+ acres or 4,238 miles of buffers. The Department would agree that mandatory buffers would increase total buffers established and that is why the Department is including mandatory buffers on EV and HQ streams.

36. **Comment:** The proposed rule makes it impossible to discern just what situation it will apply to. For example, it appears to require mandatory buffers for any project that "contains" ponds; does this mean that any permitted project that happens to occur on a property with a farm pond automatically requires buffers to be constructed around the pond? Thus, the geographic

scope of the rule likely extends to almost all possible projects, given the ubiquity of streams, lakes and ponds in the Commonwealth. (1184, 1250, 1252)

Response: The requirement to establish a new riparian forest buffer or protect an existing riparian forest buffer that is 150 feet wide applies if the waters, including ponds, are within a designated HQ or EV watershed and fail to attain their designated use at the time of permit application.

37. **Comment:** While we support what we believe is the intent of the regulatory changes, we are concerned with a lack of clarity as to when certain provisions apply to forest management practices. It is our belief that healthy working forests are an important incentive to forest land owners to keep their land in forests. We feel that DEP shares our belief in the importance of working forests and have appreciated their support. We look forward to continue working with DEP to provide feedback and professional expertise, once the language in the regulations is clarified. (1275)

Response: The Department appreciates the commentators' support and look forward to continued dialogue.

38. **Comment:** Should the Proposed Rule Making include a provision for mandatory riparian forest buffers? No. they should not! Particularly as they would apply to forest management. (1149)

Response: The Department appreciates the comment, and has addressed timber harvesting in Sections 102.5(b) and 102.14(d)(iii) and (vii). Forestry and timber harvesting that disturb 25 acres or greater and require an E&S permit would require a PCSM plan to compensate for any change in stormwater runoff as a result of the activity.

39. **Comment:** 102.14 Change Riparian Forest Buffer to Riparian Buffer in all instances. (693)

Response: Revisions in several sections in the final rulemaking changed riparian forest buffer to riparian buffer. Requirements for both are included.

40. **Comment:** I would also advise including the language that "ephemeral" streams or watercourses are exempt from these buffer proposals. (1)

Response: The Department does not agree that this is necessary. The mandatory buffer requirements in Section 102.14(a) only apply to perennial and intermittent streams and creeks. An ephemeral stream is not a perennial or intermittent stream or creek.

41. **Comment:** Require riparian forest buffers of at least 100 feet along all of our waterways, including wetlands. The overwhelming body of science supports keeping or creating riparian forest buffers, or greenways, along all of our rivers and streams. (144, 292, 327, 350, 394, 569, 589, 652, 653, 654, 655, 656, 657, 658, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 946, 1154, 1155, 1156, 1157, 1158, 1160, 1161, 1163, 1164, 1165, 1168, 1169, 1174, 1177, 1179,

1180, 1181, 1189, 1191, 1192, 1195, 1196, 1197, 1198, 1199, 1206, 1210, 1211, 1212, 1213, 1216, 1222, 1226, 1243, 1251, 1254, 1258, 1270, 1273, 1277, 1283)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

42. **Comment:** Require riparian forest buffers of at least 150 feet along all of our special protection waterways. The proposed rule would mandate 150-foot riparian forest buffers along all of our exceptional value waters, but does not impose a similar requirement along all high quality waters, which also deserve this increased protection. (144, 292, 327, 350, 394, 569, 589, 652, 653, 654, 655, 656, 657, 658, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 1154, 1155, 1156, 1157, 1158, 1160, 1161, 1163, 1164, 1165, 1168, 1169, 1174, 1177, 1179, 1180, 1181, 1189, 1192, 1195, 1196, 1197, 1198, 1199, 1206, 1210, 1211, 1212, 1213, 1216, 1222, 1226, 1243, 1251, 1254, 1258, 1273, 1277, 1283)

Response: The Department appreciates the commentators' support of the benefits of buffers.

43. **Comment:** I am writing to request that 10 foot forested buffer zones be mandatory on all Pennsylvania streams. (913)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking includes the obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

44. **Comment:** 102.14 (a)(1) While we support the requirement for a large riparian buffer for EV waters, it concerns us that absolutely no buffer would be required for many activities (i.e., those not near EV waters and those not using the permit-by-rule). We recommend that an absolute minimum buffer (perhaps 25-feet wide) be required for all streams. (436, 650)

Response: The Department appreciates the commentators' support of the benefits of buffers. The proposed permit-by-rule (as found in Section 102.15) has been deleted from this rulemaking. While the mandatory buffer requirements apply to only EV and HQ waters, the

Department encourages the establishment or protection of buffers throughout the Commonwealth.

45. **Comment:** Section 102.14(a)(1)(i) It is unclear what must be buffered - this states that a buffer is required if the activity is located within "150 feet of a river, stream, creek, lake, pond or reservoir." However, the definition of a riparian buffer is based on "surface waters" which also includes wetlands, springs, and seeps. As written, it appears that if an activity required a buffer, then the buffer would be required for all surface waters. (2, 436, 650)

Response: The riparian buffer provisions specify a subset of surface waters, specifically excluding wetlands, seeps and springs.

46. **Comment:** Wetlands that are located in the riparian buffer shall be protected and maintained consistent with Chapter 105 (Dam Safety and Waterway Management). Under Chapter 105 the wetlands impacted by the project are protected under a conservation easement. Are the Chapter 105 rules for General Permits and other permits going to be revised to be consistent with the Chapter 102 program? The forested riparian buffers section in the proposed regulations is more applicable with the Chapter 105 program and not the 102 program. (1259)

Response: There is no buffer requirement for wetlands within this rulemaking. It is not the intent of this regulation to remove or alter existing wetlands.

47. **Comment:** Section 102.14(a)(1)(i) Riparian forest buffer widths of 150 feet are appropriate but any larger buffers are excessive. (1148).

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

48. **Comment:** Please implement forested buffers on all Pennsylvania streams & creeks. (778, 806, 837, 925, 960, 999)

Response: The Department appreciates the commentator's support of the benefits of buffers.

49. **Comment:** We want mandatory buffers (minimum of 100 feet) on our lakes and streams. (781)

Response: The Department appreciates the commentator's support of the benefits of buffers. The mandatory provisions of this rulemaking also apply to lakes located in EV and HQ watersheds

50. **Comment:** Having mandatory buffers will cause a positive effect on our streams and communities. (993)

Response: The Department appreciates the commentator's support of the benefits of buffers.

51. **Comment:** It has come to my attention via a canvasser for Clean Water Action that DEP is proposing that the 100-foot minimum buffer for streams be voluntary. This clearly is not a realistic or effective enough way of attempting to ensure the safest and cleanest water provided to citizens. Give most corporations and inch, and they'll take 50 feet. (844)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

52. **Comment:** It is important that there be a buffer zone of at least 100 feet between new development and streams. The health, environmental and financial cost of development too close to our streams is dangerous and inconvenient. (845, 846, 847, 869, 896, 901, 905, 933)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

53. **Comment:** Please maintain the 100 foot forested buffer on all streams in PA for new housing/residential areas. (891, 1001, 1021, 1022)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

54. **Comment:** Include HQ streams in the provisions intended to improve protection. (1253)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are

required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

55. **Comment:** Forested buffers would be a great solution to our drainage problems. (983)

Response: The Department appreciates the commentator's support of the benefits of buffers.

56. **Comment:** Does this include disturbance necessary to create buffer? (2)

Response: Section 102.14(b)(4) discusses the requirements of the riparian forest management plan which must be implemented. In addition, Section 102.14(f)(3)(i) allows activities within the buffer for its maintenance.

57. **Comment:** I believe it is very important to keep our waterways clean and free from pollution. We should be proactive in this effort. It would seem that a minimum 100 foot buffer on PA streams would be a great place to start. (1026)

Response: The Department appreciates the commentator's support of the benefits of buffers.

58. **Comment:** Please place at least 100 foot forested buffers on all streams and waterways in PA. (990, 1054, 1059, 1060)

Response: The Department appreciates the commentators' support of the benefits of buffers.

59. **Comment:** The citizen and residents demand a forested buffer to be mandatory to protect our water quality. (994)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

60. **Comment:** I am writing this letter to urge you to implement 100 foot buffers that will reduce pollution and flooding and increase property values. (936)

Response: The Department appreciates the commentator's support of the benefits of buffers.

61. **Comment:** Quite frankly, I am appalled to find out these buffers are voluntary-not mandatory- to developers in PA. I believe these buffers should not only be mandatory, but also for them to be increased in size. 100 feet hardly seems like adequate protection. (937)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

62. **Comment:** I would greatly appreciate your support concerning the 100 foot buffers to protect our homes from flooding and keep our water safe. (975)

Response: The Department appreciates the commentator's support of the benefits of buffers.

63. **Comment:** Maintain forested buffers to reduce pollution and flooding and help increase local property values and maintain a minimum of a 100' 0" forested buffer on all Pennsylvania streams (991, 992)

Response: The Department appreciates the commentators' support of the benefits of buffers.

64. **Comment:** While we appreciate that DEP has included a requirement for 100-foot buffers in development along EV, exceptional value, streams, this requirement is not broad enough to afford significant protection to the state's waterways. (1302)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

65. **Comment:** We support requiring a 300 foot buffer on all EV and HQ streams. (1147)

Response: The Department appreciates the commentator's support of the benefits of buffers.

66. **Comment:** We wish to inform you that we wholeheartedly support your efforts to amend 25 Pa. Code Chapter 102 regarding improving the riparian buffer requirements. We well understand the importance of riparian buffers and are spending a great deal of our effort educating the township residents regarding the value of adequate riparian buffers. In particular, we are expressing support for this proposed law setting the riparian buffer at 150 feet for Exceptional value (EV) streams. In addition, we recommend that you extend this protection to High Quality (HQ) streams and consider giving this enhanced protection to all streams that have Special protection designations as well as all streams that feed rivers that are part of the national

Wild and Scenic River System. In fact, we would support this protection for all streams in Pennsylvania. (7)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

67. **Comment:** The riparian forested buffers, I know it was stated that it's only required on exceptional value streams. I read the regs, and I see enough weasel room in there that I think that could be interpreted that those forested buffers could be interpreted to be required every place. So if that's the intent of the Department, then I think maybe the wording has to be a little bit stronger to enforce it if that's the only place that they're required. (1292)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along only High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along only HQ and EV waters that are meeting their designated use at the time of application.

68. **Comment:** The proposed rules should make clear that only EV rivers, streams, etc. should be buffered. (1245)

Response: The Department disagrees with limiting buffer requirements to only EV waters. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application. The rulemaking also provides buffer specifications for non-special protection waters in Section 102.14(b)(2)(i).

69. **Comment:** Section 102.14(a)(1)(i): The punctuation obscures the requirement set forth in this provision, making it sound like a project site must contain 150 feet of a river, stream, creek, lake, pond or reservoir to require a buffer. This provision should read: "and the project site contains, is along, or is within[,] 150 feet of, a river . . ." The confusing punctuation appears elsewhere in the chapter (see, ex., Section 102.1 5(c)(2)) and should be changed globally. (946, 1191)

Response: The Department agrees. Section 102.14(a)(1)(i) has been revised .

70. **Comment:** Section 102.14 (Riparian Forest Buffer Requirements) - We think that the proposed widths for riparian forest buffers in the proposed rulemaking are appropriate and any additional widths would be excessive and may have a direct and negative affect on agriculture. (14, 645)

Response: The Department appreciates the commentator's support.

71. **Comment:** Section 102.14 (a)(1)(i)- The PA Farm Bureau feels that the proposed widths of 150 feet for riparian forest buffers in the proposed rulemaking are appropriate and any additional widths would be excessive and may have a direct and negative effect on agriculture (1166)

Response: The Department appreciates the commentator's support of the benefits of buffers.

72. **Comment:** 102.14(a)(1)(i) & 102.14(a)(2) describe when riparian forest buffers will be required. PennDOT requests clarification on the following issues: Is Section 102.14 applicable only if the earth disturbance activity requires a NPDES permit? If only a Chapter 105 permit is required, does Section 102.14(a)(2) provide the Chapter 105 permit program with the authority to require forested riparian buffers? If so, please explain under what circumstances. Will PennDOT be required to increase the length of bridges, which are adequately designed hydraulically in order to accommodate a new buffer area? If a project located in an EV watershed abuts a stream for a mile and approximately 0.25 miles of roadway work will involve significant disturbance, would the buffer be applied from one end of the project to the other or only in the vicinity of the earth disturbance? (708, 1114)

Response: The buffer requirement does not not apply unless the earth disturbance activity requires a permit (either NPDES or E&S) under this Chapter. In addition, Section 102.14(d)(1)(v) and 102.14(d)(2)(ii) provides for exceptions and waivers related to road maintenance activities and construction.

73. **Comment:** 102.14(a)(1)(i) The use of the word "and" in the list of activities in this subparagraph implies that all three conditions must be met ... i.e., the activity must require a permit, and the activity must be located within an Exceptional Value Watershed, and the project site must contain or be along or within 150 feet of a river, stream, creek, lake, pond, or reservoir. However, later in this section under subparagraph(d), buffer widths are provided for all waters, impaired waters, and special protection waters. This appears to imply that stream buffers are required along all waters and not just Exceptional Value waters. This inconsistency requires additional clarification.

Response: Section 102.14(d) is not a mandatory requirement under this section. It is included to provide a RFB standard for non-special protection waters. Section 102.14(a) has been rewritten to provide clarity. Section 102.14(d) has been reformatted in the final rulemaking and appears as 102.14(b)(2)(f)

74. **Comment:** 102.14(a)(1)(i) Also, does the description here include Exceptional Value Wetlands? (Example, the site is along a stream which is classified as CWF, but is on the list of trout producing streams. An area of wetlands tributary to that stream would be EV, but the actual watershed would be CWF ...) If so, this would essentially create a mandatory 150' wooded buffer around EV wetlands, even if the wetlands weren't in a wooded area to begin with. Is this the intent? (1255)

Response: There is no buffer requirement for wetlands within this rulemaking. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along only High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along only HQ and EV waters that are meeting their designated use at the time of application.

75. **Comment:** The Proposed Rulemaking should require riparian forest buffers for all waters, including wetlands. Section 102.14(a)(1)(i) of the Proposed Rulemaking should be revised to state: "The activity requires a permit under this chapter, [is located within an Exceptional Value watershed,]and the project site contains, is along, or is within[,] [150]100 feet of, a river, stream, creek, lake, pond, wetland, or reservoir."² PennFuture believes that at a minimum, Pennsylvania should require forest buffers at least 150 feet wide between areas of earth disturbance and all special protection waters³ -not just exceptional value waters (as the Proposed Rulemaking would require), but high quality waters as well. Therefore, at a minimum, Section 102.14(a)(1) of the Proposed Rulemaking should be revised to state: "The activity requires a permit under this chapter, is located within an Exceptional Value or High Quality watershed, and the project site contains, is along, or within[,], 150 feet of, a river, stream, creek, lake, pond, wetland. or reservoir." (946, 1191)

Response: There is no buffer requirement for wetlands within this rulemaking. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along only High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along only HQ and EV waters that are meeting their designated use at the time of application.

76. **Comment:** To avoid potential confusion, *we suggest the riparian buffers specifically exclude wetlands, as it relates to this regulation.* If left to interpretation, it will only create confusion at the Municipal and County levels. (1248)

Response: There is no buffer requirement for wetlands within this rulemaking.

77. **Comment:** The Proposed Rulemaking should require the recording of an environmental covenant to address responsibility for the long-term O&M of PCSM BMPs (including riparian buffers). Section 102.8(m) and 102.14(a)(1) of the Proposed Rulemaking should be revised accordingly. (946, 1191)

Response: Also, a buffer is a PCSM BMP (see 102.14(b)(4), therefore a covenant would be needed. The Department believes the final rulemaking is sufficiently clear specifically states the waters being protected by a riparian buffer.

78. **Comment:** I am a strong supporter of forested riparian buffers and the elimination of livestock grazing, row cropping and development within the flood plain of our streams and rivers in Pennsylvania. I can support buffers of 100 feet on streams, and 150 feet on impaired, EV or HQ watersheds. First, forest management is not a major cause of water quality degradation. The primary problems come from mine drainage, agriculture and urban runoff. The proposal before

the Board would limit timber harvesting within the outer half of the buffer. This would be a mistake. We need to manage all the way to the bank when there is an approved forest stewardship plan and 60% of the canopy cover is maintained. This is necessary to maintain the health and vigor of the forest, to control exotic invasive species, and to improve wildlife habitat. It also allows the landowner to manage the stand for carbon sequestration values, which will soon be available. In summary, if a landowner can make money and protect the water quality, this should be encouraged. We must be good stewards of the land and water, and we can only do this through active management. Benign neglect is not good management. (711)

Response: The Department appreciates commentator's support of the benefits of buffers. The 50 foot Zone 1 immediately adjacent to the stream is critical to water quality protection, and therefore no timber harvesting is permitted. The width of Zone 2 has been enlarged to 100 feet in the final rulemaking. Therefore the area where timber harvesting is permitted (with a riparian forest buffer management plan and 60% of the canopy cover is maintained) has been expanded.

79. **Comment:** The maintenance of a "60% uniform canopy cover" in the buffers is a financial and otherwise unnatural and unattainable requirement. It is simply not possible in the short term and certainly not in perpetuity. (1149)

Response: The Department disagrees, however Section 102.14(b)(3) provides an establishment period to allow the canopy cover to develop. It is important to note that the 60% uniform canopy cover is a minimum canopy cover.

80. **Comment:** For riparian forest buffer management requirements, who is required to manage and maintain these riparian forest buffer areas during and after earth disturbance activities? (1315)

Response: The permittee is responsible during earth disturbance activities, and the person designated in the PCSM would be responsible thereafter.

81. **Comment:** Allow forestry and timber harvesting in riparian buffers, including single and multi-tree harvests within inner buffer zones. (1186)

Response: The 50 foot Zone 1 immediately adjacent to the stream is critical to water quality protection, and therefore no timber harvesting is permitted. The width of Zone 2 has been enlarged to 100 feet in the final rulemaking. Therefore the area where timber harvesting is permitted (with a forest stewardship plan and 60% of the canopy cover is maintained) has been expanded.

82. **Comment:** The language within the proposed rulemaking should be clearer and balanced regarding silvicultural needs and allow for additional utilization of forestry in both the inner and outer buffers. (MISSING NUMBER)

Response: The 50 foot Zone 1 immediately adjacent to the stream is critical to water quality protection, and therefore not timber harvesting is permitted. The width of Zone 2 has been enlarged to 100 feet in the final rulemaking. Therefore the area where timber harvesting is

permitted (with a forest stewardship plan and 60% of the canopy cover is maintained) has been expanded.

83. **Comment:** Timber harvesting should be allowed throughout the forest buffer. It would contribute to the sustainability of the buffer for long-term regeneration. Also, this can be done without damaging the ability of the buffer to function or cause the landowner to give up the ability to derive income from this portion of their property. (1170)

Response: The 50 foot Zone 1 immediately adjacent to the stream is critical to water quality protection, and therefore no timber harvesting is permitted. The width of Zone 2 has been enlarged to 100 feet in the final rulemaking. Therefore the area where timber harvesting is permitted (with a forest stewardship plan and 60% of the canopy cover is maintained) has been expanded.

84. **Comment:** The proposal is very specific toward the need for a closed canopy. A closed canopy usually requires fairly mature trees. Mature trees do virtually nothing to hold back particulate matter that is suspended in stormwater runoff. If stormwater runoff is a concern, mature grasses or brushy material would hold back more particulates. (1263)

Response: The Department disagrees; suspended solids are only one type of pollutant reduced by riparian forest buffers. The literature supports the position that a closed canopy is preferred to mature grasses or brushy material for overall protection, pollutant reduction and health of the water resource.

85. **Comment:** While I accept that the roots of the trees may help stabilize the land near a stream, they do so at the peril of downstream users. Within the past few years, Sullivan County, New York lost 5 bridges due to stream bank collapsing. The large trees washed downstream to bridges and created a very effective dam. That is, until the bridges broke. Smaller, sapling to pole sized trees might have proved a better solution. Smaller trees provide soil stabilization with less above ground mass. (1263)

Response: Literature has shown that a healthy, mature riparian forest buffer of sufficient width reduces flooding and stabilizes streambanks.

86. **Comment:** Closed canopy trees along a stream is usually promoted as a means of preventing solar heating of the stream water. If this is the true reason for the subsection, then once again, it is inappropriate as Chapter 102 was intended to govern erosion and sedimentation control not thermal pollution. Furthermore, 150 feet is greater than necessary to achieve the goal. (1263)

Response: The department disagrees, there are multiple benefits from a closed canopy and it is appropriate to be included Chapter 102. Thermal pollution must be minimized according to Section 102.8(f)(13).

87. **Comment:** I am writing in support of the PA Campaign for Clean Water's proposal to require a minimum of 100 foot forested buffers on each side of all streams in Pennsylvania. (738)

Response: The Department appreciates the commentators' support of the benefits of buffers.

88. **Comment:** There needs to be flexibility to the 100-foot buffer requirement. The functions & values and individual site conditions may allow for a lesser buffer to achieve relatively the same results. (1)

Response: The exceptions in Section 102.14(d) allow for necessary flexibility.

89. **Comment:** While the DEP requires 150 foot buffers on development alongside Exceptional Value (EV) streams, I hope that the DEP will also investigate the proposal to require at least 100 feet for any earth disturbing activity alongside any stream. I believe that this is still fewer feet than is required in New Jersey. (1313)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

90. **Comment:** I think since the areas of nutrient pollution have been mapped, maybe that's where the forested buffers should actually be required as opposed to only on exceptional value lands. (1292)

Response: The Department appreciates the commentators' suggestion. The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application.

91. **Comment:** Riparian buffers should be mandatory for all earth disturbances requiring an NPDES Permit. (1286, 1290, 1293, 1297)

Response: The Department appreciates the commentators' support of the benefits of buffers.

92. **Comment:** We believe that forest riparian buffers should be mandatory for all non-agricultural earth disturbances requiring NPDES permit. DEP obviously is requiring 100 foot forest buffers in new development and exceptional value watersheds only. And in those cases this is not adequate for buffer requirement and does little to advance the goal of cleaning up our streams and meeting our local and regional water quality requirements. (1297)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

93. **Comment:** The science is clear that a minimum of 100 foot forest buffers are required to maximize the many benefits that buffers provide, such as reducing pollution and preventing flooding. Where forested buffers exist alongside our streams, water quality's improved. Floodwaters are reduced, wildlife habitat is provided and healthier communities are created. For all new earth disturbance activities that require an NPDES permit, the regulations should be revised to require as part of the post-construction stormwater best management plan 100 foot forest buffers at all streams, 150 foot forest buffers on small headwater streams and impaired streams, and finally 300 foot forest buffers for all exceptional value and high quality streams, which are our highest value rivers and streams and require special protection under the law. (1297)

Response: The Department appreciates the commentators' support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

94. **Comment:** A lack of appropriate buffers degrades water quality, which impacts our drinking water. Not only does it increase contamination of our drinking water supply, but it increases the costs of water treatment. A lack of adequate stream buffers also increases flooding problems. Bucks County has had three recent catastrophic flood events. Flooding puts people and property at risk. It is imperative that the State take actions that will reduce flood dangers. (689)

Response: The Department appreciates the commentators' support of the benefits of buffers.

95. **Comment:** The PCPF would like to assist with and see the proposed rule making expand and clarify its definitions and issues pertaining to timber harvesting, forest stewardship, sustainably managed riparian forest buffers and licensed professional foresters. (5)

Response: The Department appreciates the input provided by the commentators during the development of the proposed rule and during the public comment period.

96. **Comment:** Forestry silviculture and timber harvesting in riparian buffers particularly within the inner zone must be maintained. The *Environmental Quality Board must ensure that the proposed additions to the E&S plan can be completed by the present foresters* and forest professionals provided that they have been trained in the use and practice of Best Management Practices. (1202)

Response: The final rulemaking provides for an exception in 102.14(d)(vii) to the riparian buffer provision for timber harvesting activities for which a site reclamation or restoration is part of the permit authorization.

97. **Comment:** The PCPF can further assist with clarification and establishment of harvesting practices associated with forest buffers and riparian zones to ensure water needs are achieved, landowner goals are met and the science of forestry is applied with the use of a professional licensed forester. Therefore, licensing Pennsylvania foresters is a very important ingredient in protecting water quality and to the practice of forestry throughout Pennsylvania! (5)

Response: The Department appreciates the input provided by the commentators during the development of the proposed rule and during the public comment period.

98. **Comment:** Sec. 102.14 Riparian forest buffer requirements: The proposed buffer mandates are more restrictive than those recommended by FSC. We fail to understand the reason why DEP is recommending buffer sizes and restrictions greater than those recommended by this internationally recognized certification body. The requirement for permanent protection of the buffers is problematic. The language regarding this protection in the proposed rulemaking currently promotes the use of conservation easement or local ordinance as a protection. Such provisions, if implemented, should be accompanied by a significant reduction or even elimination of real estate taxes levied against those acres as the landowner will incur real, long-term reduction in the economic value of that land. The system of permitting and E&S planning in the Chapter is sufficient to ensure protection of these buffers. (1221)

Response: A large body of scientific literature addressing water quality supports the minimum buffer widths in this Chapter. Timber harvesting is addressed in Section 102.5(b) relating to permit requirements. Riparian buffers are only required for earth disturbance activities within EV and HQ watersheds permitted under this Chapter. In addition, the final rulemaking provides for an exception in 102.14(d)(1)vii) to the riparian buffer provision for timber harvesting activities for which a site reclamation or restoration is part of the permit authorization.

99. **Comment:** The 100-foot buffer minimum (or 150-foot for EV and HQ streams) is not always necessary to protect the stream, wetland, lake, pond, or groundwater recharge area. There have been plenty of instances in my career where a 10 or 20 foot buffer would have made a great positive benefit to a small stream or wetland (and upheld the functions and benefits that are detailed in "Appendix A"). In particular, agricultural sites that plow up to stream banks or wetland edges can often see a great benefit with a much smaller buffer area. Many older agricultural sites have no buffers what so ever. It would be wise to require these sites to have some minimum buffer. (1)

Response: A large body of scientific literature addressing water quality supports the minimum buffer widths in this Chapter. The Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

100. **Comment:** In general, we believe that the proposed buffer standards will be cumbersome and unmanageable, add significant cost to projects, and be a deterrent to voluntary establishment of buffers (absent a mandatory buffer requirement in this regulation). We also believe that some of the design, construction and maintenance standards in this section are inappropriate for use in Special Protection Watersheds where intact, healthy and ecologically functioning riparian buffers should not be altered. (1208)

Response: The Department disagrees. The standards set in this Chapter have been used on more than 53,000 acres of riparian buffers established across the Commonwealth and have not proven to be cumbersome or unmanageable.

101. **Comment:** 102.14(a) General requirements. Add a section to make applicants responsible for all applicable state and federal permits for riparian activities that constitute obstructions and/or encroachments under Chapter 105. (1208)

Response: Permittees are required to comply with all regulatory requirement, the suggested addition is not necessary.

102. **Comment:** Clarify as to what is actually required in the way of permanent protection for riparian forest buffers. I believe that requiring legal protection for a riparian buffer on a small landowner may place an undue hardship on them. Larger landowners and developers however would need to provide legal protection or the buffers will likely be ignored. The USACE has required legal protection in the way of permanent easements for wetlands on sites being developed. They also provide examples of legal easements to follow. (1)

Response: Permanent protection can be provided in a variety of ways, which are included in Section 102.14(g)(1).

103. **Comment:** 102.14(a)(1)(i) should be revised to read as follows: The activity requires a permit under this chapter, is located within Exceptional Value watershed pursuant to Chapter 93 (relating to water quality standards), and the project site contains, is along or within, 150 feet of a river, stream, creek, lake, pond or reservoir. (1208)

Response: Section 102.14(a) has been rewritten for clarity.

104. **Comment:** 102.14 (a) (1) Riparian forest buffer. The proposed regulations should define when a riparian forest buffer needs to be done. It will take years for a riparian forested buffer to grow and become established. If the buffer never gets established to protect water quality, will

the permit be rescinded? Although we recognize the need and value of riparian forested buffers from a water quality perspective, the amount of time spent determining if the buffer is working properly could get complicated and time consuming. (947)

Response: Section 102.14(b)(3) provides a five year buffer establishment period.

105. **Comment:** 102.14 (a)(1)(i) - Must all, or just a portion, of the activity fall within an EV watershed to trigger the requirement for establishing a buffer? The language should be modified to state that the majority of the activity must drain to an EV watershed in order to trigger the buffer requirements. How does the Department envision the applicant dealing with buffers that would be required to extend onto an adjacent property owner's land? (1245)

Response: The specific portion of the proposed activity that falls within 150 feet of an EV or HQ watershed requires buffer protection. Applicants are required to provide buffer protection only on the property they control.

106. **Comment:** 102.14 (a)(1)(i) The implementation of a 150' buffer will be very difficult. Some of the literature suggests that a smaller buffer would be just as beneficial. We would recommend a buffer closer to 50' from top of bank which would be consistent with the restrictions already in place in Chapter 105 through the implementation of the 50' floodway rule. (1123)

Response: A large body of scientific literature supports a minimum 100 foot buffer. The Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

107. **Comment:** The proposed amendments should be clarified to specify that any requirements that are triggered by the presence of EVs waters means that those waters have a designated use as EV waters as set forth in 25 Pa. Code Chapter 93. PADEP makes a distinction between waters that have a designated use as EV waters, and waters that have an existing use as EV waters. The designated use of each waterbody or waterbody segment has passed through both a scientific and regulatory review process conducted and managed by PADEP, has been subjected to public review and comment, and is set forth in duly promulgated regulations. Project proponents, landowners, citizens and governmental entities can easily obtain information on the designated use of a waterway when a project is being considered and permit applications are being prepared. In contrast, those waters that may qualify as EV based on an existing use are not necessarily listed in Pennsylvania's water quality regulations, and therefore the existing use of a water body is not easily obtained by project proponents, landowners, citizens and governmental entities. In the context of NPDES permitting for stormwater discharged from construction activities, We therefore recommend that if the proposed amendments require a severe restriction on property such as a mandatory riparian forest buffer, the amendments be clarified to state the imposition of a mandatory riparian forest buffer be done based on the waterway's designated use as EV as set

forth in the regulations at 25 Pa. Code Section 93.9a-93.92, rather than its existing use as EV. This suggestion could be achieved by noting in proposed Section 102.14(a)(1)(i) that the activity "is located within an Exceptional Value Watershed as designed in 93.9a-93.92; and the project contains . . ." (1256, 1323)

Response: The applicable sections in Section 102.14 have been revised for clarity.

108. **Comment:** 102.14 (a)(1) & (2) First Energy and the Energy Association of PA question whether the inclusion of 102.14 is appropriate as a mandate in this rulemaking. This is only one of many BMPs in the PA Stormwater Manual. As presented in the proposed rulemaking, the landowner would not have a choice of BMPs, because this BMP is mandated in the situations identified in 102.14(a)(1) & (2) . If 102.14 remains in the proposed rulemaking, FirstEnergy and the Energy Association of PA request that the Department replace the word, "shall" with "should" throughout this section. (1115, 1267)

Response: The Department believes that a riparian forest buffer as defined in this Chapter, will provide not only protection to the water body, but also enhance the quality of the physical, chemical and biological characteristics of the waterbody. These scientifically documented benefits are unique to riparian forest buffers. The requirement to install or protect a riparian forest buffer does not preclude the use of any other applicable BMPs found in the Stormwater Best Management Practices Manual (PADEP # 363-0300-002) as part of the E&S or PCSM plans required under this Chapter.

109. **Comment:** 102.14(a)(1) & (2) states that a riparian forest buffer must be incorporated "within the project boundaries". There will be project locations where the establishment of a riparian buffer within the project limits will not be feasible. Project limits within densely developed EV watersheds and those located adjacent to EV streams in the centers of rural villages are two such examples. PennDOT recommends revising this to allow for the option of constructing a riparian buffer along sections of the stream or its tributaries that may have a greater need, but may not be within the project boundaries. Additionally, the rule should allow for riparian mitigation banking and in-lieu-fee programs. (708, 1114)

Response: Thank you for the suggestions. Section 102.14(d)(4) related to waivers provides for the Department to consider offsite or in-lieu-of options when acting upon requests for waivers.

110. **Comment:** Section 102.14(a)(2)-What are the other rules, regulations, orders, permits or other approvals of DEP under which a buffer may be required? (9, 695, 1123, 1245, 1264, 1291) This section is unclear with respect to whether or not it is up to the discretion of DEP or the delegated conservation district to decide if a buffer will be required for a particular project. Can a permittee be required to provide a buffer if no other approval or permit, is required by the Department? Similarly, can the Department require a buffer for a Chapter 105 permit at its discretion? (1129)

Response: Section 102.14(a)(2) has been deleted from the rulemaking.

111. **Comment:** §102.14(a)(2) ("Other approvals that include a buffer") -This section should be deleted from the proposal. The language of this section could be interpreted as a delegation of unlimited authorization to the Department that, without any controls or guidelines, to require the installation of a riparian buffer for any situation, simply by adding conditions to other permits (e.g., Chapter 105 permits). (1278)

Response: Section 102.14(a)(2) has been deleted from the rulemaking.

112. **Comment:** §102.14(a)(2) ("Other approvals that include a buffer") – This section should be deleted from the proposal. Our concern is that the language of this section could be read as delegating to the Department carte blanche authorization to require the installation of a riparian buffer for any situation, simply by adding conditions to other permits (e.g., mining permits, Ch. 105 permits, etc.) issues pursuant to other programs. Such an open-ended delegation, without any control or guidelines, is not acceptable. (1241)

Response: Section 102.14(a)(2) has been deleted from the rulemaking

113. **Comment:** Section 102.14(a)(2) states that riparian forest buffers could be required by other rules or regulations. This could allow or encourage the inclusion of riparian forest buffer requirements in Act 167 Plans or local ordinances, which would limit development. CEC believes that this statement is too broad and should be revised or eliminated. (1153)

Response: Section 102.14(a)(2) has been deleted from the rulemaking

114. **Comment:** Section 102.14(a)(2) Dominion requests that this requirement clarify that the intent is to require buffers only along the EV stream and not every stream within the EV watershed. Dominion requests that the requirement in section (2) be removed as it is an open-ended statement and not a requirement; it does not add to the scope or applicability of this specific requirement. (1152)

Response: Section 102.14(a)(2) has been deleted from the rulemaking

115. **Comment:** Section 102.14(a)(2) notes that a riparian buffer would be required in other regulations where a permit is required. This should be eliminated as it is required under the other requirements and it would be redundant when provided in Chapter 102. Inclusion of it in Section 102 may lead to confusion in it being applied to areas not intended. (1304)

Response: Section 102.14(a)(2) has been deleted from the rulemaking

116. **Comment:** In siting new utility lines, a company can try to avoid development within 150' of an Exceptional Value (EV) stream with minimal earth disturbance in an effort to protect the water resources in the Commonwealth. However 102.14(a)(2) appears to grant the Department discretionary authority to require a forested riparian buffer in any project site. First Energy and the Energy Association of PA request that 102.14(a)(2) be deleted from the rulemaking. (1115, 1267)

Response: Section 102.14(a)(2) has been deleted from the rulemaking

117. **Comment:** Delete Section 102.14 (a)(1)(ii) ~~The activity is authorized utilizing the permit by rule under this chapter.~~ (693)

Response: Section 102.14(a)(2) has been deleted from the rulemaking.

118. **Comment:** Section 102.14(a)(ii) Another option to be added? (1268)

Response: Section 102.14(a)(2) has been deleted from the rulemaking.

119. **Comment:** Section 102.14(a)(2) should be revised to read: "Other approvals that include a buffer." (946, 1191)

Response: Section 102.14(a)(2) has been deleted from the rulemaking.

120. **Comment:** ~~Delete 102.14 (a)(2) Other approvals that include buffer. A riparian forest buffer may be required to be incorporated within the boundaries of a project site in accordance with this section by other rules, regulations, order, permit or other approval of the Department.~~ (693)

Response: Section 102.14(a)(2) has been deleted from the rulemaking.

121. **Comment:** Revise 102.14 (a) (3) to read: Riparian ~~forest~~-buffer. Persons proposing or conducting earth disturbance activities shall incorporate a riparian ~~forest~~-buffer within the boundaries of the project site when the activity requires a permit under this chapter, is located within an Exceptional Value or High Quality watershed, and the project site contains, or is ~~along~~ or within, 150 feet of a ~~river, stream, creek, lake, pond or reservoir~~ surface water. (693)

Response: The Department disagrees. The Department intends that this requirement apply to a narrow group of waters, and the term "surface water" is too broad and includes road ditches and wetlands.

122. **Comment:** Revise 102.14 (a)(3) to read: Discharges into the buffer. (i) ~~Concentrated flow and~~ Accelerated erosion and sedimentation shall be managed in the area upgrade and along the riparian-~~forest~~ buffer in accordance with §§ 102.4(b)--(e) and § 102.8 (relating to erosion and sediment control requirements; and PCSM requirements).

(ii) Concentrated flow shall be managed to the greatest extent practicable in the area upgrade and along the riparian buffer in accordance with §§102.4(b)--(e) and § 102.8 (relating to erosion and sediment control requirements; and PCSM requirements). (693)

Response: Section 102.14 (a)(3) has been revised, and discharges into the buffer are addressed in Section 102.14(c)

123. **Comment:** 102.14(a)(3): Discharges into the buffer. This requirement may have the unintended result of interfering with predevelopment hydrologic regimes and creating unstable,

erosive discharges. This section appears to contradict Section 102.14 (e)(4)(i) which allows for the construction or placement of roads, bridges, trails, storm drainage, utilities or other structures within the riparian forest buffer. (1208)

Response: Section 102.14 (a)(3) has been revised, and discharges into the buffer are addressed in Section 102.14(c)

124. **Comment:** 102.14(a)(4) Existing Buffer Composition. The District questions imposing this requirement which could mandate alteration of intact, healthy and ecologically functioning buffers in relatively undisturbed Special Protection watersheds. (1208)

Response: Section 102.14(a)(4) has been deleted. The final rulemaking clarifies existing buffer composition in 102.14(b)(1).

125. **Comment:** More importantly however, FERC/NERC requires PECO to remove all incompatible trees located within 35 feet of all transmission wire as a matter of electrical reliability and public safety. These additional riparian buffer requirements would add significant delays to the projects, result in additional cost, and be largely self-defeating given that all incompatible trees (trees greater than 15 feet tall) must be removed from the ROW. (1262)

Response: Section 102.14(d)(vi) addresses linear projects including utility lines which are excluded from the riparian buffer requirement.

126. **Comment: Revise** 102.14(a)(4) to read "... or controlled to the maximum extent possible." (1268)

Response: The Department disagrees and does not believe the recommended language is appropriate for this rulemaking.

127. **Comment:** 102.14(a)(4). Clarify the Department's expectation in regards to removing or controlling noxious weeds and invasive species. Guidance should be provided. (1123)

Response: The Department anticipates issuing such guidance concurrently with the final regulation.

128. **Comment:** Chapter 102.14(a) There is a concern that existing buffers established on previously mining permits would have to be expanded. (1265)

Response: This rulemaking applies only to new activities and does not require a retrofit unless the site becomes active again.

129. **Comment:** Section 102.14(a)(4-5) How would the 60 percent uniform canopy cover requirement be measured? It would be difficult, if not impossible, scientifically to do so. What would be the case if this were to be evaluated during the winter? At the same time, the requirement that noxious weeds and invasive species in the buffer be controlled to "the extent possible" is problematic, as the cost of doing so is likely to be extremely high. What if native

material is interspersed with the noxious weeds? How does one keep these plants from spreading? Invasive plants would only be "controlled" on the project site, which may abut property on which invasive plants exist without management. (1264, 1291)

Response: The Department anticipates issuing guidance concurrently with the final regulation that will address these questions.

130. **Comment:** 102.14 (a) (4) Existing buffer composition - We didn't see subsection (d) to see what the requirements of an existing riparian forest buffer are. "The controlling of noxious weeds and invasive weeds must be removed or controlled to the extent possible." This is a very subjective determination. (947)

Response: The Department appreciates the comment, and has revised Section 102.14(b)(3), management requirements for clarity.

131. **Comment:** To be realistic, most of Pennsylvania is surrounded by areas with noxious weeds, whether they be agricultural areas, roadsides, railroad ROWs, pipelines, residential areas, or natural vegetative breaks. You cannot be completely rid of the seed bank and to claim 0% is not being honest on any site. As for the invasive species percentages, I think you are being a bit generous in allowing less than 25% in Class 1 areas. I believe that less than 10-15% invasives should be the amount in a Class 1 area. (1)

Response: The Department acknowledges the comment and has revised 102.14(b)(1) in the final rulemaking to clarify noxious weeds or invasive plants control.

132. **Comment:** Section 102.14(a)(5): It would appear that this provision should reference "paragraph (4)", not "paragraph (3)" (946, 1123, 1129, 1191)

Response: The Department agrees. Section 102.14(a) has been revised and renumbered.

133. **Comment:** Section 102.14(a)(4) should be removed. Section 102.14(a)(5) and (6) both require the planting of native trees and shrubs in the areas of the required riparian buffer where the vegetation is lacking. The acreage of ground that qualifies as riparian buffer may be substantial. If these areas require the establishment of vegetation, the cost may be excessive and may make the development of the tract not feasible. This is in a sense a taking if it is making a property value climb substantially. (1304)

Response: The Clean Streams Law provides the department with the Authority to determine the appropriate regulatory mechanisms for preventing pollution to waters of the Commonwealth, and does not in this instance mandate the inclusion of all possible stormwater BMPs. 35 P.S. § 691.402. The Department has determined that post construction stormwater should be managed with BMPs. The PCSM provisions, to a large extent, are a codification of the existing program in Pennsylvania mandated by federal requirements as well as adverse law. In administering this program, the Department has observed that the riparian forest buffers are one of the most cost effective stormwater management BMPs. Therefore, pursuant to the Department's authority under Section 402 of the Clean Streams Law, DEP has determined that

riparian forest buffers are necessary to protect exceptional value and high quality waters of the Commonwealth from land development activities. The Department notes that only 26,215 miles (roughly 30%) of Commonwealth streams miles are classified as special protection (exceptional value or high quality). Further, only 714 (0.8%) of all stream miles are presently classified as special protection and designated as "impaired" For the vast majority of projects – because they will not be located adjacent to impaired special protection waters – riparian forest buffers will not be mandatory, but rather will be an optional BMP that the applicant may choose to manage their post construction stormwater.

Land development activities change natural features and alter stormwater runoff characteristics. The resulting alterations of stormwater runoff volume, rate and water quality can cause stream bank scour, stream destabilization, sedimentation, reductions in groundwater recharge and base flow, localized flooding, habitat modification and water quality and quantity impairment, which constitute pollution as that term is defined in the Pennsylvania Clean Streams Law, 35 P.S. Section 691.1. Riparian buffers play a vital role in mitigating the effects of stormwater runoff from land development activities.

Riparian buffers are useful in mitigating or controlling point and nonpoint source pollution by both keeping the pollutants out of the waterbody and increasing the level of instream pollution processing. Used as a component of an integrated management system including nutrient management along with E&S control practices, riparian buffers can produce a number of beneficial effects on the quality of water resources. Riparian buffers can be effective in removing excess nutrients and sediment from surface runoff and shallow groundwater, stabilizing streambanks, and shading streams and rivers to optimize light and temperature conditions for aquatic plants and animals. Riparian buffers provide significant flood attenuation and storage functions within the watershed. They prevent pollution both during and after earth disturbance activities, and provide natural, long-term sustainability for aquatic resource protection and water quality enhancement.

A riparian forest buffer is a specialized type of riparian buffer. Scientific literature supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can do all of the following: Capture and hold stormwater runoff from the majority of Pennsylvania storms in a given year; Infiltrate most of that water and/or transport it as shallow flow through the forest buffer soils where contaminate uptake and processing occurs; release excess storm flow evenly further processing dissolved and particulate substances associated with it; sequester carbon at significant levels; improve the health of the stream and increase its capacity to process organic matter and nutrients generated on the site or upstream of the site.

The PCSM provisions, to a large extent, are a codification of the existing program in Pennsylvania mandated by federal requirements as well as adverse case law. In administering this program, the Department has observed that the riparian forest buffers are one of the most cost effective stormwater management BMPs. Therefore, pursuant to the Department's authority under Section 402 of the Clean Streams Law, DEP has determined that riparian forest buffers are necessary to protect exceptional value and high quality waters of this Commonwealth from land development activities.

In addition to Department observation, numerous studies demonstrate that riparian forest buffers are particularly effective in mitigating adverse impacts, due to their proximity immediately adjacent to the surface water and their function as a physical buffer to that surface water. Specifically, riparian forest buffers protect surface waters from the effects of runoff by providing filtration of pollutants, bank stability, groundwater recharge, rate attenuation and volume reduction. Riparian forest buffers reduce soil loss and sedimentation/nutrient and other pollution from adjacent upslope flow (Dosskey et al. 2002). Riparian forest buffers also remove, transform, and store nutrients, sediments, and other pollutants from sheet flow and shallow sub-surface flow and have the potential to remove substantial quantities of excess nutrients through root-zone uptake. (Desbonnet et al, 1994, Lowrance et al 1997, Mayer et al, 2007, and Newbold et al, 2010). Nitrates can be significantly elevated when adjacent land uses are urban/suburban. Further, the buffer's tree canopy shades and cools water temperature, which is especially critical to support high quality species/cold water species – a function not as effectively provided by any other BMP (Jones, 2006).

Other neighboring states have also recognized the value of riparian buffers. For example New Jersey requires buffers along all trout streams and special protection waters; Virginia requires riparian buffers to implement the Chesapeake Bay Preservation Act; and Maryland has buffer regulations to protect tidal waters, tidal wetlands and streams tributary to the Chesapeake Bay. Riparian forest buffers provide other economic benefits and intrinsic value to land.

There are many existing provisions in the regulations found in Title 25 that limit the extent of activities that can occur along streams and wetlands as a means of protecting water quality. A number of these types of controls are in the form of “setbacks”. Although riparian forest buffers also have additional BMP functions, riparian forest buffers are like other regulatory setbacks in that they are a project or facility siting limitation that is included in the regulations as an environmental control. This type of environmental control mechanism is found in numerous other environmental regulations, including but not limited to: Surface and Underground Coal Mining: General, 25 PA Code § 86.102(12), [mining prohibited within 100 feet of a perennial or intermittent stream]; Noncoal mining, 25 PA Code § 77.504, [mining prohibited within 100 feet of a perennial or intermittent stream]; Water Resources: General Provisions, 25 Pa. Code §§ 91.36, 92.5a(e)(1)(i), [stream setbacks and or buffers required for land application of animal manure]; Nutrient Management, 25 Pa. Code § 83.351(a)(1)(v), [surface water and wetland setbacks for manure storage facilities]; Municipal Waste Landfills, 25 Pa. Code § 273.202 [100 foot surface water and 300 foot exceptional value wetland setbacks for municipal waste landfills]; Municipal Waste: Land application of sewage sludge, 25 Pa. Code § 275.202 [land application of sewage sludge prohibited within 100 feet of a perennial or intermittent stream or exceptional value wetland]; Municipal Waste: Construction/demolition waste landfills, 25 Pa. Code § 277.202, [flood plain and wetland setbacks]; Municipal Waste: Resource recovery facilities, 25 Pa. Code § 283.202 [flood plain and wetland setbacks]; Oil and Gas Wells, 25 Pa. Code § 78.63 [100 foot setbacks for land application of residual waste from oil and gas well development]; and Hazardous Waste Management: Siting, 25 Pa. Code § 269a.29, [hazardous waste treatment and disposal facilities may not be sited in watersheds of exceptional value waters]. Finally, the final

regulation contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

134. Comment: Delete 102.14 (a)(4) ~~Existing buffer composition. An existing riparian buffer must meet the requirements of subsection (d); consist predominantly of native trees and shrubs that provide at least 60% uniform canopy cover; noxious weeds and invasive species must be removed or controlled to the extent possible.~~ (693)

Response: The Department disagrees.

135. Comment: 102.14(a)(4) through (6) - It is unclear because of the location of these sections whether they are only applicable to sites meeting the requirements of §102.14(1). (1129)

Response: Section 102.14(a) has been revised and reorganized for clarity.

136. Comment: Delete 102.14 (a)(5) ~~Existing site enhancement. Existing sites that consist of predominantly native woody vegetation that do not meet all of the criteria in paragraph (3) shall be enhanced or widened, or both, by additional plantings in open spaces around existing native trees and shrubs to establish a riparian forest buffer. Noxious weeds and invasive species shall be removed or controlled to the extent possible.~~ (693)

Response: The Department believes that in an impaired EV or HQ watershed existing riparian buffers should be enhanced to meet the standards for a riparian forest buffer in 102.14.

137. Comment: Revise 102.14(a)(5) to read "... or controlled to the maximum extent possible." (1268)

Response: The Department disagrees and does not believe the recommended language is appropriate for this rulemaking.

138. I recommend that the buffers allow discretion to permit a variation in the required width. This would permit a design to improve a riparian buffer while integrating it into a site design. It is appropriate to allow an engineer to design a system that is better than the existing buffer. (1304)

Response: The Department disagrees. The minimum width established in this Chapter is based upon scientific research related to water quality. The Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

139. **Comment:** Section 102.14(a)(6) Rather than establishing a riparian forest buffer on a site with no native woody vegetation, such vegetation should be allowed to grow in naturally. (695, 1245, 1264, 1291)

Response: Section 102.14(a) has been revised to allow for protection of natural vegetation in EV or HQ watersheds attaining their designated use.

140. **Comment:** 102.14(a)(6). Buffer establishment. Many streams in Pike County meander through wetlands without 60% uniform canopy cover. We do not believe that it is the intent of the Chapter 102 revisions to force forestation of buffers in wetland areas that currently do not support 60% uniform canopy cover. This may, however, be the result. (1208)

Response: The Department appreciates the comment. It is not the intent of this regulation to remove or alter existing wetlands.

141. **Comment:** Correct Section 102.14(a)(6) to read: "Buffer establishement" (946, 1191)

Response: The Department agrees.

142. **Comment:** **Revise** 102.14 (a)(6) to read: *Buffer establishment*. On sites ~~with no native woody~~ where buffers contain a predominance of non-woody vegetation, a riparian forest buffer shall be established in accordance with this chapter.

i. ~~(7) Wetlands and buffers~~. Wetlands located in the riparian-forest buffer shall be protected and maintained consistent with Chapter 105 (relating to dam safety and waterway management).

ii. ~~(8) Plan submission~~. The applicant shall prepare and submit a plan for riparian forest buffer management to the Department or conservation district as part of the PCSM Plan. The riparian forest buffer management plan must describe how the management requirements of this section will be met. (693)

Response: Section 102.14 (a)(6) has been deleted and Section 102.14(a) has been revised and reorganized for clarity.

143. **Comment:** 102.14 (a)(6) - On sites with no native woody vegetation, the buffer should mature naturally versus requiring the applicant to establish and care for the buffer. Doing otherwise would pose a financial hardship to the applicant and expose the stream to potential pollution events while the soil is disturbed during planting activities. (695)

Response: Section 102.14(a) has been revised to allow for protection of natural vegetation in EV or HQ watersheds attaining their designated use.

144. **Comment:** Section 102.14.a.6 Does this section conflict with Section 102.14.a.1? If not, it should be reworded to better clarify the intent. (1123)

Response: Section 102.14 (a)(6) has been deleted and Section 102.14(a) has been revised and reorganized for clarity..

145. **Comment:** Section 102.14(a)(7)-This requirement needs clarification-would or would not such wetlands need to be planted with trees? (1264, 1291)

Response: The Department appreciates the comment. It is not the intent of this regulation to remove or alter existing wetlands.

146. **Comment:** 102.14(a)(8) states that a riparian forest buffer management plan must be prepared and submitted with the PCSM Plan. PennDOT requests clarification from DEP on what constitutes an acceptable plan. (708, 1114)

Response: Clarification of management plan requirements are found in Section 102(b)(3).

147. **Comment:** Section 102.14(a)(8) should be revised to read as follows: The riparian forest buffer management plan must describe how the management requirements of this section **and all other requirements included under this chapter will be met.** (1208)

Response: Clarification of management plan requirements are found in Section 102(b)(3).

148. **Comment:** Section 102.14(b)(1&2). The District questions the inclusion of buffer zones in the proposed regulation when there is little information included to distinguish between acceptable activities in the 2 zones. (1208)

Response: This section has been reworked, and the zones have been clarified in Section 102.14(b)(1)(iii). Zone 1, closest to the water consists of native trees, and Zone 2 consists of native trees and shrubs. The zones are important when establishing a new riparian forest buffer.

149. **Comment:** Revise 102.14 (b)(1) Buffer zones to read: ~~At a minimum, newly established Riparian forested buffers must be composed of two distinct zones, Zones 1 and 2 . (See Paragraph (2) regarding zones.) Concentrated flow and accelerated erosion and sedimentation shall be managed in the area upgrade and along the riparian forest buffer in accordance with this subsection and subsection (c) — (e) and §102.8.~~

(i) Zone 1 must measured perpendicular to and on a horizontal line from the top of the bank of a river, stream, or creek, wetland boundary, or normal pool elevation of a lake, pond, or reservoir.

(ii) Zone 2 must begin at the landward edge of Zone 1 and occupy an additional strip of land measured perpendicular to and on a horizontal line from the edge of Zone 1. (693)

Response: This section has been reworked, and the zone measurement have been clarified in Section 102.14(c)(3).

150. **Comment:** Section 102.14(b)(1) If concentrated flow must be managed in the area upgrade and in the buffer as prescribed earlier in the draft regulation, how can a project discharge to a stream as required by DEP? Section 102.14(b)(2)(i)-What if the area in question is a wetland? What if a project is an urban/suburban area and a landowner wants to install ornamental gardens? (1264, 1291)

Response: The intent of these requirements is to discharge into the buffer with a sheet or shallow concentrated flow. This type of discharge will protect the integrity of the buffer and will allow the discharge to eventually enter into the groundwater or into the stream. Wetlands within the buffer should be protected and maintained consistent with Chapter 105.

151. **Comment:** Clarify what is meant by discharges to a riparian forest. Most riparian areas have slopes and do not have undergrowth that will support any type of discharge. (256)

Response: The intent of these requirements is to convert discharges from the disturbed area to the buffer into a sheet flow prior to entering the buffer. This is to minimize the potential for short-circuiting the buffer.

152. **Comment:** Discharges into a buffer concentrated flow would require a level spreader to discharge to a 150 ft. buffer would only be possible under ideal conditions. (Draft E & S Manual-Page 188) Does this section also state that E & S and PCSWM BMP's should **not** be located within a buffer? (2)

Response: The Department disagrees with the assertion that the only way to treat discharges into a buffer is with a level spreader. BMPs that need to treat the 2 year/ 24 hour storm event should not be located within the buffer. The idea is to ensure that any design criteria discharge from the disturbed area enters the buffer as sheet flow. The Department does not specify how this can be accomplished. In many cases no discharge will occur under design conditions. In any event, no other E&S or PCSM BMPs should be located in the buffer.

153. **Comment:** 102.14 (b)(2) *There does not appear to be a substantive difference between Zone 1 and Zone 2, especially considering many streams are currently void of vegetation and the Buffer will be established by the applicant. Greater clarity for the difference between Zones should be provided.* (1190)

Response: This section has been reworked, and the zones have been clarified in Section 102.14(b)(1)(iii). Zone 1, closest to the water consists of native trees, and Zone 2 consists of native trees and shrubs. The zones are important when establishing a new riparian forest buffer.

154. **Comment:** *Items that need more clarification are various uses per Zone (Zone 1 should be more restrictive than Zone 2, currently there is no differentiation), buffer impacts for a Chapter 105 permitted impact (road crossing, utility crossing, etc), currently utility installation is prohibited in the Buffer, regional sanitary sewer mains (trunk lines) need to be constructed at the lowest possible elevations and this provision will severely limit the ability to properly locate regional utilities.* (1190)

Response: This section has been reworked, and the zones have been clarified in Section 102.14(b)(1)(iii). Specific exceptions are described in Section 102.14(d).

155. **Comment:** 102.14 (b) (2) (i) "...must be composed of a variety of native riparian tree species." Is a list of applicable species available? "Variety" is quite subjective. (436, 650)

Response: It is the Department's intent to include such a list in the Buffer Guidance which will be issued concurrently with this final rule.

156. **Comment:** 102.14 (b) (2) (i) & (ii) - Forested buffers should not be required on off-site properties when the waters are not located on the permittee's property. This should be clarified. (1129)

Response: Section 102.14(a) has been revised to clarify that the riparian buffer requirement is tied to the project site.

157. **Comment:** 102.14 (b) (2) (2) Impaired waters. It is not clear under this section if it matters what portion of a water body is impaired? How will the designation of the entire Pennsylvania portion of the Chesapeake Bay being listed as impaired affect these buffer requirements? (947)

Response: 102.14(d)(2) in the proposed rulemaking – which required buffers on all impaired waters (special protection and all others) where construction activities would take place, has been deleted. The final rulemaking includes the obligation to establish or maintain a riparian forest buffer only where the project site contains, is along or within 150 of special protection waters that are not meeting their designated use (impaired) at the time of application.

158. **Comment:** Delete 102.14 ~~(b)(2) Zones~~. (693)

Response: This section has been reworked, and the zones have been clarified in Section 102.14(b)(1)(iii). Zone 1, closest to the water consists of native trees, and Zone 2 consists of native trees and shrubs. The zones are important when establishing a new riparian forest buffer.

159. **Comment:** 102.14(b)(2)(i) requires that newly established buffers have undisturbed trees in Zone 1. Many times, the adjacent floodplain is not currently forested. Also, this can dramatically change the hydraulic characteristics of a stream and increase the potential for flooding at adjacent properties due to higher n-values (as the trees mature) as well as create a source of large flood debris (floating trees). (708, 1114)

Response: Flood flows that would impact the buffer area are slower moving waters that would not be impacted by tree growth. Flow in the channel would be faster moving water that would be impacted more by a change in n-value. A healthy, mature riparian forest buffer of sufficient width stabilizes stream banks and would reduce the possibility of fallen trees.

160. **Comment:** Section 102.14.b.2.ii Clarify how Zone 2 is measured "horizontally on a line perpendicular from the top of streambank or normal pool elevation". If Zone 2 starts on the edge of Zone 1, it would not be near the streambank or normal pool. (1123)

Response: This section has been reworked, and the zone measurement has been clarified in Section 102.14(c)(3). In addition, Zone 2 begins where Zone 1 ends going landward.

161. **Comment:** 102.14 (b)(3) Special protection waters. - The proposed regulations seem to imply the requirement of planting riparian forest buffers without any regard to property boundaries. (947)

Response: Buffers would only be required on property controlled by the applicant and would not be required on adjacent property.

162. **Comment:** 102.14 (c) *Measurements*. Riparian ~~forested~~ buffers must be measured horizontally ~~with no more than a 10% variation~~ below the minimum width from the normal pool elevation for lake, pond or reservoir and from top of streambank or top of slope for streams. (693)

Response: This section has been reworked, and the zone measurement has been clarified in Section 102.14(c)(3). The regulation retains the 10% variation in recognition of variable sites and conditions.

163. **Comment:** 102.14 (c) Clarify the intent of the maximum 10% variation. (1123)

Response: This section has been reworked, and the zone measurement has been clarified in Section 102.14(c)(3). The regulation retains the 10% variation in recognition of variable sites and conditions.

164. **Comment:** 102.14(a)(3) --This section appears to encourage the use of level spreaders which have a proven track record of being ineffective at protecting downslope areas (in this case the critical riparian buffer) from gully erosion. Concentrating stormwater flows should be discouraged on-site prior to reaching level spreaders and sheet flow should be encouraged or required. (218)

Response: The Department agrees that concentrating runoff should be discouraged, but has not prescribed to applicants how that is achieved.

165. **Comment:** 102.14 (c)(2)(iii) There does not appear to be an flexibility in this new requirement for projects that have only limited and temporary stormwater impacts, such as natural gas well site construction and pipeline projects, the impacts from which are typically limited to construction-related issues easily managed by other BMPs. Moreover, this proposal fails to account for typical right-of-way maintenance techniques that apply to pipelines requirements. (1184, 1250, 1252)

Response: Linear projects, such as pipelines are included in 102.14(d) exceptions.

166. **Comment:** 102.14 (d) "Average minimum widths." - this is confusing as it may be read that these widths are required everywhere. Clarify that these apply only when riparian buffers are required. (436, 650)

Response: The final rulemaking includes the obligation to establish or maintain a riparian forest buffer ONLY where the project site contains, is along or within 150 of special protection waters that are not meeting their designated use at the time of application.

167. **Comment:** 102.14 (d) A single "minimum average width" standard is inappropriate and is not based in sound science. Work done at the Pennsylvania State University (Dr. Albert Jarrett, Unpublished Observations on Effective Stream Buffers within University Agricultural Plots, The Agricultural and Biological Engineering Department, the Pennsylvania State University), has indicated that in many cases stream buffers as narrow as 35 feet provide significant protection to streams and waterways. In fact, in personal conversations with Dr. Jarrett, he has indicated that he does not believe that there is much water quality value to be gained from using forested buffers greater than 35 feet in width, particularly since the water quality value comes from the movement of runoff as "sheet flow." It also makes logical sense that smaller buffers would be appropriate for the protection and enhancement of smaller waterways. It is recommended that any required buffer width be revisited and be established based on stream width, tributary drainage area, or some other more appropriate variable measure. Another concern is the impact of the proposed buffer widths on developable land areas. In a significant number of cases the buffer width requirements will render parcels undevelopable. Commentator offered several examples. (1255)

Response: A large body of scientific literature related to water quality supports the minimum buffer widths in this Chapter. The Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

168. **Comment:** 102.14 (d)(1): Clarify this section as it is unclear if the riparian buffer Requirement is only for EV watersheds, permit-by-rule, or any site with a river traversing it. (1123)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application. Section 102.15 (permit-by-rule) has been deleted from this rulemaking.

169. **Comment:** 102.14 (d)(1): If a site abuts a stream, clarify if you have to provide a riparian buffer on "both sides" if your site is not on both sides of the stream. Or, if your site is on both sides of a stream, but you are only proposing disturbance on one-side, is a buffer required on both sides? Or, what if your site is within the required buffer distance, however, there is another property in between your site and the stream. (1123)

Response: Buffers would be required on property controlled by the applicant and would not be required on adjacent property. The definition of project site includes "the entire area of

activity, development, lease or sale...” , therefore if the site is on both sides of a stream, an appropriate buffer would be required on both sides of a stream.

170. **Comment:** 102.14 (d)(2). Are there specific reasons to require a wider buffer for impaired waters? Many impaired waters are in developed areas where getting a 150-foot buffer may not be feasible for most sites. This may actually discourage buffers along impaired waters because the permit-by-rule option will not be achievable and therefore there will be little incentive to provide buffers. In urbanized areas, even getting a 50- or 75-foot buffer could be very beneficial for impaired waters. (436, 650)

Response: A large body of scientific literature related to water quality supports the minimum buffer widths in this Chapter. The Department recognizes the difficulty in establishing buffers in an already developed area, and therefore added Section 102.14(d) exceptions.

171. **Comment:** 102.14 (d)(2). An offset should be included if discharging to impaired waters. (1268)

Response: The Department has provided an opportunity to utilize riparian forest buffers in Section 102.14(e)(2) that would allow for the use of trading or offsetting credits in accordance with procedures or regulations established by the Department.

172. **Comment:** 102.14 (d)(1, 2, 3). These sections should be clarified to reflect that both sides applies to all rivers, perennial or intermittent streams, not just intermittent streams. (1208)

Response: Section 102.14(b)(2) has been reworked, to clarify minimum widths.

173. **Comment:** 102.14(d)(1) and (2) - These sections seem to contradict the conditions requiring a buffer outlined in 102.14(1). These sections seem to indicate that buffers are required along all waters, not just in Exceptional Value watersheds. (1129, 1223)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application. Section 102.15 (permit-by-rule) has been deleted from this rulemaking.

174. **Comment:** 102.14(d)(1-3) requires minimum riparian buffer widths be 100 feet along all rivers, perennial and intermittent streams (both sides), lakes, ponds or reservoirs; 150 feet along impaired waters; 150 feet long HQ and EV waters. Due to property ownership and rights issues as well as costs, this is not possible by PennDOT. PennDOT requests that Commonwealth properties be explicitly excluded from this requirement. (708, 1114)

Response: Buffers would only be required on property controlled by the applicant and would not be required on adjacent property. Further, Section 102.14(d)(1)(v) and 102.14(d)(2)(ii) provides for exceptions and waivers related to road maintenance activities and construction.

175. **Comment:** 102.14 (e)(1) Are there maintenance agreements that are required and/or enforceable for both existing and newly established riparian forest buffers? (1268)

Response: Section 102.14(b)(4) states that the riparian forest buffer management plan shall be part of the PCSM plan. A PCSM plan includes the obligation for continued operation and maintenance.

176. **Comment:** 102.14 (e)(2) We have concerns about our role in determining compliance with the riparian forest buffer requirements. (947)

Response: Acceptance of delegation by a conservation district is a voluntary action by the conservation board of directors. The Department will continue to provide training and guidance to conservation districts, including guidance on implementation of riparian buffer requirements. The Department values conservation district participation in this program. However, if a district no longer wishes to hold delegation, a procedure is in place to revise or terminate the delegation agreement.

177. **Comment:** The existing buffers on the site must meet the requirements proposed by the Department (Zones 1 and 2) for native species and control of invasive species. If the existing buffer IS non-existent or does not have the appropriate mix of native species the applicant will incur additional costs associated with developing a management plan, planting native species, controlling invasive species and post construction monitoring for at least five years. The rules are not clear on the agency (Department or Conservation District) responsible for determining compliance via the post construction riparian forested buffers monitoring reports? (1259)

Response: Section 102.14(b)(4) states that the riparian forest buffer management plan shall be part of the PCSM plan. A PCSM plan includes the obligation for continued operation and maintenance and is reviewed by the Department or the delegated conservation district.

178. **Comment:** 102.14 (e)(2) - The requirement to establish a riparian forest buffer that consists predominantly native species is a problematic one on several fronts. Economically, the cost of removing invasive species along the entire width of a buffer - on both sides of a stream - will necessarily pose a financial hardship on the applicant. Environmentally, the impact of disturbing the whole length of the stream bank to remove such species would seem to contradict the environmental objectives of maintaining a buffer by presenting the real possibility of creating a significant pollution event to the stream. And pragmatically, why create unnecessary cost and environmental risk when, after 5 years, they invasive species will likely return? We recommend removing all language referencing the removal of weeds and invasive species. (695, 1245)

Response: The control of noxious and invasive vegetation is extremely important during establishment of new buffers or enhancing existing buffers. Section 102.14 has been revised to clarify that point.

179. **Comment:** 102.14 (e)(2) This section would require long-term maintenance of a riparian forest buffer, similar in nature to a Post Construction Stormwater Management maintenance plan

and would add substantial direct and indirect cost to all projects. Dominion requests that this requirement be limited to those projects that impact current forest riparian buffers only. (1152)

Response: Section 102.14(b)(4) states that the riparian forest buffer management plan shall be part of the PCSM plan. A PCSM plan includes the obligation for continued operation and maintenance.

180. **Comment:** Section 102.14 (e)(2) " ... invasive species have been removed or controlled to the extent possible for a period of at least 5 years." "Extent possible" is subject to considerable interpretation and 5 years is a long time. This section could therefore serve to discourage the use of riparian buffers. If an existing buffer is in good condition and is left undisturbed, is maintenance required? (436, 650)

Response: An existing buffer in good condition can be left undisturbed, but must be appropriately managed to assure natural regeneration and to address hazards.

181. **Comment:** Section 102.14 (e) (3) - If housing, grazing or otherwise maintaining animals within the riparian forest buffer is prohibited as well as the other listed items, the question that comes into play is "Who owns this land"? If the landowner is not permitted to use the land, does this then become a permanent easement to the Commonwealth? Does the landowner no longer pay taxes on the acreage? (645)

Response: The landowner is permitted to use the land in accordance with the riparian forest buffer management plan. Section 102.14(f) lists the activities authorized within a riparian buffer.

182. **Comment:** 102.14(e) specifies a timeframe of "at least 5 years" for the post-construction management and monitoring of established buffers. No timeframe for management is placed on existing buffers and it seems as though this might be intended to continue in perpetuity. This open ended "management" requirement could result in Department led management and monitoring activities for significant acreages of land scattered across many locations. OCC comment (2) to the Draft Riparian Forest Guidance addresses a similar issue within the Guidance. This additional burden on the Department might be manageable if riparian forest buffers are banked resulting in fewer locations to be managed. (708, 1114)

Response: Management of a riparian forest buffer is described in Section 102.14(b)(3). The Department believes that active management is absolutely critical during the first five years of establishing a new riparian forest buffer or enhancing an existing buffer to meet riparian forest buffer standards. Management would be focused on ensuring survivability of the young trees and shrubs. Once the new trees and shrubs are established (end of the 5-year period) then management activities become less active and focus more on maintenance needs as defined as long term operation and maintenance in the riparian forest buffer management plan. Active management of an existing riparian forest buffer is not required, however activities or practices used to maintain the riparian buffer are allowed in Section 102.14(f)(3)(i). Forest buffer banking is not being considered at this time but may be in the future.

183. **Comment:** 102.14(e)(4) If construction or land disturbance may be allowed, how can it be considered a buffer? (1268)

Response: The Department believes that certain activities as defined in 102.14(f)(2) and (3) appropriate within the riparian buffer.

184. **Comment:** 102.14(e)(4) allows construction of roads and bridges in a riparian forest buffer "when permitted by the Department". It is unclear if this is referring to a Chapter 105 permit or whether it simply means "when allowed by the Department". PennDOT requests that DEP clarify this. (708, 1114)

Response: This refers to a Chapter 105 permit when such a permit is required.

185. **Comment:** 102.14 (e)(3) The list of prohibited practices and activities within the riparian buffer seem to make it impossible to remove weeds and invasive species. For example, removing such plant materials will likely require soil disturbances and off road vehicular traffic. How does the Department envision applicants complying with 102.14(e)(2) if these activities are prohibited? (695, 1245)

Response: This section has been reworked, and Section 102.14 (f)(3)(i) indicates that activities or practices used to maintain the riparian buffer are allowed.

186. **Comment:** Section 102.14 (e)(4)(i). Many of these "acceptable activities" would appear to undermine the function of the buffer. There need to be limits to them and a qualifying statement should be added: "if the functions of the overall buffer are maintained." (436, 650)

Response: This section has been revised. The Department intends to evaluate the impact of the authorized activity to assure that it does not impact the integrity of the buffer.

187. **Comment:** Section 102.14 (e)(4)(i) lists construction or placement of utilities in a forested riparian buffer as an acceptable activity. Overhead electric lines could not be constructed in a forested riparian buffer. These overhead lines require a right-of-way varying in width from 30 to 100 feet, that must be cleared of trees and brush that could grow into the lines. In addition, this clearance requirement already limits the property owner in the development allowed in the right-of-way or easement granted to a utility. The requirement to maintain or plant a forested buffer is contrary to present practices and federal requirements and will result in additional utility costs for property acquisition and possible buffer maintenance. Ultimately, these additional costs will fall on the ratepayer as transmission and/or distribution charges. While FirstEnergy and the Energy Association of PA acknowledge the biological value of the buffer, the Department should consider buffers other than forested, if necessary, for linear utility line projects. (1115, 1267)

Response: The Department appreciates the recognition of the value of buffers. Linear projects are addressed in Section 102.14(d) exceptions.

188. **Comment:** While we strongly suggest that mandatory riparian forest buffer requirements be eliminated, if the concept is retained, we believe that it is vital to modify the proposed

amendments to include "railroad projects" as one of the enumerated practices and activities that can be constructed, placed, maintained, operated and enlarged within a riparian forest buffer pursuant to 25 Pa. Code 102.14(e)(4)(i) (proposed). For reasons described throughout these comments, rail projects are similar to the other types of linear features such as roads, bridges and utilities that are already specifically mentioned in the proposed amendments. (1256)

Response: Rail lines are addressed in Section 102.14(d)(2)(ii) exceptions.

189. **Comment:** Section 102.14 (e)(5)(i) "...the disturbance of existing vegetation, tree removal, shrub removal, clearing, mowing, burning, or spraying.. ." These generally sound like activities that should NOT be done in the buffer. The language of this section should be strengthened and clarified. (436, 650)

Response: The Department disagrees. These activities are necessary to maintain the overall health and integrity of the buffer.

190. **Comment:** Section 102.14 (e)(5)(iii) Why would scientific studies need to be approved by the Department? (436, 650)

Response: This section has been revised, and research and data collection activities are allowed within the riparian buffer in Section 102.14(f)(3)(v), and do not require Department approval.

191. **Comment:** 102.14(e)(5)(v): Definitions/examples? (1268)

Response: Passive recreational activities could include walking paths, nature study, fishing, bird watching and any other similar low impact recreational activities. Section 102.14(f)(3)(iii) has been revised to clarify low impact activities further.

192. **Comment:** 102.14(e)(5)(iv): We request that you remove "... approved by the Department of Conservation and Natural Resources." We are concerned that in the event that many requests come in, we will not have the time or staffing resources to approve all the resulting plans. We recommend replacing it with one of the following options: a. "written by a DCNR-trained Stewardship Plan Writer." or b. "written by a forestry professional with a four-year degree in forestry from an institution accredited by the Society of American Foresters (SAF) or a two-year degree in forestry from an institution recognized by the SAF" (1275)

Response: This section has been revised and the phrase "... Forest Stewardship Plan approved by the Department of Conservation and Natural Resources." has been deleted.

193. **Comment:** 102.14(f)(l) requires buffers be protected in perpetuity. Any restrictions placed on property adjacent to a PennDOT bridge could pose problems for future improvements to the roadway. If the land between the disturbed area and the adjacent stream does not belong to the PennDOT, it is unclear if PennDOT would be forced to acquire the land or purchase some type of conservation easement from the property owner. PennDOT requests an exclusion be added for Commonwealth-owned projects. (708, 1114)

Response: Projects involving road maintenance activities and linear projects such as roadways are addressed in Section 102.14(d) exceptions. In addition, protecting Commonwealth-owned property in perpetuity has been addressed in Section 102.8. Section 102.8 has been revised to state that for Commonwealth owned-property, a covenant that runs with the land is not required until the transfer of the land containing a PCSM BMP occurs. Upon transfer of the Commonwealth owned-property containing a PCSM BMP, the deed shall comply with the requirements of Section 102.8(m).

194. **Comment:** 102.14(f)(1). Permanent protection of riparian buffers. We recommend removing permit conditions and local ordinances from the list of permanent protections for buffers. Permit conditions no longer exist once the permit expires or is terminated and local ordinances are often revised or repealed by actions of local governments. Neither of these options provides permanent protection. (1208)

Response: The Department disagrees with the deletion suggestion, however has added clarification to this section that these mechanisms are to ensure the long term functioning and integrity of the riparian buffers.

195. **Comment:** Section 102.14(f)(1) requires protecting riparian buffers in perpetuity through legal means such as deed restrictions, easements, and ordinances. Since installation of a riparian forest buffer under the proposed regulation is essentially eliminating future land use for the land owner, it is highly unlikely that the land owner would agree to such a condition. The requirement to permanently protect the riparian forest buffers would impose under burdens on project development and cause delays in implementation of environmental projects. The removal of this requirement for riparian forest buffers from the proposed regulation and establishing it as a primary and preferred BMP per the previous comment makes better environmental and business sense. (1278)

Response:. Section 102.14 (d) has been added to outline exceptions to the requirement for riparian buffers. The Department does not agree that property owners lose the use of their land when a buffer is established. The final regulation contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

196. **Comment:** Section 102.14(f)(1) The cost of the acquiring the riparian buffer, added to right of way costs and the need to obtain the perpetual protection of the land, will be burdensome and costly to the utilities. It may limit or prohibit the location of our utility services and essentially involve a taking of the landowners' property to comply with this mandatory regulation. As proposed by PADEP, the landowner would then have the financial obligation to maintain that buffer as a PCSM BMP. Dominion requests that this requirement be limited to developments that have post-construction impacts that must be controlled through engineered controls only. (1152)

Response: Section 102.14(f)(2)(i) allows construction or placement of utilities within the riparian forested buffer when authorized by the Department. In addition linear projects are addressed in Section 102.14(d) exceptions.

197. **Comment:** The riparian forest buffer requirement is specifically and substantively problematic for the utility industry. For example, for utility line crossings, the utility typically does not own the land. Right-of-way needs to be negotiated and obtained from the land owner. Section 102.14(f)(1) requires protecting riparian buffers in perpetuity through legal means such as deed restrictions, easements, and ordinances. Since installation of a riparian forest buffer under the proposed regulation is essentially eliminating future land use for the land owner, it is highly unlikely that the land owner would agree to grant the right-of-way for the crossing, therefore blocking the utility's progress. Does DEP propose the use of eminent domain just to satisfy this proposed riparian forest buffer provision? The Chamber recommends that utility services be exempt from the riparian forest buffer requirement. As an alternative, remove the requirement for riparian forest buffers from the proposed regulation and establish it as a primary and preferred BMP per the Chamber's previous comment. (1241)

Response: Section 102.14(f)(2)(i) allows construction or placement of utilities with the riparian forested buffer when permitted by the Department. In addition linear projects are addressed in Section 102.14(d) exceptions.

198. **Comment:** 102.14(b)(5)(xv) should read riparian forest buffer, and not forest riparian buffer. (708, 1114)

Response: The Department agrees.

199. **Comment:** 102.14(a)(2) should actually be (a)(1)(iii), or the word "or" should be removed from (a)(1)(ii). (708 , 1114)

Response: Section 102.14(a)(2) has been deleted from the rulemaking

200. **Comment:** § 102.14 (a)(3) Does this statement then require a level spreader upslope of the buffer from any sediment or detention basin? (1315)

Response: A level spreader is not specifically required, however Section 102.14(c) does state the stormwater entering the buffer must be managed as sheet flow or shallow concentrated flow.

201. **Comment:** 102.14 (d) (1-3) The language is confusing since it seems to imply a 100-ft buffer on all streams or 150-ft if Special Protection or Impaired. The RBA standards should be formatted more closely to a Zoning Ordinance format that separates the applicability of the Buffer to the performance standards of the buffer. Is it intended that these dimensions apply only to a PBR permit or EV watershed? (1190)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters

that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application. Section 102.14(d)(2) has been deleted from this rulemaking, and clarifying revisions to the entire subsection have been added.

202. **Comment:** The language in §102.14(d)(1) through (3) is confusing. Specifically, the proposed rule injects the words, "(both sides)" after the words "along all rivers, perennial or intermittent streams" in each subsection relative to the required average minimum widths. What is DEP's intention with the words "both sides?" Did DEP intend to say "either side?" Or, is DEP's intention that if a project is proposed within a required minimum width on one side of a stream, then a riparian buffer must be also established on the other side of the stream where the project is not occurring. We note that in many situations, the land which the developer owns and controls may be located only on one side of the stream (with the stream acting as a property boundary). If DEP's intention is to impose an obligation to install a buffer on both sides of the stream, even where the land in question is owned by other entities, then the Chamber strongly objects, as this requirement is unreasonable and unachievable due to land ownership issues, as well as the fact that the project is not taking place on the other side of the stream. The Chamber requests that DEP very clearly explain, then clarify and adjust the wording in the regulation. (1241, 1278)

Response: Buffers would only be required on property controlled by the applicant. The terms "both sides" have been removed from the final rulemaking. A riparian buffer would be required on both sides of the stream, if the stream transects a project site controlled by the applicant.

203. **Comment:** The rules also do not address an issue of when the forested riparian buffer encroaches on to adjacent properties not owned or controlled by the applicant. When the buffer encroaches onto the adjacent properties, how will the Department handle the implementation and maintenance of forested riparian buffers on adjacent properties? The Department should also consider implementing a rule of having riparian forested buffer averaging that allows for the flexibility of site design while still protecting the environment. The riparian forested buffer averaging plan could allow for the reduction of the riparian forested buffer in certain areas for development purposes, but would require the same area of compensation within the site. (1259)

Response: Buffers would only be required on property controlled by the applicant and would not be required on adjacent property. This section has been reworked, and the zone measurement has been clarified in Section 102.14(c)(3). The regulation retains the 10% variation in recognition of variable sites and conditions.

204. **Comment:** The narrative notes that the 150 foot buffer would be applicable to intermittent streams. In our area that is construed to mean any ditch, depression, etc. that conveys water after a rain. A 150 foot buffer on either side of a ditch (300 feet plus width of ditch) could effectively result in a great loss of potentially developable land with virtually no environmental gain. Somewhere down the line a "takings" issue will result. (1263)

Response: There is a definition for intermittent streams in the rulemaking. These streams are associated with flowing water and would not include "any ditch, depression, etc. that conveys

water after a rain". Further clarification of the Department's intent can be found in the Order portion of this final rulemaking.

205. **Comment:** 102.14(d)(1-3) The dimensions of the various Zones of the RBA does not seem appropriate. Typically Zone 1 is narrower than Zone 2. The split seems more appropriate at 25/75 and 50/100 for 100-ft and 150-ft buffer respectively. (1190)

Response: This section has been revised and renumbered, and retains 50 feet for Zone 1 and 100 feet for Zone 2.

206. **Comment:** Section 102.14(d)(2)-Whose definition of "impaired waters" is being used? (1264, 1291) There is no definition of "impaired waters". (1265)

Response: Section 102.14(d)(2) has been deleted.

207. **Comment:** A mandated forest buffer, particularly when coupled with the requirement of "permanent protection," would be a government prescribed and exclusionary land use imposed directly on a surface landowner. As such it implicates the state and federal prohibitions against government takings without just compensation. For example, Sections 102.14 (e) and (f) require a landowner to discontinue active farming activity and some timbering activities within a forest buffer zone. (1250)

Response: The Department disagrees that the requirements in Section 102.14 will affect an unconstitutional taking. Further, neither agricultural nor timber harvesting activities are subject to the riparian forest buffer requirements under the exceptions provided in 102.14(d).

208. **Comment:** Section 102.14(e)(2)-The requirement that the buffer be managed in a manner such that 60 percent canopy cover is achieved and noxious weeds and invasive species are removed or controlled to the extent possible is scientifically unrealistic. (1264, 1291)

Response: The Department disagrees, and has determined in consultation with state and federal forest resource agencies that 60 percent canopy cover is reasonable and necessary for an effective buffer. Invasive species and noxious weed control is most critical during the establishment of new trees or shrubs.

209. **Comment:** We realize that the 60% canopy cover requirement is to be uniformly distributed across the buffer. However, there may be situations where it is ecologically best to "daylight" a small portion of the buffer for purposes such as wildlife habitat improvement. It would be helpful if there is some flexibility in the language that would allow for professional judgment, without adversely impacting the goal of reduced sedimentation. (1275)

Response: With a minimum 60% canopy, there is the opportunity for 40% to be open area and sufficient to support other wildlife habitats.

210. **Comment:** A "Riparian Forest Buffer Management Plan" is mentioned in 102.8(f)(15) and 102.14(e)(2). Is this the same item as what is currently called the "Forest Stewardship Plan?" A

"Riparian Forest Buffer Management Plan" is not referenced in the definition section. Is the plan mentioned in 102.14(a)(8) the same plan? If so, the same terminology should be used. (1275)

Response: Reference to the Forest Stewardship Plan has been deleted from the rulemaking. All other references refer to Riparian Forest Buffer Management Plan which is described in 102.14(b)(4).

211. **Comment:** In 102.14(e)(5)(i), is the "long-term operation and maintenance plan" mentioned there the same as what is currently referred to as the "Forest Stewardship Plan?" This should be made clear. (1275)

Response: Reference to the Forest Stewardship Plan has been deleted from the rulemaking. All other references refer to Riparian Forest Buffer Management Plan which is described in 102.14(b)(4).

212. **Comment:** In subsection (e)(5)(iv), we understand which is the requirements for forest stewardship plans to be reviewed and approved by DCNR. We understand that DCNR indicates that they currently do not have the capacity or resources to necessarily review or approve these plans as called for in the proposed rulemaking. And this does need to be addressed. (1176)

Response: Review by DCNR has been removed from the rulemaking.

213. **Comment:** The requirement for a Forest Stewardship Plan should be eliminated, as this requirement is a significant expansion beyond the intent of the Chapter. If an additional harvest plan is required, the definition of Forest Stewardship Plan should be amended to explicitly allow for plans other than those produced from the federal Forest Stewardship Program. (1176)

Response: The Department agrees. Reference to the Forest Stewardship Plan has been deleted from the rulemaking. All other references refer to Riparian Forest Buffer Management Plan and is not limited to plans produced from the federal Forest Stewardship Program.

214. **Comment:** The rulemaking should ensure that landowners have the discretion in the type of forest plan being submitted as opposed to a requirement on utilization of a specific program's plan. There are a lot of foresters out here that utilize different programs, including third-party certification, and those plans should be acceptable under those provisions. (1176)

Response: The Department agrees. Utilizing different programs, including third-party certification, would be acceptable as long as the requirements of Section 102.14(b)(4) are met.

215. **Comment:** 102.14(e)(3) The use provisions should be split between Zone 1 and Zone 2, with additional uses permitted in Zone 2 as opposed to Zone 1. (1190)

Response: Prohibited and allowed practices are clarified in Section 102.14(f)

216. In addition, the prohibition of utility construction within 150-ft of a streambed will severely restrict the ability to design and construct regional utility systems, specifically sanitary sewer trunk lines. (1190)

Response: Utilities are an allowable activity when authorized by the Department as described in Section 102.4(f)(2)(i).

217. **Comment:** Section 102.14(e)(3-5) While maintenance activities or practices, such as the disturbance of existing vegetation, tree removal and shrub removal, are "allowable" within the buffer, the proposal also states that soil disturbance by grading, stripping of topsoil, plowing, cultivating, and other practices are prohibited in the buffer. Given these provisions, how are noxious weeds to be removed? Also, the draft regulation prohibits off-road vehicular travel in the buffer, but allows for trails, roads and bridges if permitted by DEP. Such a provision does not belong in an erosion and sediment control regulation. (695, 1245, 1264, 1291)

Response: Section 102.14(e)(5) allows activities or practices to maintain the riparian buffer as described in Section 102.4(f)(3)(i).

218. **Comment:** Section 102.14(e)(4)(i)-Why are storm drainage activities acceptable in the buffer when permitted by the Department, but an applicant is not allowed to use concentrated flow? (1264, 1291)

Response: Storm drainage structures that are allowed will be permitted by the Department and will minimize or eliminate concentrated flow so as not to impact the integrity of the riparian buffer.

219. **Comment:** 102.14(e)(5) should be amended to clearly allow single or multi-tree removal and the sale of these trees by the landowner should also be allowed. This both encourages good maintenance of the forest buffer and helps offset the costs of maintaining the buffer. (1176)

Response: If the removal of these trees is clearly to maintain the forest buffer, their removal would be allowed.

220. **Comment:** Language in 102.14(e)(5)(iv) should be changed to "Timber harvesting activities" to make it consistent with the definition in the Chapter. (1176)

Response: The Department agrees and Section 102.14(f)(3)(ii) has been revised.

221. **Comment:** The proposed rule at section 102.14(f)(1) requires permanent protection of riparian forest buffers through deed restrictions, conservation easements, local ordinances or permit conditions. This provision does not acknowledge or consider the existence of interests in real property that are either of record, arise by operation of law, or enjoy protection under Pennsylvania common law that entitle the owner of the property interest to use the land in such a way that may affect or impair the riparian buffer. As a rule, oil and gas developers do not own the surface of the lands upon which they operate. Rather, oil and gas interests that have been severed from the surface estate or that have been leased by the surface owner to an oil and gas

operator will contain express and implied rights created by deed or operation of law pertaining to the allowable use of surface resources. It is entirely likely that the requirements to actually install a forest buffer along with making provision for it to be "protected in perpetuity" would both exceed the scope of the oil and gas operator's general common law privilege to reasonable use of the surface and conflict with the terms of deeds or leases. Accordingly, we are concerned that the application of such rules as proposed would impair rights secured to both landowners and oil and gas operators by existing contracts and deeds and implicate constitutional prohibitions forbidding the impairment of contracts. (1250)

Response: Oil and gas activities are addressed in Section 102.14(d) exceptions.

222. **Comment:** Finally, in virtually all situations, an oil and gas operator leases the land or otherwise acquires only a limited interest in the land. Thus, the permanent landowner is the one most affected by such buffers and would need to agree to the conditions of any permit in this regard. If riparian forest buffers effectively are mandated, property owner may balk at allowing any gas development on their properties if it will mean that hundreds of feet around any water will become riparian forest buffers. This would have a dramatic adverse effect on the development of additional natural gas production in the Commonwealth. (1184, 1250, 1252)

Response: Oil and gas activities are addressed in Section 102.14(d) exceptions.

223. **Comment:** Section 102.14.f.2 Clarify if "identification" and "clearly marked" refer to the field conditions and how does the Department want the buffers marked? (436, (650,1123, 1187, 1264, 1291)

Response: There is no requirement for a specific type of marking. The Department believes that a marking delineating the buffer is reasonable and appropriate, but is sensitive to varying site conditions and has not mandated any specific type of marking.

224. **Comment:** 102.14 (f) Permanent protection of riparian forest buffers. Although we agree with the use of riparian forest buffers we have concerns as to how much time it will take to evaluate access easements, deed restrictions, conservation easement, local ordinance or permit conditions. Will all of these documents be submitted to a District as part of a complete NOI? (947)

Response: The Department would expect to be notified that these documents have been executed and are available, but they would not need to be part of the NOI submittal.

225. **Comment:** Section 102.14(g) This requirement will simply create more paperwork to be processed and stored by the Department. (1264, 1291)

Response: It is important that these BMPs be identified and recognized for the benefits they provide. The Department has been requiring this reporting for years when buffers are established through a Department Growing Greener grant. Reporting can be completed on-line through the DEP website (depweb.state.pa.us, key word "Stream Releaf").

226. **Comment:** 102.14 (g) Reporting. Who is going to look at all of these data sheets and how much time will it take? (947)

Response: Responsibility for the review of these documents remains with the Department. The Department has been requiring this reporting for years when buffers are established through a Department Growing Greener grant. Reporting can be completed on-line through the DEP website (depweb.state.pa.us, key word "Stream Releaf").

227. **Comment:** 102.14 (g) Clarify how often the reports need to be submitted. (1123, 1129) And where can the data forms for riparian forest buffers be found? (1123)

Response: Section 102.14(h) requires the forms to be submitted one time (within one year of project completion). The forms are available on the DEP website (depweb.state.pa.us, key word "Stream Releaf").

228. **Comment:** The 60% canopy cover requirement will be problematic to measure in the winter, when much timber harvesting occurs. An option for use of basal area should be included if a buffer requirement is maintained in the final rule. (1176).

Response: The planting plan, as part of the buffer management plan would include a sequencing that assures 60% canopy throughout the season. A further description of how to determine canopy cover will be included with Department guidance scheduled for publication concurrently with this final rulemaking.

229. **Comment:** 102.14 (i) This requirement should apply to both High Quality and Exceptional Value watersheds. (947)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

230. **Comment:** We need stronger and compulsory riparian vegetation corridors along our waterways, not diluted rules. (93)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

231. **Comment:** I would like to object to any voluntary stream buffer program. The vast majority of developers will simply ignore it to the detriment of our watersheds and drinking water supplies. (95)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

232. **Comment:** In the history of environmental protection, voluntary measures have proven to fail far too often. Please make stream buffers a mandatory requirement on all streams in Pennsylvania! (255, 1290)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

233. **Comment:** A rigid 150 feet buffer on either side of a stream could significantly diminish the developable area of a property. This seems particularly onerous in areas where redevelopment projects would convert underperforming and blighted properties into valuable assets. (421, 424, 425, 432, 1122, 1126, 1132, 1133, 1137, 1138, 1140, 1151, 1175, 1190, 1233)

Response: The Department agrees that flexibility is needed in developed areas. Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects.

234. **Comment:** I object to the requirement of including a mandatory 150-feet (300-feet total) buffer for any project that happens to be located within an Exceptional Value waterway. Such a requirement is arbitrary, and may impact other persons with potential interests in the waterway. While riparian buffers certainly have benefits, and should be encouraged where appropriate and feasible, instituting a mandatory buffer threshold will have unintended consequences. I encourage the department to maintain the buffer setback as a best management option for applicants, or to be applied on a case-by-case basis. I also look forward to the department's estimated financial costs of mandating such a buffer, as requested by the Water Resources Advisory Committee. (948)

Response: Riparian buffers are included in this rulemaking because the Department has determined that riparian forest buffers are the only BMP that can provide all the benefits needed to protect, reclaim and restore water resources. A cost analysis is included within the regulatory Order.

235. **Comment:** This section speaks to riparian buffer requirements. Unfortunately, the regulations do not specify at which point in time the buffer standards must be achieved. Is it before permit issuance? Prior to permit expiration? (3)

Response: No earth disturbance is allowed prior to permit issuance. All work, including buffers should be completed prior to submitting a Notice of Termination.

236. **Comment:** I support the inclusion of a mandatory riparian buffer for pertinent Exceptional Value (EV) waters. I further recommend that 75-foot buffers be required for all perennial streams (especially High Quality ones) with appropriate exceptions for linear projects, utility connections, access, etc.(1274)

Response: The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application. Exceptions for linear projects are located in section 102.14(d) exceptions.

237. **Comment:** There need to be provisions for exceptions to buffers in more densely-settled watersheds. There also need to be tradeoffs depending on slope and soil types. And there should be an opportunity to trade improvement to an existing buffer in the watershed in return, perhaps, for reduced requirements in a new disturbance. (1288)

Response: The Department agrees that flexibility is needed in developed areas. Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects.

238. **Comment:** In addition to the buffer, BMPs outside the buffer should be absolutely required. The timbering trigger point should be the same as the five-acre trigger point for other activities. The 15-acre trigger for one disturbance is not a good idea. Cumulative impacts are part of what's gotten us to where we are today. The overall scope of the project should be the trigger. And cumulative impacts must be considered. (1288)

Response: BMPs need to be provided to protect and maintain the quality of water in the Commonwealth. Depending on the project, additional BMPs, other than the riparian buffer may be needed as part of the E&S or PCSM plan. The size of the activity over the life of the project is the determining factor in the type of permit required. Timber harvesting activities involving 25 acres or more would require an E&S permit.

239. **Comment:** Clearly buffers are an important component to the practice of stormwater management. The group in general suggested adding a 75' buffer for perennial streams (measured from the stream edge) for all streams to compliment the EVHQ stream buffer requirements. This distance was felt to be in most cases within the CH 105 Floodway regulations. (1207)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

240. **Comment:** Please ensure the safety and quality of our streams and drinking water in Pennsylvania by creating a 100 foot forested buffer for streams and eliminating the proposed PBR program. (638, 1219)

Response: The final rulemaking expands the buffer obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application. Section 102.15 Permit by Rule has been deleted from the rulemaking.

241. **Comment:** Times change. Industries change, And we must learn to change with them. What worked in the past may not be appropriate for the future. So simply leaving the buffer to its own accord might have worked in the past. But with issues of industrial climate change, temperature changes along the waterways – and we can prove that managed buffers can actually reduce water temperature from four to nine degrees. That becomes very significant when you start talking about trout water or bass populations. But what is management? Management must be something that is learned, that is maintained and that must have a serious quality review. And currently we don't have anything in place to allow for that. We need to put something in place for that. (1219)

Response: The Department agrees that the long term mechanics to ensure the integrity of the buffers are important. Section 102.14(g) clarifies this requirement for a protected buffer.

242. **Comment:** Although the PA Chamber does not dispute the conceptual environmental value and benefit of riparian forest buffers to water quality, the Chamber does not support the inclusion of riparian forest buffers as a mandatory regulatory requirement. The incorporation of a riparian forest buffer as part of a regulated earth disturbance project should rather be highlighted as a significant and preferred BMP, with incentives in the regulation and the PA storm water BMP manual to adopt this BMP over other available BMPs. For example, DEP could have highlighted the incorporation of a riparian forest buffer BMP as the means of compliance for meeting the nondischarge or ABACT requirements in a High Quality (HQ) or Exceptional Value (EV) watershed. (1241, 1278)

Response: Riparian buffers are included in this rulemaking as mandatory because the Department has determined that riparian forest buffers are unique in providing the benefits needed to protect, enhance and restore aquatic ecosystems and water quality. The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

243. **Comment:** The mandatory requirement for incorporation of riparian forest buffers in regulated earth disturbance projects is not a good idea, and could have been handled differently that would have achieved buy-in with the numerous organizations in Pennsylvania that are impacted by this provision. It deprives land owners of their land, increases the cost of land and

land development, is a strong disincentive for using the new Permit-by-Rule, and is not really necessary for an EV watershed, since the watershed is already exceptional. (1241)

Response: The Department believes that riparian buffers provide multiple benefits to streams and lakes in Pennsylvania. The benefits are described in detail in the Order associated with this regulation. The economic value associated with riparian buffers is also described in the Order portion this regulation package. The final regulation does not deprive a landowner of their land, as it allows a number of other uses of the riparian forest buffer area of the property. Further the final regulation contains exemptions and waivers for certain categories of activities or circumstances. Balancing cost to comply with and economic and ecological benefit of riparian forest buffers led the Department to its current position of requiring riparian buffers only in Special Protection waters so as to protect and enhance our most precious resources.

244. Comment: A riparian forest buffer cannot always be placed along a stream. Physical impediments such as streamside roads and buildings, or topographical features such as cliffs or high banks, prevent the installation and/or survival of a forest system. The regulation should be modified to account for these issues, and consideration of the best use of the land to protect the water bodies while accounting for site-specific issues and obstacles. (1241, 1278)

Response The exceptions and waivers (Section 102.14(d)) allow for necessary flexibility for accommodating existing features.

245. Comment: Plant trees out in the middle of an open meadow or farm fields? The limits or application of this requirement must be better explained/listed. (9)

Response: Existing buffer establishment programs occur in similar situations, and have been extremely successful. In addition, agriculture activities generally do not require a permit and therefore the buffer requirements do not apply.

246. Comment: During the series of outreach opportunities conducted by the Department as the proposed Chapter 102 revisions were developed, PA Builder's Association made clear to the Department its opposition to any mandatory statewide buffer requirement. While some Pennsylvania municipalities have ordinances requiring buffers for new development, despite the lack of a state law specifically authorizing such measures, imposing any type of mandatory buffer requirement deprives landowners of the use of their property without compensation. PBA also believes that the imposition of a buffer requirement, as included in this draft rule making, also discriminates against properties in EV watersheds, discriminates against developers as a class and fails to impose similar requirements on agricultural operations which contribute far more nutrient sediment pollution to the Pennsylvania waterways than does new development. (1264, 1291)

Response: The Department does not agree that the riparian buffer requirements work an unconstitutional taking of property (see above responses). Further, the Department does not agree that Section 102.14 violates the equal protection clause. The regulation does not discriminate against a constitutionally protected class, and as discussed above, the riparian forest buffer provisions are rationally related to the legitimate state interest of protection of waters of

the Commonwealth and to the prevention of pollution in accordance with the Clean Streams Law. In addition, the final rulemaking contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

247. Comment: The mandatory riparian area provisions in the proposed rulemaking are a significant taking of a private landowner's utilization of their land. While the proposed rulemaking limits riparian forested buffers to permitted activities in EV watersheds, the impact of this provision will none the less be significant. (1176, 1221, 1287, 1303) In general, we believe the requirement to set aside 100' to 150' wide riparian forest buffers along surface waters is a taking of land. While some of this property may be subject to development due to wetlands, floodplains, etc., prohibiting development within this corridor must be coupled with compensation to the property owner for the land value lost by setting aside the buffer. (1129)

Response: The Department does not agree that the riparian buffer requirements work an unconstitutional taking of property (see above responses). Further, the Department does not agree that Section 102.14 violates the equal protection clause. The regulation does not discriminate against a constitutionally protected class, and as discussed above, the riparian forest buffer provisions are rationally related to the legitimate state interest of protection of waters of the Commonwealth and to the prevention of pollution in accordance with the Clean Streams Law. Finally, the final regulation contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

248. Comment: Allow forestry and timber harvesting in riparian buffers, including single and multi-tree harvests within inner buffer zones. If forest management is not allowed within SMZ buffers then this would constitute a significant taking of a private landowner's land and utilization of their land. This would negatively impact the economics for timberland owners of owning productive forest land and thus promote other non-conservation uses of the land such as subdivision and camp lots development. (1186)

Response: The Department disagrees that the requirements in Section 102.14 will effect an unconstitutional taking (see answer to Comment 248 above). Further, timber harvesting activities are subject to the riparian forest buffer requirements under the exceptions provided in 102.14(d). Likewise, some timber harvesting activities are allowed within a buffer under 102.14(f)(3).

249. Comment: While many support mandatory buffers and attempt to minimize the cost associated with such proposals, the reality is that significant financial hardships would be established on the individual residential level and significant economic impact also established on the developer level. This is so because buffers impose costs not only for their installation, operation and maintenance, but also due to the economic losses landowners experience when they're denied use of the land that's taken to establish a buffer. (1264, 1291)

Response: A number of research studies have shown that property values increase as a result of having riparian forest buffers or green corridors in their developments.

250. Comment: The proposed institution of a 150 foot buffer on each side of Exceptional Value Waters would have the unintended consequence of hindering good land planning. By limiting the layout options available to create environmentally sound and fiscally practical sites, designers and builders may be forced to search for green field sites well away from the existing utility and transportation infrastructures. This could be an especially difficult problem for urban/brownfields redevelopment. Most of these communities are located along stream/river corridors. A buffer of this magnitude might render these sites non-viable for development. (422, 428, 429, 435, 690, 736, 940, 1122, 1126, 1132, 1133, 1134, 1136, 1162, 1185, 1232, 1244, 1276, 1303)

Response: The Department agrees that flexibility is needed in developed areas. Section 102.14(d)(2)(v) allows for a waiver for redevelopment projects.

251. Comment: If the mandated buffers are expanded to HQ and non-special protection waterways, essentially all of Pennsylvania's 83,000 miles of stream, the burden would be profound. Taken to its full realization, a 100-foot buffer on each side of these streams would result in the regulatory taking of over 3,000 square miles or a land mass larger than the combined size of Bucks, Montgomery, Chester, Delaware, Lehigh, Northampton and Philadelphia Counties. Furthermore, there seems to be no acknowledgement that local topography and modern stormwater management requirements limit the amount of actual runoff reaching the buffers. It's for these reasons we feel the more local, hands-on approach of Pennsylvania's municipalities are better suited for adopting riparian buffers than a rigid statewide mandate. (435, 695, 736, 1245, 1303)

Response: The Department has considered the ramifications of requiring riparian buffers along all streams. This is, in part, why the Department is only requiring riparian buffers in our special protection watersheds (EV and HQ).

252. Comment: Assuming that the Commonwealth will adopt some form of riparian buffers, we would like to offer some suggestions on ways to add flexibility. Primarily, the regulations should include the ability to buffer average. Many modern ordinances include such provisions. Buffer averaging will allow the applicant to propose various buffer widths at various points though they must average to the mandated minimum widths. This flexibility allows the applicant to address the unique site conditions and to better configure the lots within the site plane. Properly designed, there is no additional risk to the environment. On those sites that simply can't incorporate buffers, the Department may wish to consider establishing an appropriate fee that an applicant would pay into a fund that addressed water quality improvement upstream. Or allow the applicant to propose a treatment train that meets the stated goals of the riparian buffer. Buffers are just one of many different types of BMPs. If the applicant can create a treatment trend with BMPs that reach the identical environmental objective of protecting the water quality of the receiving stream, the opportunity to make such a proposal should be available. (435, 695, 736, 1245, 1303)

Response: The commentators raise a good point regarding flexibility due to unique site conditions. The Department has allowed for some flexibility through the waiver provisions in Section 102.14(d)(2). Additionally Section 102.14(d)(4) allows for consideration of mitigation fees in the context of a waiver request. Riparian buffers are included in this rulemaking as mandatory because the Department has determined that riparian forest buffers are unique in providing the benefits needed to protect, enhance and restore aquatic ecosystems and water quality.

253. **Comment:** Land is not all the same. Each property and project has its own conditions. Properties have unique shapes especially in regard to the relationship of natural features to manmade features like property lines in one instance a buffer zone may limit development just in that zone, while on another property it may limit development of a substantially larger area due to the location of other features or the depth of the remaining area. (651)

Response: The Department agrees with the need for flexibility and has provided such in Section 102.14(d) exceptions.

254. **Comment:** 102.14 Riparian forest buffer requirements. The HBAs oppose the rigid requirement of a uniform 150 foot riparian buffer. Greater flexibility should be offered to the applicant to account for site conditions and/or inclusion of stormwater treatment trains which reduce sediment pollution before being received by the stream. (423)

Response: The Department agrees with the need for flexibility and has provided such in Section 102.14(b)(2)(iii), as well as exceptions in 102.14(d). Riparian buffers are included in this rulemaking as mandatory because the Department has determined that riparian forest buffers are unique in providing the benefits needed to protect, enhance and restore aquatic ecosystems and water quality.

255. **Comment:** The proposed rulemaking should be revised to provide forestry with the same exemption from permitting, forested riparian buffers and PCSM Plan requirements, as are provided to agricultural activities. These provisions will have substantial economic costs on landowners and companies engaged in forestry and timber harvesting, without providing any significant improvement related to erosion control. DEP should be making every effort to ensure private forestland owners continue to keep their land under long-term forest management instead of imposing restrictions and fees which may lead some landowners to sell their forest land to developers due to economic loss resulting from the restrictions and fees. (1176, 1221)

Response: Only permitted activities under this Chapter would require a riparian buffer if located in an EV or HQ watershed. Timber harvesting activities less than 25 acres would not need a permit. This would exempt most small woodlot owners from the buffer requirements.

256. **Comment:** Expand buffer requirements to waters other than EV: Others have called for an expansion of the buffer requirements to all permitted activities that interact with any body of water. We oppose such as proposal, as it would magnify the problems and concerns we have outlined with the current buffer proposal. (1221)

Response: The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application

257. **Comment:** If DEP feels that this 150 foot buffer is necessary, it should produce for public scrutiny the studies that have determined such. My own personal observations lead me to believe that such studies may be junk science not worthy for such use. Finally, I live and work in EV watersheds. I hunt there. I fish there. I take routinely collect water samples for laboratory analysis and study the macro invertebrates in EV streams and their watersheds. I have no doubt that I spend more time in contact with EV streams than anyone involved in writing this regulation. I see no way that a 150 foot closed canopy forest is any more beneficial to reducing waterborne sediment than a grass lands or shrubby areas. If the regulation is to reduce thermal pollution, then be honest about it and put the idea forth for debate. (1263)

Response: A large body of scientific literature supports the minimum buffer widths in this Chapter, and specific references can be found in the Order accompanying this final rulemaking package. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

258. **Comment:** §102.14. This section (Riparian forest buffer requirements) has no place in this document and all references to the “Riparian Forest buffer requirements” should be removed from Chapter 102. (944, 1204)

Response: The Department disagrees.

259. **Comment:** I feel that instituting a rigid buffer on streams could ultimately make many projects unbuildable. There could be language built into the buffer requirements that allow for disturbance if certain criteria are met such as additional Best Management Practices. (1190)

Response: The Department has provided some flexibility through exceptions in 102.14(d).

260. **Comment:** I feel that municipalities are better suited for adopting riparian buffers than a rigid, statewide mandate. The current regulations also do not address various use concerns within the buffers, to the level necessary to properly regulate. A local municipality is better suited to address these concerns via their Zoning Ordinance provisions. (1190)

Response: Nothing in this regulation precludes the development of local land use controls. These regulations provide basic minimum standards for riparian buffers.

261. **Comment:** The building community is continually identifying new technology to help improve the quality of stormwater runoff. These creative techniques are especially helpful in the urban areas where lawn and landscape areas are, for the most part, non-existent. Rather than eliminate the ability to redevelop these eyesores because of large, rigid buffers, allow developers/builders to use a combination of a variety of BMP's which achieve the common goal of improved water quality. This is truly smart, green development that creates a win-win solution. (422, 428, 429, 690, 940, 1122, 1126, 1132, 1133, 1134, 1136, 1162, 1172, 1185, 1231, 1232, 1236, 1244, 1276)

Response: The Department agrees with the need for flexibility for redevelopment, and has provided such in 102.14(d)(2)(v) related to waivers from riparian buffer requirements.

262. **Comment:** While I have a number of concerns with respect to the proposed rulemaking, my comments will address the *inflexibility of the riparian buffer proposal* and its effects. Assuming the Commonwealth will adopt some form of riparian buffers, I would like to voice my *request that the buffer requirements include the ability to create flexible designs by using other best management practices in conjunction with reduced buffer widths to achieve the results sought by the use of buffers alone.* (430, 694, 1132, 1133, 1135, 1167, 1182, 1183, 1139, 1231, 1246)

Response: The Department agrees with the need for flexibility and has provided such in Section 102.14(c)(3), as well as exceptions in 102.14(d).

263. **Comment:** There are a number of benefits that buffers can achieve. However, I believe that the proposed buffer width exceeds the widths supported by the various studies on buffers. While I am concerned about regulations that exceed their scientific support, I am more concerned by regulations that are inflexible and can not be adapted to achieve the same or better results. (430, 651, 694, 1132, 1133, 1135, 1139, 1167, 1182, 1183, 1246)

Response: The Department agrees and appreciates the supportive comments on the benefits of buffers. Flexibility has been provided in several sections including Section 102.14(c)(3), as well as exceptions in 102.14(d). The Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

264. **Comment:** Science and engineering design have advanced significantly over the recent decades and will continue to do in the future. A decade ago many of the BMP's now in use were not refined and certainly not used as a part of a unified engineering design. By requiring a rigid buffer width, the Department discourages innovation and integrated design. There is no doubt that many of the current BMP's can achieve the same results that buffers are intended to achieve. There will be more BMP's in the future that will also be able to do the same. Engineers should be free to apply BMP's together with reduced buffers if they can achieve the same goals as the required buffer would achieve on its own. (430, 651, 694, 695, 1132, 1133, 1135, 1139, 1167, 1182, 1183, 1246)

Response: Riparian buffers are included in this rulemaking as mandatory because the Department has determined that riparian forest buffers are unique in providing the benefits needed to protect, enhance and restore aquatic ecosystems and water quality. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

265. **Comment:** The only potential goal of a rigid buffer that cannot be achieved by a combination of buffer and BMP's is the inappropriate goal of removing otherwise developable land from being useable for development. To require rigid buffers would have significant adverse consequences. It would expand the area of development and create sprawl. It would devalue land, decreasing ratables and tax revenues. It would increase the cost of development in Pennsylvania, placing us at a further disadvantage in competing with other states for growth and jobs. It would deprive some of our existing businesses of planned expansion space on land already paid for and approved for that purpose, and encourage them to look elsewhere, including out of state, when they need to expand. The result will be loss of jobs and opportunities for Pennsylvania. (651, 1132, 1133, 1135, 1139, 1167, 1182, 1183, 1246)

Response: Riparian buffers are included in this rulemaking as mandatory because the Department has determined that riparian forest buffers are unique in providing the benefits needed to protect, enhance and restore aquatic ecosystems and water quality.

266. **Comment:** I understand that buffers can serve a worthwhile function. But they should not be a rigid, mandated requirement. Where the advancements of science and the talent of engineers can achieve the same or better results by varying the buffer and supplementing it with other BMP's, the environment, the Commonwealth and its people are all winners. When a rigid buffer deprives us of an opportunity to reduce sprawl, to create or retain jobs and opportunities, and to increase tax revenue, the environment, the Commonwealth and its people are all losers. We need to let the engineering and scientific communities apply their skills and not tie their hands with supposedly well intended, but clearly impractical, rigid requirements. (651, 1132, 1133, 1135, 1139, 1246, 1167, 1182)

Response: The Department appreciates the supportive comments regarding buffers, and agrees with the need for flexibility. Several sections including Section 102.14(c)(3), as well as exceptions in 102.14(d) are intended to provide that flexibility. Riparian buffers are included in this rulemaking as mandatory because the Department has determined that riparian forest buffers are unique in providing the benefits needed to protect, enhance and restore aquatic ecosystems and water quality.

267. **Comment:** We have a concern about the enforcement of the many requirements associated with the Riparian Forest Buffers, 102.14. It is not clear in the regulations which agency(ies) will enforce these requirements. It appears that it will be a significant financial and manpower burden on the responsible agency. (1178)

Response: The Department of Environmental Protection or conservation districts have responsibility through their permitting program to enforce these requirements.

268. **Comment:** The inclusion of mandatory minimum buffers is an unwise. It does not incorporate differences in elevations, soils, or vegetative cover; even drainage pattern. It eliminates the ability to engineer sound site plans in the buffer area (an engineered BMP can never be 100' from a stream bank). It will eliminate Millions of dollars of developable commercial and residential ground in the state; in these economic times, legislatively destroying landowner value, be it private, municipal, or state owned is ill advised. The ground that these regulations make undevelopable is substantial has it been quantified and have the affected landowners been notification? The wording in the mandatory buffers and the requirements to replant them, may damage the water shed; certainly there are areas that may benefit, but conversely there will be areas that will be damaged. Clearing to the stream bank is risky. Therefore, site specific analysis should determine this, as the current regulation does, not the new state wide mandatory regulation. (1230)

Response: Clearing to the stream bank is not permitted under these regulations. The riparian forest buffer management plan is essentially a site specific analysis as suggested by the commentator.

269. **Comment:** Under subsection F of section 102.14, the ambiguous language in the proposed rulemaking regarding the permanent protection of the riparian buffers, we believe it will result in further proliferation of arbitrary and even more excessive municipal forestry ordinances that will make it difficult for forest landowners to maintain their acreage as working forests. Municipal ordinances in certain regions of the state are a huge problem for conducting proper forestry. (1176)

Response: The Department appreciates the comment. Concerns regarding local land use controls should be directed to the appropriate municipal entity.

270. **Comment:** The requirement to post buffers is excessive and costly for the forest landowner, who may or may not currently be providing public access to their land. Given these costs and the overall mandates in the Chapter – including the impact of intermittent streams – many landowners may elect to post their entire tract of land, removing it from public recreational access. (1176)

Response: Private landowners currently have the right to “post” their land. The Department does not believe the requirements of this Chapter will affect their current rights.

271. **Comment:** While thankful for the opportunity to offer comments, we will state that the proposed rulemaking will impose buffers that are more restrictive than most hardwood timbering states in the eastern U.S., more restrictive to a certain extent than the management practices on some public lands where within the Commonwealth, and more restrictive than existing third-party forest certification requirements. That includes the Forest Stewardship Council, a program which is blessed by such groups as Rainforest Alliance, Greenpeace and the World Wildlife

Fund. And if you are being more restrictive than those, I think we may need to take a stronger look at that. (1176)

Response: The Department disagrees. Buffer requirements are appropriate for water quality needs in Pennsylvania.

272. **Comment:** The proposed width and restrictions of riparian forest buffers on EV, other perennial and intermittent streams will involve substantial acreage on tracts where it is required, making it difficult for landowners to conduct the appropriate sustainable forestry activities necessary to ensure future forest health and productivity on their land. It will also restrict the ability of the landowners to mitigate safety issues through the removal of dead and dying trees. Ash, hemlock, maple, oak, pine, and birch are among the species that face significant decline and mortality due to disease and invasive pests. Forested tracts with concentrations of these species will suffer under the proposed rulemaking, as landowners will be restricted or prohibited from being able to adequately mitigate this decline. We question the scientific grounds to support the necessity to require 100 foot buffers on intermittent streams, particularly as it relates to forestry or timber harvesting activities that are temporary and will not change the land use. (1176)

Response: The 50 foot Zone 1 immediately adjacent to the stream is critical to water quality protection, and therefore no timber harvesting is permitted. The width of Zone 2 has been enlarged to 100 feet in the final rulemaking. Therefore the area where timber harvesting is permitted (with an approved forest stewardship plan and 60% of the canopy cover is maintained) has been expanded. Further Section 102.14(d) (3)(vii) exceptions addresses timber harvesting activities. Additionally, removal of diseased or dead trees and shrubs as part of a riparian forest management plan would be allowed.

273. **Comment:** It must be recognized that the proposed mandates in the Chapter will be imposed upon some forest landowners due to actions outside the control of these individuals. Specifically, landowners who do not own their subsurface rights are subject to oil, gas, and mineral development from these subsurface owners. In most cases, the landowner has no input how or when these subsurface rights are developed. When development of these subsurface rights require permit under the Chapter, the mandates and costs, including the regulatory taking associated with the buffers, are imposed upon landowner. This situation will be quite common in northern and western Pennsylvania where oil and gas development is active. The proposal needs to address this situation and provide relief for these landowners. (1176)

Response: Oil and gas activities are addressed in Section 102.14(d) exceptions.

274. **Comment:** In most situations, an oil and gas operator only leases the land. The permanent landowner is the one most affected by forest buffers and would have to agree to the conditions of any permit in this regard. Property owners will be extremely reluctant to permit any oil and gas activity on their properties once they realize the mandates and restrictions associated with this type of relationship. The additional requirements will dramatically decrease the industry's ability to develop this state's natural energy resource. (1261)

Response: Oil and gas activities are addressed in Section 102.14(d) exceptions.

275. **Comment:** We believe this is all quite unnecessary. The expanded buffer widths, proposed buffer widths are quite unnecessary since a 2008 report, the Pennsylvania Integrated Water Quality Monitoring and Assessment Report prepared by the DEP indicated that silvicultural activity and logging roads were the source of less than two tenths of one percent of the state's impaired stream miles. (1287)

Response: Forestry activities are addressed in Section 102.14(d) exceptions.

276. **Comment:** Part of my fear in looking at those regulations also is the definition of where it's required. We think of riparian forested buffers along the Conodoguinet, along the Yellow Breeches, along the major stream areas. The way the regulations are written, it's intermittent, perennial, ponds, reservoirs. An intermittent stream --- I've actually been out on a site where I had DEP and the Corp of Engineers interpret two tire tracks going through a field as an intermittent stream. And I had to get a permit to cross a tire track. Now, I take that and I have to add a 200 foot swab and I have to plant that with trees, maintain it and make sure I keep the noxious weeds out of it. It's pretty easy to see how a development project could very quickly go away and not be economically feasible with those type of interpretations. I think we can all agree that yes, forested buffers are a good idea, but let's implement them where they're actually going to do some good and where it's not interpreted down to its every little swale that goes through a field. (1292)

Response: The definition of intermittent stream refers to substrates associated with flowing water and would not include tire tracks or swales. The Department has further clarified intermittent streams in the Order accompanying this rulemaking.

277. **Comment:** Section 102.14 Riparian forest buffer requirements. Although riparian forest buffers can result in various environmental benefits, only a few of these benefits are directly or indirectly related to preventing accelerated erosion and sedimentation. Because of the extreme cost and lack of flexibility, as well as property rights issues associated with this type of mandate, We suggest that this requirement be removed from this rulemaking in its entirety and be addressed in a separate rulemaking. We believe that voluntary riparian buffer creation could be encouraged through other incentives, such as post construction stormwater credits. This requirement is particularly problematic for the oil and gas industry where construction is normally conducted on leased right-of-ways, where the permittee has no continuing property rights outside of those specifically negotiated in the lease agreement. (691, 1124, 1152, 1250)

Response: The Department does promote voluntary buffers, as referenced in Section 102.14(e)(3). Oil and gas activities are addressed in Section 102.14(d) exceptions. The Department maintains that mandatory riparian buffers are appropriate to protect, enhance and restore special protection waters.

278. **Comment:** Development and maintenance of riparian buffers in exceptional value watersheds would significantly increase costs that would ultimately be passed on to the rate payer. Most of our permitting requirements are associated with re-conductoring projects, which is the replacement of the electrical wires or the replacement of the static wire with an optical

ground wire (part of the Smart Grid Program). While PECO has adopted the Department's policy of avoidance of wetlands and streams in these projects, it is still required to obtain the necessary State and Federal wetland permits as well as a letter of adequacy from the local conservation district for an E&S Plan. These riparian buffer requirements would add significant delays, result in additional cost, be largely self-defeating given that incompatible trees must be removed from the right of way, and create an unnecessarily complicated process for what is otherwise a very simple project that shouldn't require permitting. (1301)

Response: Utility activities are addressed in Section 102.14(d) exceptions.

279. **Comment:** The proposed rulemaking requires riparian buffers if earth disturbance activity is within an EV watershed. Must the entire activity fall within the EV watershed to trigger the buffer requirements? What if only a portion is in the EV watershed? Must the entire project, even the non- EV portion, then incorporate the buffer requirements? (736, 1303)

Response: The specific portion of the proposed activity that falls within 150 feet of an EV or HQ watershed requires buffer protection. Applicants are required to provide buffer protection only on the property they control.

280. **Comment:** The proposed rules should make clear that only EV rivers, streams, et cetera, should be buffered. How is the applicant expected to address required buffers that may need to be installed on another landowner's property? If the stream runs within 150 feet of a property line, it seems the expectation is that the applicant will need permission from the adjacent property owner. In many cases, gaining this approval would seem unlikely and would place the entire project in jeopardy. (736, 1303)

Response: The specific portion of the proposed activity that falls within 150 feet of an EV or HQ watershed requires buffer protection. Applicants are required to provide buffer protection only on the property they control.

281. **Comment:** The DEP best management practices manual includes the ability for an applicant to restore a flood plain to the historic cross section. Chapter 102 should not include buffer widths that would prevent flood plain restoration. Similar to flood plain restoration, the requirements should include the ability to disturb the noted riparian buffer areas in redevelopment projects. This type of project may have existing impervious and/or contaminated area in the buffer. These areas should be removed as part of the redevelopment project. (1304)

Response: Nothing in this regulation would prevent flood plain restoration. Such public safety situations are addressed in Section 102.14(d) exceptions.

282. **Comment:** The adoption of a 150-foot wide riparian buffer on each side of an exception value stream is, in my opinion, extremely harsh and excessively over protective. (938) Unnecessarily conservative (1265)

Response: Mandatory riparian buffers would only be required on both sides of a stream when the stream transects through the property site located in an EV or HQ watershed and under the control of the applicant.

283. **Comment:** My initial comments are directed to the provisions of the PRM regarding mandatory riparian forest buffers. Riparian forest buffers are an effective tool to promote erosion & sedimentation control, water quality, and other environmental benefits. It is important to recognize, however, that some forest management activities, conducted to meet landowner objectives and under the direction of a professional forester, may be appropriate and beneficial in application within both the inner and outer buffer zones. Manipulation of species composition, wildlife habitat conditions, maintenance of forest health, and providing economic return to the landowner are examples of these types of activities. Also, restrictions placed on operations within the inner and outer buffer zones can be perceived by many landowners as **a taking**, or limitation of their ability to conduct activities on what could amount to significant portions of their ownerships. (939)

Response: The Department disagrees that the riparian forest buffer requirements will result in an unconstitutional taking of private property. See response to Comment #248. The Department agrees that some forest management activities may be appropriate and beneficial to the buffer. Such activities would be authorized under Section 102.14(f)(3) of the final rulemaking.

284. **Comment:** Permit DCNR type trails within a buffer. (2)

Response: Section 102.14 (f)(2) allows trails within a riparian forest buffer.

285. **Comment:** §102.14 describes the composition of an existing riparian buffer that is acceptable to the Department. In public meetings, DEP has stated that the average cost to establish and maintain a riparian buffer is \$1400/acre. Considering the widespread presence of invasive species in Pennsylvania, the Chamber believes that the Department's estimates are low, and the cost to design, install, and maintain a riparian forest buffer in accordance with DEP's composition requirements exceeds the Department's current projection. The Chamber requests DEP re-evaluate their cost estimates, and in turn re-evaluate the cost impact of Section 102.14 on PA commerce and the economy. (1241, 1247)

Response: The Department has reevaluated the cost estimates and included that analysis in the regulatory Order.

286. **Comment:** The other problem I have is by the time we get done with a development project and we've installed all of our stormwater requirements, we've met all our stormwater regs, we have our E&S plan approved, we have our NPDES permit approved, why do we need a forested buffer? We've complied with all of the environmental regulations. At that point the stormwater that's coming out the other end of that stormwater pond and has already gone through the infiltration trenches and stuff is environmentally treated. So at that point I think you've limited the need for a riparian forested buffer to a development site. (1292)

Response: Riparian buffers are included in this rulemaking because the Department has determined that riparian forest buffers are unique in providing the benefits needed to protect, enhance and restore water quality and aquatic resources.

287. **Comment:** The requirements for establishing, enhancing, and maintaining riparian buffers and controlling plant invasive species present tremendous cost issues that seriously challenge the benefits to be gained if applied in a manner that does not recognize specific features of sites that command less than the full range of measures provided for in the proposed rule. These examples illustrate the costs expected under typical utility operations and would appear to be far out of proportion to costs the utility should be expected to bear for limited operations and for damages or degraded conditions due to other parties upstream of site activities. (1301)

Response: Utilities and linear projects are addressed in Section 102.14(d) exceptions.

288. **Comment:** Hemlock is exhibiting the same snap syndrome as beech, a condition that has not been clearly addressed in scientific literature. The simple point to be made is that these buffers cannot be managed to sustain the forest or to the best advantage of water quality under the buffer requirements of the proposed rulemaking and the riparian forest buffer guidance document recently published for comments. (1305)

Response: Forestry activities are address in Section 102.14(d) exemptions and waivers.

289. **Comment:** The important point to consider is the requirement for continuous 60 percent crown enclosure and other regulatory practices in proposed rulemaking will not maintain a healthy forest and provide for the sustained production of high quality water. (1305)

Response: The 60% canopy cover is a minimum and greater cover is encouraged.

290. **Comment:** The riparian forest buffer requirement also presents a conflict with overhead utilities (electrical power industry). In the vicinity of overhead electrical lines, vegetation that is low-growing and will not interfere with and disrupt overhead power lines is specifically planned and maintained. Trees in the proximity of overhead power lines present a very real risk to electrical utility infrastructure in the Commonwealth. The Chamber again emphasizes that the utility industry should be exempted from the riparian forest buffer requirement. (1241)

Response: Section 102.14(e)(4) allows construction or placement of utilities within the riparian forested buffer when permitted by the Department.

291. **Comment:** How is the applicant expected to address required buffers that may need to be installed on another land owner's property? If the stream runs within 150 feet of a property line, it seems the expectation is that the applicant would need permission from the adjacent property owner. In many cases, gaining this approval would seem unlikely and would place the entire project in jeopardy. In general, this provision seems to be ripe with potential problems. The Department should incorporate more flexibility to the buffer widths and/or add a waiver process in certain instances. (1245)

Response: The specific portion of the proposed activity that falls within 150 feet of an EV or HQ watershed requires buffer protection. Applicants are required to provide buffer protection only on the property they control.

292. **Comment:** While we understand the need to satisfy all stakeholders, new elements such as the 150-foot riparian buffer requirements represent an arbitrary, unfair and possibly unnecessary burden for those landowners who can otherwise demonstrate that proposed design elements will meet or exceed already existing requirements for Exceptional Value ("EV") and High Quality ("HQ") watershed development. There should be an elimination of the buffer requirement altogether, or a meaningful waiver process. (1281)

Response: An exceptions provision has been added in Section 102.14(d). Section 102.14 has been revised to clarify requirements for riparian buffers. The Department does not believe that its requirement for riparian buffers in special protection watersheds is arbitrary, but rather a proactive approach to protect, enhance and restore our most treasured waters.

293. **Comment:** For purposes of post-construction stormwater management, it would be one thing to require a permittee to meet operational and maintenance requirements to protect EV and HQ waters. It would be another to compel a landowner to not only meet technical requirements, but to engage in costly and long-term maintenance of the buffer in a manner that may have very little to do with the important aspects of the operation and maintenance of stormwater controls, like preventing degradation of the waters. This is particularly onerous for landowners who by happenstance are in the position of serving as the "last line of defense" in EV or HQ watersheds because of their proximity to a stream or other water body. It is they, not the other landholders in the watershed, who could possibly wind up controlling erosion and sedimentation problems in the watershed that originate from other properties. No less unfair would be situations where an oddly-shaped lot is rendered useless because the new regulations could handcuff almost entirely a landowner's use and enjoyment of such a property. (1281)

Response: The Department appreciates the need for flexibility in the mandatory provisions related to riparian buffers. Section 104.14(d) exceptions provides opportunities for flexibility in certain circumstance.

294. **Comment:** Subsection 102.14 proposes to create a requirement of 150 feet from the top-of-bank of any Exceptional Value stream. I have serious concerns about the requirement. (1263)

Response: The Department appreciates the comment, however the Department does not share the commentator's concern. A large body of scientific literature addressing water quality supports the minimum buffer widths in this Chapter.

295. **Comment:** We support mandatory buffers on permitted sites, wetlands and in special protection waters and impaired waters (please note that we suggest PBR be eliminated). We are opposed to the proposed buffer establishment and management requirements because they serve as a deterrent to voluntary buffers and require inappropriate disturbance within EV riparian areas. While we support the concept of buffer zones, the proposed regulations make only one

distinction between what can occur in Zone 1 and Zone 2 (timber harvesting). In light of this, we question the incorporation of buffer zones in the revised regulation. (693)

Response: The Department appreciate the commentator's support of buffers. A large body of scientific literature addressing water quality supports the minimum buffer widths in this Chapter. Section 102.15 (permit by rule) has been deleted from this rulemaking.

296. **Comment:** As usual, blanket regulations DO NOT WORK and cannot be written as such. DEP should have learned by now that "one size fits all" regulations are impractical. Example: If I need to widen a road that directly borders a stream with surrounding EV wetlands-having perhaps not even 20 feet of existing buffer, and I need to push the bank out a few feet, to perhaps GREATLY improve the roadway and reduce fatal crashes, or improve commute times, tell me why the EV wetland is more important than the needs of humanity? (16)

Response: The Department appreciates the comment and agrees with the importance of flexibility. Public safety activities are addressed in Section 102.14(d) exceptions.

297. **Comment:** § 102.14 Riparian forest buffer requirements. Will work done to develop or enhance buffer zones require 105 permits? (1315)

Response: Not unless the work would require changes to the course, current or cross section of the watercourse, floodway or wetlands.

298. **Comment:** Are Chapter 105 permits required for establishment or improvement of buffers within floodways? For project working under PBR coverage, what portion of the project is the District required to review? Although PBR does not require District review, Chapter 105 permits (other than small projects permits) do require District review. (1315)

Response: No 105 permit is required unless the work would require changes to the course, current or cross section of the watercourse, floodway or wetlands. The Permit by Rule (102.15) has been deleted and is not included in the final rulemaking.

299. **Comment:** § 102.14 (a)(1)(i) There are terms used here that are not defined in Chapter 102, this could result in confusion or arguments, i.e., river, creek lake, pond, & reservoir are not defined in Chapter 102. Natural lakes/ponds/reservoirs only? These terms should be defined or the term 'surface waters' could be used with exclusions of wetlands, seeps, springs, estuaries, etc. (1315)

Response: The Department believes the wording describing where riparian buffers are required is sufficiently clear as written.

300. **Comment:** I am an industrial real estate developer who for the last 25 years has taken pride in constructing office and industrial parks in southeastern Pennsylvania that employ thousands of people. The land that we have developed over this time generates millions of dollars in tax revenues to local communities, provides earned income tax revenues that help support local economies and employ thousands of people that provide millions of dollars to the Pennsylvania

economy. This blanket 150' setback off of waterways will destroy our ability to continue to provide these business parks in an economical fashion. In a business environment where Pennsylvania already has no ability to compete with Delaware and New Jersey, losing these jobs to businesses in other states will end up being a far more critical issue to the State of Pennsylvania than constructing buildings and parking lots within 150' of waterways. Much of the remaining industrial land left to develop is land that is encumbered by streams and waterways. This proposed legislation will directly affect the economics of future businesses looking to remain or relocate into the State of Pennsylvania. Having dealt with the ever-changing stormwater regulations in Pennsylvania, I assure you the net impact of this legislation will be to drive business, jobs and revenue out of the State of Pennsylvania to a friendlier environment. I would ask that you please reconsider this proposed legislation. (647)

Response: Necessary flexibility has been addressed in Section 102.14(d) exceptions. The Department notes that New Jersey requirements call for a 300 foot riparian buffer on all Category 1 streams and a 150 foot riparian buffer on trout streams.

301. **Comment:** While I have a number of concerns with respect to the proposed rulemaking, my comments will address the inflexibility of the riparian buffer proposal and its effects. Assuming the Commonwealth will adopt some form of riparian buffers, I would like to voice my request that the buffer requirements include the ability to create flexible designs by using other best management practices in conjunction with reduced buffer widths to achieve the results sought by the use of buffers alone. (651)

Response: The Department believes that a riparian forest buffer as defined in this Chapter, will provide not only protection to the water body, but also enhance the quality of the physical, chemical and biological characteristics of the water body. These scientifically documented benefits are unique to riparian forest buffers. The requirement to install or protect a riparian forest buffer does not preclude the use of any other applicable BMPs found in the Stormwater Best Management Practices Manual (PADEP # 363-0300-002) as part of the E&S or PCSM plans required under this Chapter.

302. **Comment:** Mandatory Riparian Forest Buffers: Riparian forest buffers play useful roles in protecting water quality, but mandating their establishment and preservation is unnecessary and an excessive exertion of government control. Requiring a 150-foot permanent forest buffer in exceptional value watersheds imposes significant economic hardship on all types of landowners and builder-developers. Such a regulatory taking deprives landowners of both use and value of their lands and also imposes ongoing costs to manage those buffers in perpetuity. The Department should withdraw this mandate from its rulemaking and instead rely on the promotion and use available voluntary best management practices for the establishment, management and preservation of riparian forest buffers in all watershed classes. (643)

Response: The Department does not agree that the riparian buffer requirements work an unconstitutional taking of property (see above responses). Further, the Department does not agree that Section 102.14 violates the equal protection clause. The regulation does not discriminate against a constitutionally protected class, and as discussed above, the riparian forest

buffer provisions are rationally related to the legitimate state interest of protection of waters of the Commonwealth and to the prevention of pollution in accordance with the Clean Streams Law. In addition the final rulemaking contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

303. **Comment:** The proposed regulations discuss and require the establishment of a "Riparian Forest Buffer" even where none currently exists. The costs of creating and maintaining such a buffer, particularly from scratch, could be prohibitive. For example, current "Forest" definitions identify a young forest as a forest with trees that have a diameter at least height (DBH) of greater than 6 inches. Depending on the species of tree and the growing conditions, it can take anywhere from 10 to 30 years for tree saplings to reach that size. (1281)

Response: Once the riparian forest buffer is established, very little maintenance is required. An analysis of the economic impact of riparian buffers is included in the Order accompanying this rulemaking.

304. **Comment:** The Department should reconsider the extent to which the regulations work a regulatory taking, especially for landowners whose proximity to Waters of the Commonwealth alone results in the inability to use or to enjoy the property at all. The Department may wish to consider whether the proposed regulations would violate equal protection rights by placing unreasonable and unfair burdens on landowners who by happenstance have property in proximity to EV or HQ waters. (1281)

Response: The Department does not agree that the riparian buffer requirements work an unconstitutional taking of property (see above responses). Further, the Department does not agree that Section 102.14 violates the equal protection clause. The regulation does not discriminate against a constitutionally protected class, and as discussed above, the riparian forest buffer provisions are rationally related to the legitimate state interest of protection of waters of the Commonwealth and to the prevention of pollution in accordance with the Clean Streams Law. In addition, the final rulemaking contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

305. **Comment:** Mandatory riparian forest buffers: Until such time as the Department can show that water quality is not being protected under current regulations - that is, until it can prove the degradation of water quality in exceptional value watersheds due to earth disturbance activities that comply with current regulations - then it is unwise to require any mandatory stormwater management practices. Until such time as the Department can show that a buffer of less than 150 feet is insufficient to achieve pollutant and sediment reduction adequate to maintain water quality, then it is a flagrant usurpation of legislative authority to mandate a taking of property for no benefit. The proposed rules do not recognize the burden to be placed on landowners in EV watersheds that do not own more than 150 feet from a stream. Will landowners with relatively small lots along

EV streams lose all future use of their property, aside from passive recreation? Is there an exemption to the forested buffer requirement for such situations? How will an applicant comply with the buffer requirement if their project site is within 150 feet of an EV water but they do not own the property adjacent to the stream? Will a farmer in an EV watershed be forced to choose between building a new barn or taking land out of production within 150 feet of a stream or farm pond [102.14(e)(3)]? It is obvious that this requirement will increase costs of development and construction and render entire parcels off limits to improvement. At the same time, there is no obvious environmental benefit that cannot be achieved through other, more cost-effective means. The previously mentioned EHB decisions also make it clear that the Department must consider project sites in EV watersheds on a case-by-case basis and that blanket requirements and administrative checklists do not adequately document compliance with anti-degradation rules. (1260)

Response: Land development activities change natural features and alter stormwater runoff characteristics. The resulting alterations of stormwater runoff volume, rate and water quality can cause stream bank scour, stream destabilization, sedimentation, reductions in groundwater recharge and base flow, localized flooding, habitat modification and water quality and quantity impairment, which constitute pollution as that term is defined in the Pennsylvania Clean Streams Law, 35 P.S. Section 691.1. Riparian buffers play a vital role in mitigating the effects of stormwater runoff from land development activities.

Riparian buffers are useful in mitigating or controlling point and nonpoint source pollution by both keeping the pollutants out of the waterbody and increasing the level of instream pollution processing. Used as a component of an integrated management system including nutrient management along with E&S control practices, riparian buffers can produce a number of beneficial effects on the quality of water resources. Riparian buffers can be effective in removing excess nutrients and sediment from surface runoff and shallow groundwater, stabilizing streambanks, and shading streams and rivers to optimize light and temperature conditions for aquatic plants and animals. Riparian buffers provide significant flood attenuation and storage functions within the watershed. They prevent pollution both during and after earth disturbance activities, and provide natural, long-term sustainability for aquatic resource protection and water quality enhancement.

A riparian forest buffer is a specialized type of riparian buffer. Scientific literature supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can do all of the following: Capture and hold stormwater runoff from the majority of Pennsylvania storms in a given year; Infiltrate most of that water and/or transport it as shallow flow through the forest buffer soils where contaminate uptake and processing occurs; release excess storm flow evenly further processing dissolved and particulate substances associated with it; sequester carbon at significant levels; improve the health of the stream and increase its capacity to process organic matter and nutrients generated on the site or upstream of the site.

The PCSM provisions, to a large extent, are a codification of the existing program in Pennsylvania mandated by federal requirements as well as adverse case law. In administering this program, the Department has observed that the riparian forest buffers are one of the most

cost effective stormwater management BMPs. Therefore, pursuant to the Department's authority under Section 402 of the Clean Streams Law, DEP has determined that riparian forest buffers are necessary to protect exceptional value and high quality waters of this Commonwealth from land development activities.

In addition to Department observation, numerous studies demonstrate that riparian forest buffers are particularly effective in mitigating adverse impacts, due to their proximity immediately adjacent to the surface water and their function as a physical buffer to that surface water. Specifically, riparian forest buffers protect surface waters from the effects of runoff by providing filtration of pollutants, bank stability, groundwater recharge, rate attenuation and volume reduction. Riparian forest buffers reduce soil loss and sedimentation/nutrient and other pollution from adjacent upslope flow (Dosskey et al. 2002). Riparian forest buffers also remove, transform, and store nutrients, sediments, and other pollutants from sheet flow and shallow sub-surface flow and have the potential to remove substantial quantities of excess nutrients through root-zone uptake. (Desbonnet et al, 1994, Lowrance et al 1997, Mayer et al, 2007, and Newbold et al, 2010). Nitrates can be significantly elevated when adjacent land uses are urban/suburban. Further, the buffer's tree canopy shades and cools water temperature, which is especially critical to support high quality species/cold water species – a function not as effectively provided by any other BMP (Jones, 2006).

Other neighboring states have also recognized the value of riparian buffers. For example New Jersey requires buffers along all trout streams and special protection waters; Virginia requires riparian buffers to implement the Chesapeake Bay Preservation Act; and Maryland has buffer regulations to protect tidal waters, tidal wetlands and streams tributary to the Chesapeake Bay. Riparian forest buffers provide other economic benefits and intrinsic value to land.

There are many existing provisions in the regulations found in Title 25 that limit the extent of activities that can occur along streams and wetlands as a means of protecting water quality. A number of these types of controls are in the form of "setbacks". Although riparian forest buffers also have additional BMP functions, riparian forest buffers are like other regulatory setbacks in that they are a project or facility siting limitation that is included in the regulations as an environmental control. This type of environmental control mechanism is found in numerous other environmental regulations, including but not limited to: Surface and Underground Coal Mining: General, 25 PA Code § 86.102(12), [mining prohibited within 100 feet of a perennial or intermittent stream]; Noncoal mining, 25 PA Code § 77.504, [mining prohibited within 100 feet of a perennial or intermittent stream]; Water Resources: General Provisions, 25 Pa. Code §§ 91.36, 92.5a(e)(1)(i), [stream setbacks and or buffers required for land application of animal manure]; Nutrient Management, 25 Pa. Code § 83.351(a)(1)(v), [surface water and wetland setbacks for manure storage facilities]; Municipal Waste Landfills, 25 Pa. Code § 273.202 [100 foot surface water and 300 foot exceptional value wetland setbacks for municipal waste landfills]; Municipal Waste: Land application of sewage sludge, 25 Pa. Code § 275.202 [land application of sewage sludge prohibited within 100 feet of a perennial or intermittent stream or exceptional value wetland]; Municipal Waste: Construction/demolition waste landfills, 25 Pa. Code § 277.202, [flood plain and wetland setbacks]; Municipal Waste: Resource recovery facilities, 25 Pa. Code § 283.202 [flood plain and wetland setbacks]; Oil and Gas Wells, 25 Pa.

Code § 78.63 [100 foot setbacks for land application of residual waste from oil and gas well development]; and Hazardous Waste Management: Siting, 25 Pa. Code § 269a.29, [hazardous waste treatment and disposal facilities may not be sited in watersheds of exceptional value waters. In addition, the final rulemaking contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

306. **Comment:** WRAC has requested input on expanding the requirement for a forested riparian buffer along all water bodies of the Commonwealth, not limited to EV waters. FirstEnergy and the Energy Association of PA maintain that the language as proposed is too prescriptive and unworkable when it is applied to linear utility projects that are often constructed on non-utility property subject to existing rights-of-way and easements. Even if the requirement is limited to projects located within an EV watershed, FirstEnergy and the Energy Association of PA question whether the riparian buffer must be forested, particularly because the North American Electric Reliability Corporation (NERC) regulations do not allow woody vegetation to be planted where it could interfere with overhead lines. Flexibility and cost consideration are necessary and warranted, particularly in the area of the typical utility project involving overhead transmission and distribution lines where costs are passed on to all ratepayers. Moreover, FirstEnergy and the Energy Association of PA question whether this requirement is appropriate in the context of preventing accelerated erosion and sedimentation, i.e., do the assumed environmental benefits decrease erosion and sedimentation due to earth disturbance activity. A better way in which to promote the establishment of riparian buffers (all types) along waterways and achieve the desired environmental benefits would be through the creation of incentives, such as post-construction stormwater credits, rather than mandates. (1115, 1267)

Response: Linear projects have been addressed in Section 102.14(d) exceptions.

307. **Comment:** It is my opinion that Riparian buffers should be treated as any other best management practice. Using buffers should simply be one of many tools available to develop intelligent stormwater management designs that effectively protect our important resources. Mandatory minimums discount the value of sound science and design creativity. (1151)

Response: Riparian buffers are included in this rulemaking because the Department has determined that riparian forest buffers are the only BMP that can provide all the benefits needed to protect, reclaim and restore surface waters. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

308. **Comment:** It is not clear what classification of stream would require a buffer, This chapter does not state the method by which the 60% cover requirement would be calculated. It should also be stated if wetland mitigation can occur in the buffer areas and how this would affect the cover requirements. (1153)

Response: The final rulemaking includes the obligation to establish or maintain a 150 feet wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application. Section 102.14(c)(2) describes how wetlands are to be managed. The riparian forest buffer canopy requirement would only apply to the portion of the buffer planted in trees.

309. **Comment:** In general, we would like more clarity on when various plans would be required for forestry operations in the riparian situations covered under these regulations. (1275)

Response: Timber harvesting activities are addressed in Section 102.14(d) exceptions.

310. **Comment:** DCNR's final concern regards recreational trails. There are many public recreational trails that occur within 75 feet of an EV stream. Furthermore, we are striving to work with other stakeholders to link trails together in order to provide a richer outdoor experience for Pennsylvanians. We hope that there is nothing in this regulatory change that would prevent the joining of these trails. (1275)

Response: Passive recreational activities, including hiking trails are permitted within the buffer area.

311. **Comment:** The riparian forest buffer section should also include a list of project types or project sizes that do not trigger the buffer requirement, such as pipeline replacements or utility stream crossings. (1153)

Response: Such activities are addressed in Section 102.14(d) exceptions.

312. **Comment:** Riparian forest buffers should only be required when a project site is located adjacent to a waterbody. Developers of projects located within 150 feet of a water body may not have control of the land that is directly adjacent to the water body. Separate owners may control the land where the buffer would need to be placed. As currently written, the project could not proceed if the separate owner does not consent to having the buffer built on his land, which could potentially make some parcels undevelopable. (1153)

Response: Applicants are required to provide buffer protection only on the property they control.

313. **Comment:** The riparian forest buffer requirements should be consistent throughout the Chapter. Currently, EV watersheds require buffers in developments that occurs within 150 feet of a water body, while the permit-by-rule option requires buffers within 100 feet. The buffers should have a consistent width to avoid confusion. (1153)

Response: All buffers in EV and HQ watersheds are 150 feet. The permit by rule section (102.15) has been deleted from this rulemaking.

314. **Comment:** The regulations are proffered under the authority of the Clean Streams Law and are alleged to support the goals and requirements of the Stormwater Management Act and the Federal Clean Streams Law. It is unclear from where the impetus springs for certain proposed revisions, particularly the requirement for mandatory forested buffers along waters in Exceptional Value Watersheds. Clearly the impetus is not from any recent lawmaking by the Pennsylvania State Legislature. (1260)

Response: Land development activities change natural features and alter stormwater runoff characteristics. The resulting alterations of stormwater runoff volume, rate and water quality can cause stream bank scour, stream destabilization, sedimentation, reductions in groundwater recharge and base flow, localized flooding, habitat modification and water quality and quantity impairment, which constitute pollution as that term is defined in the Pennsylvania Clean Streams Law, 35 P.S. Section 691.1. Riparian buffers play a vital role in mitigating the effects of stormwater runoff from land development activities.

Riparian buffers are useful in mitigating or controlling point and nonpoint source pollution by both keeping the pollutants out of the waterbody and increasing the level of instream pollution processing. Used as a component of an integrated management system including nutrient management along with E&S control practices, riparian buffers can produce a number of beneficial effects on the quality of water resources. Riparian buffers can be effective in removing excess nutrients and sediment from surface runoff and shallow groundwater, stabilizing streambanks, and shading streams and rivers to optimize light and temperature conditions for aquatic plants and animals. Riparian buffers provide significant flood attenuation and storage functions within the watershed. They prevent pollution both during and after earth disturbance activities, and provide natural, long-term sustainability for aquatic resource protection and water quality enhancement.

A riparian forest buffer is a specialized type of riparian buffer. Scientific literature supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can do all of the following: Capture and hold stormwater runoff from the majority of Pennsylvania storms in a given year; Infiltrate most of that water and/or transport it as shallow flow through the forest buffer soils where contaminate uptake and processing occurs; release excess storm flow evenly further processing dissolved and particulate substances associated with it; sequester carbon at significant levels; improve the health of the stream and increase its capacity to process organic matter and nutrients generated on the site or upstream of the site.

The PCSM provisions, to a large extent, are a codification of the existing program in Pennsylvania mandated by federal requirements as well as adverse case law. In administering this program, the Department has observed that the riparian forest buffers are one of the most cost effective stormwater management BMPs. Therefore, pursuant to the Department's authority under Section 402 of the Clean Streams Law, DEP has determined that riparian forest buffers are necessary to protect exceptional value and high quality waters of this Commonwealth from land development activities.

In addition to Department observation, numerous studies demonstrate that riparian forest buffers are particularly effective in mitigating adverse impacts, due to their proximity immediately adjacent to the surface water and their function as a physical buffer to that surface water. Specifically, riparian forest buffers protect surface waters from the effects of runoff by providing filtration of pollutants, bank stability, groundwater recharge, rate attenuation and volume reduction. Riparian forest buffers reduce soil loss and sedimentation/nutrient and other pollution from adjacent upslope flow (Dosskey et al. 2002). Riparian forest buffers also remove, transform, and store nutrients, sediments, and other pollutants from sheet flow and shallow sub-surface flow and have the potential to remove substantial quantities of excess nutrients through root-zone uptake. (Desbonnet et al, 1994, Lowrance et al 1997, Mayer et al, 2007, and Newbold et al, 2010). Nitrates can be significantly elevated when adjacent land uses are urban/suburban. Further, the buffer's tree canopy shades and cools water temperature, which is especially critical to support high quality species/cold water species – a function not as effectively provided by any other BMP (Jones, 2006).

Other neighboring states have also recognized the value of riparian buffers. For example New Jersey requires buffers along all trout streams and special protection waters; Virginia requires riparian buffers to implement the Chesapeake Bay Preservation Act; and Maryland has buffer regulations to protect tidal waters, tidal wetlands and streams tributary to the Chesapeake Bay. Riparian forest buffers provide other economic benefits and intrinsic value to land.

There are many existing provisions in the regulations found in Title 25 that limit the extent of activities that can occur along streams and wetlands as a means of protecting water quality. A number of these types of controls are in the form of “setbacks”. Although riparian forest buffers also have additional BMP functions, riparian forest buffers are like other regulatory setbacks in that they are a project or facility siting limitation that is included in the regulations as an environmental control. This type of environmental control mechanism is found in numerous other environmental regulations, including but not limited to: Surface and Underground Coal Mining: General, 25 PA Code § 86.102(12), [mining prohibited within 100 feet of a perennial or intermittent stream]; Noncoal mining, 25 PA Code § 77.504, [mining prohibited within 100 feet of a perennial or intermittent stream]; Water Resources: General Provisions, 25 Pa. Code §§ 91.36, 92.5a(e)(1)(i), [stream setbacks and or buffers required for land application of animal manure]; Nutrient Management, 25 Pa. Code § 83.351(a)(1)(v), [surface water and wetland setbacks for manure storage facilities]; Municipal Waste Landfills, 25 Pa. Code § 273.202 [100 foot surface water and 300 foot exceptional value wetland setbacks for municipal waste landfills]; Municipal Waste: Land application of sewage sludge, 25 Pa. Code § 275.202 [land application of sewage sludge prohibited within 100 feet of a perennial or intermittent stream or exceptional value wetland]; Municipal Waste: Construction/demolition waste landfills, 25 Pa. Code § 277.202, [flood plain and wetland setbacks]; Municipal Waste: Resource recovery facilities, 25 Pa. Code § 283.202 [flood plain and wetland setbacks]; Oil and Gas Wells, 25 Pa. Code § 78.63 [100 foot setbacks for land application of residual waste from oil and gas well development]; and Hazardous Waste Management: Siting, 25 Pa. Code § 269a.29, [hazardous waste treatment and disposal facilities may not be sited in watersheds of exceptional value waters. In addition, the final rulemaking contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or

waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

315. Comment: In the preamble to the proposed rule, the Board asks for feedback from commentators on the question of whether the final rule should include a provision for mandatory riparian forest buffers. POGAM agrees that riparian forest buffers provides variety of benefits to a watershed, including pollution control, habitat enhancement and water quality improvements, but we believe it is critical to recognize that riparian forest buffers are extremely complex ecosystems that are difficult to create, restore, maintain and sustain and may not be appropriate in all cases where they would be required by the proposed rule. For example, steep slopes, cliffs, outcroppings and other topographic or geologic features may preclude the installation of a riparian forest buffer. Similarly, existing land uses such as roads, buildings and bridges may also prevent the use of a buffer. Rather than imposing a mandatory riparian forest buffer requirement in all cases where a permitted project occurs near EV waters or whenever an applicant wishes to use the proposed NPDES permit-by-rule, POGAM urges the Board to provide flexibility in the final rule by relying on riparian forest buffers as a preferred BMP option for meeting the nondischarge or ABACT requirements in a Special Protection watershed that the permittee may voluntarily choose when local topography, existing land uses and other site-specific conditions can accommodate them. (1250)

Response: The Department has clarified the mandatory provisions relating to riparian buffers in 102.14(a), and has included Section 102.14(d) exceptions to address specific situations where the riparian buffer requirement may be inappropriate, and has provided an antidegradation presumption in 102.14(e).

316. Comment: Assuming there is no deed, lease or common law right for a mineral owner to install perpetual forest buffers, a regulatory provision or permit condition mandating the maintenance of a buffer zone would require the mineral owner to obtain a surface owners consent before being able to proceed with development. If consent was not forthcoming, the requirement would afford the surface owner a veto right over development in contravention of a mineral owner's dominant mineral rights. To ensure that the final rule does not create constitutional, contractual or common law conflicts between owners of separate estates in land, and to avoid imposing a mandatory BMP that may not be appropriate in all cases envisioned by the proposed rule, we strongly suggest that the Board modify the final rule to provide for riparian forest buffers as an optional BMP that may be selected by the permittee voluntarily. (1250)

Response: Such activities are addressed in Section 102.14(d) exceptions.

317. Comment: The Draft Regulations need to be clarified so that it is clear that construction, placement and maintenance of pipelines in the Riparian Forest Buffer area are permitted by the regulations. (1272)

Response: Such activities are addressed in Section 102.14(d) exceptions.

318. Comment: We have a concern over the proposed riparian buffer requirements, specifically the requirement of including a mandatory 150-foot (300-feet total) buffer for any project that

happens to be located within an Exceptional Value waterway. Such a requirement is arbitrary, and may impact other persons with potential interests in the waterway. We encourage the department to withdraw this requirement, or at a minimum allow the buffer setback as a best management option for applicants, or to be applied on a case-by-case basis. We would also oppose any mandatory statewide buffer requirement. We believe this would be a major shift of state policy, which would in effect, amount to a taking of property without legislative oversight or approval. (1321)

Response: Section 102.14 has been revised to clarify requirements for riparian buffers. The Department does not believe that its requirement for riparian buffers in special protection watersheds is arbitrary, but rather a proactive approach to protect, enhance and restore our most treasured waters.

319. **Comment:** Not one forester from the private sector was, and very few others were. included in the discussion and drafting of the proposed rule making. Government foresters have little understanding of the economics of the management of small private ownerships and, along with others, tend to falsely believe that landowners have deep pockets. (1149)

Response: The Department engaged in discussion with forestry representatives between the proposed regulation and this final regulation.

320. **Comment:** The cost of establishing and maintaining forested buffers is grossly underestimated. (1149)

Response: The Department has reevaluated the cost estimates and has included that information in the regulatory Order. The potential costs related to the riparian forest buffer requirements in the rulemaking have been calculated by considering how much it could cost to establish a new buffer where no buffer exists as well as enhancing or maintaining an existing buffer. Recognizing that a number of possibilities need to be considered when quantifying total costs that may be experienced when establishing riparian forest buffers throughout the Commonwealth, dollars per acre of riparian forest acre established can range from \$385 to \$4,723 per acre. The minimum estimate is based on the cost of planting 110 (12 – 18 inch) hardwood trees spaced 20 feet apart at \$3.50 per tree as a minimum to establish a riparian forest buffer. The maximum potential cost is based on planting 435 (12 – 18 inch) hardwood trees ten feet apart at \$3.50 per tree as well as removal of invasive species (\$200 per acre), reinforcement planting (\$175 per acre), seedling protection (\$2,175 per acre), competition control such as herbicides and mowing (\$650 per acre) altogether could cost as much as \$4,723 per acre. However, it is most likely that actual establishment of riparian forest buffers will be less than the maximum estimate due to the variety of conditions in the field. It is also possible that riparian forest buffers already exist where projects may fall within the requirements of this part of the rulemaking. The cost would be \$0 per acre where this is the case.

321. **Comment:** Forests do provide high quality water. However, buffers needlessly complicate the management of forested properties. When buffers are managed differently from the remainder of the similar forest the buffers will indeed be different and under the proposed rulemaking less healthy and safe than the surrounding forest. Present best management practices

provide sufficient protection for water quality particularly when the services of professional foresters are utilized in the management of the forest. (1149)

Response: The Department appreciates the comment. Professional foresters would certainly be able to write riparian forest buffer plans that would meet the requirements of this section while maintaining a health forest environment.

322. Comment: The proposed riparian buffer requirements will significantly impacted future economic development opportunities in many of the older communities within the commonwealth. Most available redevelopment sites are linear in nature, being tucked immediately adjacent to existing waterways. The proposed buffer requirements will significantly reduce the developable land mass available for these projects impacting their economic viability. Even with the available federal and state funding (all be it, ever dwindling funding) these projects require private capital and investment to work. By limiting land use within the buffer areas, the incentive and economic justification for private investment in these projects will be impacted. To ensure the success of redevelopment efforts in the commonwealth, it is our recommendation that provisions be included in the buffer requirements to provide for flexibility and alternate approaches to the one-size-fits all buffer requirements in these proposed regulations. (1255)

Response: The Department agrees that flexibility is needed. Section 102.14(d) exceptions allows for exceptions and waivers to the riparian buffer requirement.

323. Comment: It is my understanding and to my satisfaction, that the DEP has decided to require forested buffers on exceptional value (EV) streams. However, I am writing today to express my concern that that these forested buffers be required to be at least one hundred feet on both sides of every stream in our state, rather than one hundred fifty feet on small headwater streams and three hundred feet on EV and high quality streams. (1125)

Response: The Department appreciates the commentator's support of the benefits of buffers. The final rulemaking expands the buffer obligation to establish or maintain a 150 foot wide riparian forest buffer along both High Quality (HQ) and Exceptional Value (EV) waters that are impaired at the time of application. In addition, existing 150 foot riparian buffers are required to be protected along both HQ and EV waters that are meeting their designated use at the time of application.

324. Comment: Section 102.14 (2) Industry feels that increasing the width to 150' on newly established riparian buffers is an unnecessary restriction. (1188)

Response: The Department has not increased the width requirement.

325. Comment: Section 102.14 (4) This section needs clarified to exclude earth disturbance activities which are currently permitted under other Department regulations whereby existing riparian forest buffers are currently established at widths of 100' along special protection and impaired waters. Many sites currently exist where facilities were designed and constructed utilizing a 100' buffer. Minimally, these sites should qualify for an exemption. (1188)

Response: Section 102.14(d)(1)(vii) and (ix) includes such an exemption.

326. **Comment:** Riparian buffers should be voluntary, and significant credit should be given in the PCSM calculations for their use based on total acreage of the buffer proposed. If riparian buffers are mandatory, development will be de facto excluded from many sites. Only large developers that can acquire significant tracts of land will be able to build anything at all. Providing credits as an incentive to establish riparian buffers benefits both developers, especially small developers, and the environment. The permit by rule process also gives incentive to include riparian buffers in a project. Permit by rule should be available for all low risk projects that include riparian buffers. (1223)

Response: The Department has provided an opportunity to utilize riparian forest buffers in Section 102.14(e)(2) for trading or offsetting credits in accordance with procedures or regulations established by the Department. Section 102.15 relating to permit-by-rule has been deleted.

327. **Comment:** When establishing new forested riparian buffers, what controls are put in place until the buffer is fully established when site disturbance occurs? What minimum requirement regarding buffer establishment is set for newly established buffers prior to earth disturbance activities? Many of our stream valleys hold the best potential for land development based on our topography. This will lead to areas in which development can never occur if it is included on the property deed. (1266)

Response: Those controls would be site specific and included in the riparian forest management plan. The Department sets a standard to be met in Section 102.14(b)(1) and Section 102.14(b)(4). The Department is not prescriptive in how that is accomplished, but will be issuing guidance concurrent with this final rulemaking that will be helpful to permittees in meeting the requirements of Section 102.14.

328. **Comment:** The requirements of Section 102.14 are extremely burdensome and lack the scientific basis normally required in support of such legislation. Without clear scientific evidence to support the specific requirements contained in 102.14, i.e., substantiated research that defines the level of protection of water quality provided by the minimum widths and planting densities of required new buffers, as well as documentation supporting the idea of removing existing vegetation in areas bordering existing waterways, this requirement is simply without merit. A 100-foot wide buffer along each side of a 200-foot long section of stream that passes through the middle of a 2-acre property essentially reduces that property to 1 usable acre, at most. This kind of aggressive legislation is a **taking of real property**, and is unfair and unjust to those who own undeveloped or partially developed property. This section should just be removed from the proposed Rulemaking and withheld until such time as sufficiently detailed documentation supporting the proposed requirements is produced. (1279)

Response: Land development activities change natural features and alter stormwater runoff characteristics. The resulting alterations of stormwater runoff volume, rate and water quality can cause stream bank scour, stream destabilization, sedimentation, reductions in

groundwater recharge and base flow, localized flooding, habitat modification and water quality and quantity impairment, which constitute pollution as that term is defined in the Pennsylvania Clean Streams Law, 35 P.S. Section 691.1. Riparian buffers play a vital role in mitigating the effects of stormwater runoff from land development activities.

Riparian buffers are useful in mitigating or controlling point and nonpoint source pollution by both keeping the pollutants out of the waterbody and increasing the level of instream pollution processing. Used as a component of an integrated management system including nutrient management along with E&S control practices, riparian buffers can produce a number of beneficial effects on the quality of water resources. Riparian buffers can be effective in removing excess nutrients and sediment from surface runoff and shallow groundwater, stabilizing streambanks, and shading streams and rivers to optimize light and temperature conditions for aquatic plants and animals. Riparian buffers provide significant flood attenuation and storage functions within the watershed. They prevent pollution both during and after earth disturbance activities, and provide natural, long-term sustainability for aquatic resource protection and water quality enhancement.

A riparian forest buffer is a specialized type of riparian buffer. Scientific literature supports the riparian forest buffer (with stormwater entering the buffer as sheet flow or shallow concentrated flow) as the only best management practice that can do all of the following: Capture and hold stormwater runoff from the majority of Pennsylvania storms in a given year; Infiltrate most of that water and/or transport it as shallow flow through the forest buffer soils where contaminate uptake and processing occurs; release excess storm flow evenly further processing dissolved and particulate substances associated with it; sequester carbon at significant levels; improve the health of the stream and increase its capacity to process organic matter and nutrients generated on the site or upstream of the site.

The PCSM provisions, to a large extent, are a codification of the existing program in Pennsylvania mandated by federal requirements as well as adverse case law. In administering this program, the Department has observed that the riparian forest buffers are one of the most cost effective stormwater management BMPs. Therefore, pursuant to the Department's authority under Section 402 of the Clean Streams Law, DEP has determined that riparian forest buffers are necessary to protect exceptional value and high quality waters of this Commonwealth from land development activities.

In addition to Department observation, numerous studies demonstrate that riparian forest buffers are particularly effective in mitigating adverse impacts, due to their proximity immediately adjacent to the surface water and their function as a physical buffer to that surface water. Specifically, riparian forest buffers protect surface waters from the effects of runoff by providing filtration of pollutants, bank stability, groundwater recharge, rate attenuation and volume reduction. Riparian forest buffers reduce soil loss and sedimentation/nutrient and other pollution from adjacent upslope flow (Dosskey et al. 2002). Riparian forest buffers also remove, transform, and store nutrients, sediments, and other pollutants from sheet flow and shallow sub-surface flow and have the potential to remove substantial quantities of excess nutrients through root-zone uptake. (Desbonnet et al, 1994, Lowrance et al 1997, Mayer et al, 2007, and Newbold et al, 2010). Nitrates can be

significantly elevated when adjacent land uses are urban/suburban. Further, the buffer's tree canopy shades and cools water temperature, which is especially critical to support high quality species/cold water species – a function not as effectively provided by any other BMP (Jones, 2006).

Other neighboring states have also recognized the value of riparian buffers. For example New Jersey requires buffers along all trout streams and special protection waters; Virginia requires riparian buffers to implement the Chesapeake Bay Preservation Act; and Maryland has buffer regulations to protect tidal waters, tidal wetlands and streams tributary to the Chesapeake Bay. Riparian forest buffers provide other economic benefits and intrinsic value to land.

There are many existing provisions in the regulations found in Title 25 that limit the extent of activities that can occur along streams and wetlands as a means of protecting water quality. A number of these types of controls are in the form of “setbacks”. Although riparian forest buffers also have additional BMP functions, riparian forest buffers are like other regulatory setbacks in that they are a project or facility siting limitation that is included in the regulations as an environmental control. This type of environmental control mechanism is found in numerous other environmental regulations, including but not limited to: Surface and Underground Coal Mining: General, 25 PA Code § 86.102(12), [mining prohibited within 100 feet of a perennial or intermittent stream]; Noncoal mining, 25 PA Code § 77.504, [mining prohibited within 100 feet of a perennial or intermittent stream]; Water Resources: General Provisions, 25 Pa. Code §§ 91.36, 92.5a(e)(1)(i), [stream setbacks and or buffers required for land application of animal manure]; Nutrient Management, 25 Pa. Code § 83.351(a)(1)(v), [surface water and wetland setbacks for manure storage facilities]; Municipal Waste Landfills, 25 Pa. Code § 273.202 [100 foot surface water and 300 foot exceptional value wetland setbacks for municipal waste landfills]; Municipal Waste: Land application of sewage sludge, 25 Pa. Code § 275.202 [land application of sewage sludge prohibited within 100 feet of a perennial or intermittent stream or exceptional value wetland]; Municipal Waste: Construction/demolition waste landfills, 25 Pa. Code § 277.202, [flood plain and wetland setbacks]; Municipal Waste: Resource recovery facilities, 25 Pa. Code § 283.202 [flood plain and wetland setbacks]; Oil and Gas Wells, 25 Pa. Code § 78.63 [100 foot setbacks for land application of residual waste from oil and gas well development]; and Hazardous Waste Management: Siting, 25 Pa. Code § 269a.29, [hazardous waste treatment and disposal facilities may not be sited in watersheds of exceptional value waters. In addition, the final rulemaking contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

329. Comment: We suggest that the proposed amendments be modified to allow that a riparian forest buffer be one of a suite of BMPs that a project proponent could employ when seeking an individual or general permit or requesting authorization to proceed under a PBR. If a riparian forest buffer is proposed at the discretion of the permit applicant, the width of the forest buffer would be properly determined on the basis of site-specific conditions set forth in the permit application, which would thereafter be reviewed and approved by PADEP. (1256, 1323)

Response: Riparian buffers are included in this rulemaking because the Department has determined that riparian forest buffers are unique in providing the benefits needed to protect, enhance and restore water quality and aquatic resources.

330. Comment: If the proposed amendments are not modified to remove the requirements imposing a 150 foot wide riparian forest buffer in EV watersheds, we strongly recommend that the mandatory width of the riparian forest buffers be reduced significantly. The proposed amendments do not contain any compelling supporting documentation to justify why a riparian buffer averaging a minimum of 150 feet wide is necessary and how much additional benefit is gained by having a riparian buffer of that width. (1256, 1323)

Response: Riparian buffers are included in this rulemaking because the Department has determined that riparian forest buffers are unique in providing the benefits needed to protect, enhance and restore water quality and aquatic resources.

331. Comment: We strongly suggest that the proposed amendments include a provision allowing riparian buffers to be waived under circumstances where imposition of riparian buffers are not technically justified, would result in significant hardship on the permit applicant, or would result in the possibility of regulatory taking of private property without just compensation. (1256, 1323)

Response: The Department does not agree that the riparian buffer requirements work an unconstitutional taking of property (see response to # 329). Further, the Department does not agree that Section 102.14 violates the equal protection clause. The regulation does not discriminate against a constitutionally protected class, and as discussed above, the riparian forest buffer provisions are rationally related to the legitimate state interest of protection of waters of the Commonwealth and to the prevention of pollution in accordance with the Clean Streams Law. Finally, the final rulemaking contains exemptions and waivers for certain categories of activities or circumstances. Even if an applicant would not qualify for an exemption or waiver, the final regulation does not deprive a landowner of all reasonable investment backed expectation, as it allows a number of other uses of the riparian forest buffer area of the property.

332. Comment: While we strongly suggest that mandatory riparian forest buffer requirements be eliminated, if the concept is retained, we believe that it is vital to modify the proposed regulations so that the requirements pertaining to riparian forest buffers can be properly understood by the regulated community and applied by PADEP. (1323)

Response: Section 102.14 has been revised for clarity.

333. Comment: If the "project site" is located in both an EV and non-EV watershed, the proposed amendments must clarify that any mandatory riparian forest buffers to be imposed by 25 Pa. Code Chapter 102 should only apply to the property located within the EV watershed, and not to the portions of the project site that are in the non-EV watershed and do not drain into the EV watershed. If the intent of the mandatory riparian forest buffer requirements is to protect EV waters, then it only makes sense that areas located outside of EV watersheds not be encumbered in any way by any type of mandatory riparian forest buffer. (1256, 1323)

Response: The buffer requirement applies only to earth disturbances within High Quality (HQ) and Exceptional Value (EV) waters. Section 102.14(a) has been revised to clarify when a riparian buffer is required.

334. **Comment:** The proposed amendments do not address situations, which will be abundant throughout the Commonwealth, where there are existing structures or activities located within areas that fall within the boundaries of mandatory riparian forest buffers required by the proposed amendments, or structures or activities existing within areas to be designated as riparian forest buffers that are inconsistent with riparian forest buffers but nevertheless were permitted or approved prior to the adoption of the proposed amendments. Because these structures and activities are supported by an investment-backed expectations of time, money and effort by their proponents, as well as the authorization of the governmental entity which provided the permit or approval (to the extent a permit or approval was required), the proposed amendments must be clarified to explicitly state that these structures and activities can be built, maintained, repaired, replaced or reasonably expanded despite any prohibitions which would otherwise be required by the later imposition of a mandatory riparian forest buffer. This comment is especially meaningful in situations regarding the siting and operation of municipal waste landfills. In the same manner, the imposition of any mandatory riparian forest buffer to be imposed by the proposed amendments should not act to prohibit the siting, permitting and operation of a municipal waste landfill that was previously approved, or which was the subject of a newspaper notice prior to the identification of a requirement to create a mandatory riparian forest buffer. (1323) This comment is especially meaningful in the context of rail operations. In this context, we also suggest deleting the phrase "when permitted by the Department" in the introductory provision of 25 Pa. Code 102.14(e)(4) (proposed) because the phrase appears to provide PADEP with unfettered and standard less discretion to determine when roads, bridges, trails, storm drainage, utilities or other structures may be constructed or placed within riparian forest buffers. (1256)

Response: Existing structures are not impacted by these buffer requirements. In addition, while not specifically mentioned in the regulation, landfills would likely be exempt from riparian buffer requirements through the exception in 102.14(d)(ix) relating to setback requirements in other permits issued by the Department.

335. **Comment:** The proposed requirements to enhance, establish and/or manage and maintain any riparian forest buffer is unnecessary, and appears to be at odds with the intention of the proposed amendments to preserve certain riparian forest buffers. In situations in which a riparian forest buffer is required to be designated, the proposed amendments also require that the Post-Construction Stormwater Management Plan ("PCSM Plan") include a plan to establish, enhance, maintain and manage the riparian forest buffer. The entity responsible for the implementation of the PCSM Plan would also be responsible for the management of the riparian forest buffer. Since the intention of the riparian forest buffer requirements is, in part, to create natural areas removed generally from all human activity, then it seems inapposite to require active management on those areas, and force the entity responsible for the implementation of the PCSM Plan to do so. Therefore, if the amendments as adopted include the mandatory imposition of a riparian forest buffer, we suggest that such provisions do not require any active management of the riparian

forest buffer, and that the buffer area be generally left in its existing state to undergo natural succession. The proposed definition of the phrase "riparian forest buffer" would be revised accordingly. However, if the creation and width of a riparian forest buffer was voluntary, and reviewed by PADEP on a site-specific basis, then the permit applicant should be able to propose forest management techniques which are consistent with its proposed project and included in the PCSM Plan. (1256, 1323)

Response: Management of a riparian forest buffer is described in Section 102.14(b)(3). The Department believes that active management is absolutely critical during the first five years of establishing a new riparian forest buffer or enhancing an existing buffer to meet riparian forest buffer standards. Management would be focused on ensuring survivability of the young trees and shrubs. Once the new trees and shrubs are established (end of the 5-year period) then management activities become less active and focus more on maintenance needs as defined as long term operation and maintenance in the riparian forest buffer management plan. Active management of an existing riparian forest buffer is not required, however activities or practices used to maintain the riparian buffer are allowed in Section 102.14(f)(3)(i).

336. **Comment:** Earth disturbances associated with rail projects must be excluded from any requirement to create riparian forest buffers, rail lines and facilities must be permissible in areas potentially falling within zones designated for the creation of riparian forest buffers, and any riparian forest buffers previously created must allow rail projects to be constructed, operated, maintained and enlarged without any interference. (1256)

Response: Linear projects, such as rail projects are addressed in Section 102.14(d) exceptions.

337. **Comment:** **Riparian forest buffer** -This definition includes "native trees, shrubs and forbs"-the assumption is that the Department is using the E&S program to advance native trees, meaning that non-native trees are being removed and kept out. We question the appropriateness of using the E&S program to establish a preference for native plants. (1264, 1291)

Response: Native trees, shrubs and forbs are preferred in riparian forest buffers. This is due to the fact that locally evolved species have better vigor and hardiness and are better able to compete. These "natives" also provide food to aquatic insects, some of which have mouths adapted to feed only on these local species of plant materials. Aquatic insects are vital to instream processing of pollutants. In recognition of the merits of native material, many nurseries now stock native plants. Where available, this stock should be used. A professional preparing the planting plan for the riparian forest buffer will assess any non-native trees and shrubs that may already be established on the site and make the decision to retain some of this vegetation if it is providing some function such as streambank stabilization.

338. **Comment:** The rules are unclear on the necessity to obtain an approved Jurisdictional Determination that establishes the limits of the regulated wetland and watercourses. This Jurisdictional Determination is needed to establish the riparian, forested buffer limit. Under your current programs, there is no mechanism for the Department to verify a wetland line without a Chapter 105 application. The United States Army Corps of Engineers ("USACE") typically

verifies wetland delineations in the Commonwealth without permit applications, but with budget cuts have been reluctant to issue approved Jurisdictional Determinations. An approved Jurisdiction Determination now takes at least six (6) months to over a year prior to issuance Is it the rules intent to have either the Department or conservation districts be responsible for reviewing the wetland delineation as part of the 102 program review? (1259)

Response: Because a riparian forest buffer is not required for wetlands, no Jurisdictional Determination is required by this Chapter.

102.15. Permit by rule for low impact projects with riparian forest buffers.

Department Response: The proposed amendments included an innovative permitting option for low impact, low risk projects that incorporate riparian forest buffers. This permit-by-rule option was intended to address a variety of issues regarding permit review timing and result in new or expanded buffers.

Specifically it was to be used to authorize qualifying projects that require either an NPDES permit or E&S control permit under this Chapter. The permit-by-rule concept included eligibility criteria to limit applicability to “low-risk” projects and conditions requiring the use of riparian forest buffers, “low impact design” techniques, more prescriptive plan and implementation requirements, mandatory oversight by a professional engineer, geologist or landscape architect registered in Pennsylvania, and a 30-day review timeframe.

Over 260 comments were received on Section 102.15 alone – some supporting it, others suggesting revision, and still other recommending that it be dropped from the regulatory package altogether. The comments received are listed below.

For each of these comments, the Department’s response is the same – we appreciate your attention to this concept. The Department remains committed to looking for methods to balance environmental protection for the Commonwealth with predictability in permitting for the applicant, however realizes that the permit-by-rule approach envisioned in this proposed rulemaking did not reach the desired balance. Therefore, Section 102.15 has been removed in its entirety from the regulatory package and is not included in the final rulemaking.

1. **Comment:** DEP should also continue to review stormwater plans to ensure that they meet the standards of the Clean Water Act and do not degrade the quality of the streams of the Commonwealth. An expedited permit review process, like the new “permit-by-rule” (PBR) program, puts rivers and streams at risk, is poor policy, and violates core requirements of the Clean Water Act. Of particular concern is the fact that the PBR would apply in High Quality and Impaired watersheds. These watersheds require special protections to ensure that water quality is protected and maintained. Those special protections cannot be ensured through an expedited permit review process. (58, 62, 122, 155, 256, 259, 262, 263, 264, 266, 267, 269, 273, 274, 275, 276, 277, 278, 278, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 315, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 426, 427, 431, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535,

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2. **Comment:** Please ensure the safety and quality of our streams and drinking water in Pennsylvania by creating a 100 foot forested buffer for streams *and eliminating the proposed PBR* program. (58, 62, 122, 155, 259, 264, 269, 273, 274, 275, 276, 277, 278, 278, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 315, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 426, 427, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 627, 629, 630, 631, 632, 633, 634, 635, 636, 702, 703, 705, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 725, 727, 728, 729, 730, 731, 732, 735, 1116, 1117, 1118, 1119, 1120, 1121, 1142, 1219)

3. **Comment:** Section 102.15. Permit-by-rule for low impact projects with riparian forest buffers. - Economic impact; Reasonableness; Clarity. Permit-by-rule exclusions Paragraph (b)(4) is an exclusion that states: The earth disturbance is being proposed or conducted by a person who has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit and schedule of compliance or order issued by the Department. This provision is not clear. For example, if a person was cited for past violations, there would be a record of that event and an ability to appeal the result. However, this provision penalizes the person for "lack of ability or intention to comply." How will this provision be enforced and how can an action taken under it be appealed? The EQB should explain the intent of this provision, its reasonableness and how it would be enforced. (1322-IRRC)

4. **Comment:** *Permit conditions* The Department of Transportation cited several specific concerns with provisions in Subsection (c) that are similar to its concerns with Subsection

102.8(g) relating to meadow requirements, hydrologic routing analysis, presubmission checklists. We recommend that the EQB consider the concerns raised by the Department of Transportation and make amendments as appropriate. (1322-IRRC)

5. **Comment:** *Written E&S Plan, PCSM Plan and PPC Plan* Under Subsection (f), the registrant develops the PPC Plan. The Department of Transportation commented that this is inappropriate for contract jobs because the Department of Transportation cannot control the contractor's use of these materials. We recommend that the EQB clarify this paragraph. (1322-IRRC)

6. **Comment:** Sadly, the proposed rule does not go far enough. The new rule should prohibit the use of the permit-by-rule in high quality waters. The permit-by-rule would fast-track permitting decisions, meaning less time for review and fewer opportunities for public participation. Permits that would impact some of our best rivers and streams require more scrutiny, not less. (144, 292, 327, 350, 394, 589, 652, 653, 654, 655, 656, 657, 658, 569, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 1154, 1155, 1156, 1157, 1158, 1160, 1161, 1163, 1164, 1165, 1168, 1169, 1174, 1177, 1179, 1180, 1181, 1189, 1192, 1195, 1196, 1197, 1198, 1199, 1206, 1210, 1211, 1212, 1213, 1216, 1222, 1226, 1243, 1251, 1254, 1258, 1273, 1277, 1283)

7. **Comment:** *Scope of the permit-by-rule:* It is clear from the comments of the Environmental Protection Agency, legislators and the public that these parties find the permit-by-rule, as proposed by the EQB, not acceptable to protect the environment or useful to potential permit holders. Majority Chairman of the House Environmental Resources and Energy Committee, Representative Camille "Bud" George provided extensive comments on why the proposed permit-by-rule is not acceptable. Several other committee members and legislators also questioned this provision. The EPA commented that the permit-by-rule does not satisfy the Clean Water Act unless it meets 40 CFR 122.41. Many public comments in general support of the regulation also included opposition to the permit-by-rule provision. Entities who would actually be the permit holders find that the permit-by-rule has devolved to such a point that the attendant restrictions, conditions and timeframes have all but eliminated its usefulness. We recommend deleting the permit-by-rule provisions. (1322-IRRC)

8. **Comment:** I object to the requirement that an applicant who seeks to utilize the permit-by-rule option must install, maintain or otherwise incorporate into their project a 100-foot or 150-foot riparian buffer. There is no environmental or conservation justification for imposing a potentially costly and unnecessary requirement on a permit applicant simply because of the administrative review process they choose to utilize. Moreover, such a requirement reinforces the notion among some groups who object to the permit-by-rule option that the option is somehow less protective of the environment, and therefore additional, compensatory requirements must be imposed. This is particularly true for oil and gas development, where the earth disturbance is relatively limited, both in size and duration, and where Pennsylvania remains one of the few states to require an erosion and sediment control permit. (948)

9. **Comment:** If the permit-by-rule is included in the final regulation, add permit-by-rule verification of coverage to the list of authorizations to be issued by the Department or conservation district prior to municipal issuance of building or other permits or approvals. (1208)
10. **Comment:** Permit-by-rule -Besides the proposed 30-day review time, clarify the benefits of this process. It does not appear that the process is simplified any. (1123)
11. **Comment:** Permit-by-rule – need to add/clarify the term of this permit. (1268)
12. **Comment:** Scope of the permit-by-rule: The proposed rulemaking should exclude the availability of the proposed permit-by-rule (PBR). Pike County Conservation District believes that the PBR will negatively impact land and water resources, add to an already confusing and complex permitting system, increase the costs of land development and create complicated enforcement scenarios that will be very difficult to manage. This was demonstrated recently when DEP revoked three erosion and sediment control permits because of numerous technical deficiencies discovered after the permits were approved and subsequently appealed. At the very least, the PBR option should not be available in any Special Protection (High Quality or Exceptional Value) watersheds given the high potential for water quality degradation in the absence of a detailed technical review of E&S and PCSM plans. (1208)
13. **Comment:** General comment - it is not clear what is exactly required to qualify for this option or what advantages it offers to applicants. (436, 650)
14. **Comment:** 102.15 (3) Is the past clean-up to residential or industrial standards? (2)
15. **Comment:** The concept of using a "permit-by-rule" approach does not satisfy the Clean Water Act unless the rules meet all the substantive and procedural requirements of NPDES permits found in 40 CFR 122.41 (e.g., duty to comply; right of inspection; public notice and comment, etc.). In addition, Pennsylvania must consider the appropriateness of incorporating a permit within its regulations when permits are limited to a five year term in comparison to regulations which are generally not modified within that timeframe. A "permit-by-rule" can not allow the filing of NOIs for a period longer than the five year term of the permit. (1268)
16. **Comment:** With regard to the proposed permit-by rule, the PA Builder's Association believes that the optional permit-by-rule proposal developed by the Department is an encouraging, enlightened approach to the issues of protecting Pennsylvania's waterways and ensuring economic opportunity. However, we have identified several issues with the proposal as drafted that should be addressed in order to ensure that this option is perceived as viable and workable by a significant number of project applicants. (1264, 1291)
17. **Comment:** The permit-by-rule section of these proposed regulations have been a source of much discussion since the idea was first presented by the PA Department of Environmental Protection. Conservation Districts are still concerned about the possible negative environmental ramifications of not having a complete technical review of the permit before it is issued. The proposed language does address some of the concerns initially raised by limiting the scope of circumstances in which a permit-by-rule can be obtained. Conservation districts, however, still

believe there is a greater potential of environmental degradation without a more complete and strenuous review. PACD recommends that conservation districts inspect the proposed plan before PBR approval is granted. (640)

18. **Comment:** FirstEnergy and the Energy Association of PA commend the Department in its effort to develop a permit-by-rule and welcomes a streamlined, shortened process. However, as proposed for Chapter 102, the permit-by-rule is unlikely to be of any significant advantage to the regulated utility industry. The restrictions on its applicability and the extensive prescriptive requirements of the permitting process and package are equivalent to or more stringent than the requirements for the General and/or individual NPDES Permit. (1115, 1267)

19. **Comment:** Is the administrative review for PBR the same as NOI review? (640)

20. **Comment:** What is included in the administrative review? (640)

21. **Comment:** We deplore the lack of opportunities for public participation. Public notification and a month-long comment period should be provided. (1290)

22. **Comment:** Provide the Department's definition of "low impact". (1123)

23. **Comment:** Do conservation districts review the technical elements of the PBR application? (640)

24. **Comment:** If the ROC is incomplete in the PBR, does the potential permittee have 60 days to re-submit, or is the permit automatically denied? (640)

25. **Comment:** If a PBR application is denied, can the applicant reapply? (640)

26. **Comment:** Buffers will only be effective if they are protected and maintained. How will that be done? (1314)

27. **Comment:** There is a concern that the site characterization requirements are inadequate. (1269)

28. **Comment:** Our organizations are supportive of any effort to simply and streamline an already overly complicated and expensive regulatory review process, and we appreciate the Department's attempt to create such a process in its proposed voluntary Permit-By-Rule program for low impact projects. We feel the Department has incorporated many additional safety factors to decrease the likelihood of pollution events occurring at the site, including in part the aggressive use of riparian buffers, restrictive criteria on what slope and soil classifications are eligible, use of an engineer's professional seal, eliminating the social or economic justification process and the sole utilization of nondischarge of BMPs. (1245, 1303)

29. **Comment:** Before exploring whether the program should be expanded to include EV watersheds, the Department may want to examine ways to accommodate small such as five acres or less type projects more readily into the program. So for example, the current slope and soil

criteria disqualify much of the remaining buildable land in Chester County and consequently the PBR program will be used infrequently. By adding a little flexibility to those small, truly low impact sites, the program may see greater use. (1245, 1303)

30. **Comment:** I'm here to speak against the Permit-By-Rule because of the lack of requirements to review erosion and sediment control plan as well as a stormwater plan. (1310)

31. **Comment:** I strongly oppose the Permit by Rule that opens the door to future degradation of our precious streams and our critical water supply for the future. When are we going to think of the preservation of our environment and not the profit of a few greedy individuals . (1320)

32. **Comment:** We feel that this provision should be eliminated from the proposed regulations. We are also opposed to the permit-by-rule because it does not provide for a technical or engineering review, which would ensure good design and management strategies. We have not provided a detailed review or recommended specific revisions to §102.15 because we are opposed to the PBR. If the PBR remains in the revised regulations, its use should be prohibited in high quality watersheds. (693)

33. **Comment:** The permit-by-Rule should not be available in impaired, HG or EV streams. (946, 1191)

34. **Comment:** We think that the PBR option should be eliminated altogether. We're seeing some problems already with Marcellus shale permits that have been issued under the permit-by-rule and we don't want those problems to continue. So it should be --- we strongly oppose the permit-by-rule, especially in special protection to watersheds. Special protection watersheds require extra oversight and review to ensure that water quality is protected and maintained. Those special protections cannot ensure --- cannot be ensured through an expedited permitting review process. Rather, DEP and county conservation districts should be reviewing such permits carefully and ensuring that the permits require sufficient protections so that the water quality is not degraded. (181, 1293)

35. **Comment:** We strongly oppose DEP's proposed Permit-By-Rule proposal and emphatically urge DEP to remove it from its final regulations. (1253, 1302, 1307)

36. **Comment:** I am here to speak out against the Permit-By-Rule given there are no requirements to conduct a technical review of erosion and sediment control, as well as stormwater management plans. (1309)

37. **Comment:** No E&S permits for disturbances less than 100 feet from streams with a process for exceptional cases. That allows for some flexibility without eliminating the concept of protection for streams by use of forestry and vegetation. (1307)

38. **Comment:** One of the things we have right now in our waterways are endocrine disrupters. It's one of the things we've been seeing. It comes from pesticides and herbicides. It also comes from cosmetics, from prescriptions, from all kinds of different places. Too many of our streams are unevaluated by the Department of Environmental Protection because of staff limitations,

therefore, we do not have streams that have any kind of qualification. They're not labeled. They are not labeled as any kind of value. They have no label on them whatsoever. So if we have a Permit-By-Rule auction that's based on value, these streams will be Permit-By-Rule. Therefore, I do not believe that Permit-By-Rule should be an option when we have too many streams that have not even been evaluated. (1300)

39. **Comment:** We feel that it's not a good idea to trade PBR for stream buffers. Riparian buffers have been mandatory for all earth disturbances, requiring an NPDES permit. And since streams flow between areas of jurisdiction, protection of our watersheds should be a concerted effort among all of the local governments, or better yet, statewide. And for the best stewardship, a buffer of at least 300 feet is needed for any development in EV watersheds. (737, 1290)

40. **Comment:** We should not adopt the proposed Permit-By-Rule regulation, but rather adopt mandatory buffer zones across Pennsylvania. There are several problems with the proposed Permit-By-Rule plan. The most troubling is that it allows for developers to bypass a technical review by the DEP. (1299)

41. **Comment:** We are concerned about permit-by-rule options for large landscape projects that propose PBR would be available for very large construction sites as long as only 15 acres are being disturbed at any time. This allows very large projects to receive expedited permit approval without adequate technical review of plans as long as the construction work is phased in 15 acre increments. (1293)

42. **Comment:** Regarding the permit-by-rule, a list of the exclusions should include numerical values. One professional's opinion of the acceptable risk of sinkhole development or land sliding will be different from another's, both of which will be different from the Department's. (1289)

43. **Comment:** "Permit-by-Rule" is an interesting term. I had assumed that it would be a limited option, granted only for the simplest of projects and restricted to only the most trusted of developers - those with a proven record of professionalism. At the public hearing in Harrisburg on 10/01/09 I asked two questions: What percentage of your permits will be eligible for PBR? What percentage of last year's permits would have qualified for PBR? No DEP representatives present could answer those queries. If DEP has no idea of the effect of enacting a PBR regulation - no idea whether it would affect 5% or 85% of earth-disturbance activities, that regulation should not even be considered. DEP should not open Pandora's Box by enacting PBR. There should be assurance of technical review of E&S plans and post-construction stormwater management plans. We feel that DEP should work with County Conservation District staff to conduct the needed technical reviews of the E&S and stormwater management plans to ensure that our waterways are protected. We are concerned because PBR would not guarantee a combination of buffers, a good stormwater management plan and upslope BMPs. Technical review is a must to ensure that streams are protected. Without requiring technical review of such plans, DEP cannot ensure that the development will use the BMPs to control runoff and prevent pollution. We fear that PBR could be abused by large developers. By working 15 acres or less at a time, they could receive expedited permit approval for each phase of their development. We disapprove of any regulations which could be circumvented. (737, 1290)

44. **Comment:** When we saw that the proposed Chapter 102 regulations included PBR, we were intrigued. We had assumed that it would be a very limited option granted only to the simplest projects and restricted only to the most trusted of developers, those with a proven record of professionalism. The last hour's presentation stated somewhat broader eligibility requirements. We were disappointed also to see that the intent of PBR is to expedite permits for earth disturbance activities, perhaps to the extent that it violates some parts of the Clean Water Act and put our waterways at risk. Will the PBR be the exception or the norm? Eligibility requirements said it's okay for HQ watersheds, and we feel that should not be done with an expedited permit review process. Your agency's task is to ensure that permits give adequate protection to our streams and rivers. (1290)

45. **Comment:** The Proposed "Permit-By-Rule Option" Should be Eliminated. This option would violate Pennsylvania's antidegradation provisions when applied in High Quality watersheds. It would violate the Clean Water Act when applied in impaired watersheds. This option constitutes insufficient agency review under the Clean Water Act. Because of the site-specific and technical nature of E&S Plans and PCSM Plans, the permitting authority must require technical review of these plans before issuing an NPDES permit that assures compliance with all applicable effluent limits and standards. 33 U.S.C. § 1342(b). Without such review, this statutory requirement cannot be met, as there is no assurance from the permitting authority that the permittee's consultant did not "misunderstand or misrepresent" proposed BMPs and relevant water quality requirements, or that the plans are not "improper or inappropriate," or contain "improper or inappropriate" BMPs to meet effluent limits and water quality standards. In sum, the language of the Clean Water Act and the relevant case law make clear that the proposed PBR is an "impermissible self-regulatory permitting regime" that violates the Clean Water Act. Id. at 498. (1249, 1314)

46. **Comment:** The newly proposed expedited permit review process, "Permit by Rule" (PBR) is an ill-conceived idea that appears to violate important requirements of the Clean water Act. It will not provide adequate analysis of new discharges into our local impaired streams. It is imperative that DEP continues to review stormwater plans for new discharges to ensure that water quality in these impaired streams is not further degraded and standards of the Clean Water Act are met. (1270)

47. **Comment:** Most of the conservation districts' made some comment about this option. They can be summed up as follows: 1. A concern over the lack of technical reviews by Districts or DEP. 2. The allowance of 15 acres of disturbance at any given time. 3. Defining "low impact development." 4. Allowing the option to be used in High Quality (HQ) watersheds. (947)

48. **Comment:** We strongly oppose the Permit -By Rule portion of the proposed regulations and would encourage the Department to withdrawal this portion of the proposed regulations. (947)

49. **Comment:** The Permit by Rule does not allow for review of effluent limits and does not allow for public participation opportunities. (833)

50. **Comment:** We feel that the DEP should not eliminate technical review of stormwater plans. Without review by the state and without opportunities for public comment, stormwater management will get worse, not better. (1125, 1228)

51. **Comment:** We also feel strongly that the DEP should not eliminate technical review of stormwater plans. Without review by the state as well as opportunities for public comment, stormwater management will get worse, not better. We have seen recent evidence that strong, more vociferous management guidelines are necessary. The DEP should also continue to actively review stormwater plans to insure that they meet the standards of the Clean Water Act and do not degrade the quality of the streams of the Commonwealth. (1219)

52. **Comment:** We're also concerned over the lack of provisions for providing , participation opportunities. Those permit applications, at a minimum 30 day comment period must be provided. (1293, 1299)

53. **Comment:** The absence of provisions for public participation and comments is also disturbing. We know of many cases where poor stormwater plans were significantly improved through the public comment and participations. (1302)

54. **Comment:** It's absolutely critical for DEP and county conservation district staff to conduct thorough technical reviews of the detailed and highly technical E&S stormwater management plans to ensure that rivers and streams are protected from erosion and stormwater runoff. Such a review is required by the Clean Water Act. (1293)

55. **Comment:** The lack of requirement to conduct a technical review of erosion and sediment control plans and post construction stormwater management plans, like this is a crucial thing. DEP and county conservation staff need to conduct technical reviews. (181)

56. **Comment:** We all know that E&S and PCSM plans submitted to DEP by developers are seldom perfect. Review by DEP and CCD professionals is a must. (1290)

57. **Comment:** There should be assurance of technical review of E&S plans and post-construction stormwater management plans. We feel that DEP should work with County Conservation District staff to conduct the needed technical reviews of the E&S and stormwater management plans to ensure that our waterways are protected. (1290)

58. **Comment:** Projects located in or with the potential to discharge to waters that have a Special Protection designation designated or existing use of High Quality or Exceptional Value under Chapter 93 (relating to water quality standards). The earth disturbance activities or potential discharges could adversely affect a Pennsylvania or federal endangered or threatened species. Exempt from this requirement are Department-approved direct discharges to tidal areas or Department-approved no detention areas. (6)

59. **Comment:** Permit-by-rule should not be applicable to developments that are not near a stream. This is a big area where there's a lot of opportunity for loophole activity. There's also a large project loophole under permit-by-rule. While a permit-by-rule is billed as being for low

risk sites, it would be available for very large construction sites as long as only 15 acres are disturbed at a time. A large project could be permitted by rule of 15 acres at a time. (181)

60. **Comment:** The Permit by Rule should not be made available for large developments and sites that are not near a stream. (833, 1131)

61. **Comment:** Who receives the fee for a PBR- Clean Water Fund, Conservation District, DEP? (3)

62. **Comment:** 102.15(b) - Do projects that are greater than 100 feet from a stream qualify for the permit-by-rule given they can not by the nature of their location provide for a riparian forest buffer? (218)

63. **Comment:** The permit-by-rule option does not define/specify what constitutes a "low impact project." Who will make the determination that a project design has a sufficient quantity and quality of BMPS to be considered a "low impact project?" (218)

64. **Comment:** Under PER, there is no requirement for a technical review of the E&S plan which will have district staff dealing with deficient plans in the field. If projects are shut down after construction has started due to violations and having to review E&S plans, the costs of construction would be significantly higher than when dealing with issues during the planning phase. (218)

65. **Comment:** Permit by Rule should be a permit that could be used for 5,000 sq. ft to 5 acres of disturbance. The fee for this could be more reasonable for this type of development. (256)

66. **Comment:** Why does the Permit by Rule not contain requirements similar to those in 102.8.1 and 102.8.m wherein requirements for final certification and deed recordation of the PCSM plan are a requirement?(3)

67. **Comment:** Being able to open up 15 acres at once has a very high potential for pollution. DEP compliance staff may need to increase in number due to the PBR not having the E&S reviewed by a technical person. (256)

68. **Comment:** While a "permit-by-rule option" may be appropriate in some cases, the procedures, requirements, and applicant benefits are unclear at this point. (1274)

69. **Comment:** The permit-by-rule has the greatest potential impact from the new proposed rules by restricting Riparian Buffer use in perpetuity. The licensed professionals defined in the PRM are not qualified to establish or manage forests and forested areas. Riparian Buffers require professional management which is clearly best provided by foresters. (1202)

70. **Comment:** Proposed Rulemaking should exclude eligibility for coverage under the PBR in special protection and impaired watersheds. Section 102.15(b)(1) of the Proposed Rulemaking should be revised to state: "Projects located in or with the potential to discharge to waters that have a designated or existing use of Exceptional Value or High Quality under Chapter 93

(relating to water quality standards) or for which the identification as impaired pursuant to Section 303(d)(1)(A) of the Federal Clean Water Act" (1191)

71. **Comment:** Section 102.15(a) -Qualifying for coverage - The reference is made that an applicant qualifies for a permit by rule as long as they meet the requirements within this section that supersede Chapter 92 (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance). It would be beneficial for all too specifically identify what sections of Chapter 92 are superseded. This could be stipulated within the regulation or within a Technical Document. (645)

72. **Comment:** 102.15 (a) Qualifying for coverage. We do not believe that the PBR position of the proposed Chapter 102 regulations should "supersede any requirements of Chapter 92.. ." Has the EPA approved the PBR concept as defined by DEP? We would suggest that the Department clarify exactly which section of Chapter 92 is being superseded. (947)

73. **Comment:** 102.15 (a) (1) Watersheds. We don't believe that the term "non-special protection waters" is defined in Chapter 93. (947)

74. **Comment:** 102.15 (a) (2) Public notice (B) While (B) requires a 30 day written public comment period, it does not explain what, if anything, the applicant is required to do in responding to the written public comments. (E) "The location of the nearest downstream potable water supply, or a finding that no potable water supply will be affected by the proposed discharge." Additional guidance needs to be provided by the Department on exactly how an applicant is to prove that no potable water supply will be affected. It would be beneficial to add a definition as to what a potable water supply is. (947)

75. **Comment:** 102.15 (b) Permit-by-rule exclusions. (1) Even though we oppose the entire PBR idea, we do not believe that it should apply in any Special Protection watersheds neither High Quality nor Exceptional Value watersheds. (947)

76. **Comment:** 102.15 (b) Any size restriction to be eligible for the permit by rule? (1268)

77. **Comment:** Section 102.15(b)(1). Projects located in or with the potential to discharge to waters that have a designated or existing use of High Quality should also not be eligible for coverage under the permit-by-rule given the high potential for water quality degradation in the absence of a detailed technical review of erosion and sediment control and post construction stormwater management plans. (1208)

78. **Comment:** § 102.15. (b)(2)(i) Highly erodible conditions: What if the soil (i.e. Urban soils) is not rated by NRCS websoil survey - soil testing required?] (1315)

79. **Comment:** Section 102.15(b)(2) should be revised to read as follows: Earth disturbance activities conducted in or on the following pre-development sensitive areas: (1208)

80. **Comment:** Section 102.15(b)(2)(i)(C) should be revised to read as follows: Greater than 15% slope with soil K factor greater than 0.18. (1208)

81. **Comment:** Section 102.15(b)(2)(ii) Clarify which specific geological formations are exempt from coverage under the permit by rule. (1123)
82. **Comment:** Section 102.15(b)(2)(iii) Does this section mean that if you apply for a Water Obstruction and Encroachment or General Permit that impacts wetlands or floodplains -- you still qualify for coverage under the permit by rule? (1123)
83. **Comment:** Section 102.15(b)(2)(ii)(A)-Excluding geological formations that would present a risk of sinkhole development would mean that the permit-by-rule option could not be used in much of the Cumberland Valley area. (1264, 1291)
84. **Comment:** 102.15(b)(2)(iii) states that permit-by-rule cannot be used in wetlands or floodplains unless for access and utilities and permitted under Chapters 105 or 106. PennDOT requests clarification whether this mean that if the project encroaches upon a wetland (temporary or permanent) or a floodplain for any reason other than "access and utilities" the permit-by-rule cannot be used. And then even if the purpose is access or utilities, must it also be authorized by a Chapter 105 and/or 106 permit? (708, 1114)
85. **Comment:** 102.15(b)(2)(c) It appears the phrase "disturbance to" is missing from this statement. If wetlands and floodplains exclude the use of PBR, very few streams will be eligible. (1190)
86. **Comment:** 102.15(b)(2)(i)(C) should read "15% or greater..". (708, 1114)
87. **Comment:** 102.15(b)(2)(iii) has apart in parentheses referring to Chapters 105 and 106 of the PA Code. Therefore, strike "National Pollutant Discharge Elimination System permitting, monitoring and compliance," and replace with "water obstruction and encroachments." (708, 1114)
88. **Comment:** Section 102.15(b)(3): This provision should reference where specifically "these terms" are defined. (946, 1191)
89. **Comment:** 102.15 (b) (3) "Lands that are currently contaminated from a spill or release of a hazardous material," . . . We have concerns about agricultural lands, especially orchards that have been in production for many years and where high concentrations of heavy metals from the use of previously approved pesticides have been used. (947)
90. **Comment:** 102.15(b) (3) "The earth disturbance must not exceed 15 acres at a time." We don't believe that 15 acres would be a low impact. In addition, there doesn't seem to be any maximum limit of disturbance as long as it is no more than 15 acres at a given time. (947)
91. **Comment:** 102.15(b) (3), which excludes brownfields and similar sites from the possibility of coverage under the permit-by-rule, is also overbroad. If regulated activities do not and will not undermine site remediation activities, there is no need for such exclusion. (1184, 1250, 1252)

92. **Comment:** Section 102.15(b)(4)--The provision prohibiting a "person" who "has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit, and schedule of compliance or order" issued by the Department from using the permit-by-rule could, for instance, penalize a developer for the actions **or** a sub-contractor or other, more tangentially related entity. There are also concerns that the Department could use a violation on one project to shut down another, unrelated project, which clearly should not be the outcome of this policy. (1264, 1291)

93. **Comment:** 102.15 (b)(4) Although we appreciate this language about.. ." a person who has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit and schedule of compliance or order issued by the Department," we think that this language needs additional clarity to define the frequency that this be allowed to continue. We would suggest that the person as described only be given one chance to meet all of the necessary requirements. The individual and the applicant then need to submit the same site through the typical NPDES process. The District would be entitled to keep the proposed \$2,500 filing fee and then be allowed to charge an additional \$2,500 filing fee as is presently being proposed in addition to the E and S fee if it applies. (947)

94. **Comment:** 102.15(b)(4) This provision is vague and ambiguous and could unnecessarily call to question whether oil and gas developers could seek any coverage under the permit-by-rule. There are no standards, criteria or procedures for how such a determination would be made, or by whom. (1184, 1250, 1252)

95. **Comment:** Section 102.15(b)(5): Should read "Consultation with the Pennsylvania Natural Heritage Program reveals the presence of a State or Federal threatened or endangered species on the project site." Determinations about whether earth disturbance activities or potential discharges will adversely affect a Pennsylvania or federal endangered or threatened species should not be left to the discretion of the person seeking coverage under a permit-by-rule. (946, 1191)

96. **Comment:** § 102.15 (b)(5) If there is a PNDI hit, PBR is excluded? (1315)

97. **Comment:** § 102.15 (b)(5) Clarify what the Department means by "adversely affecting a PA or federal endangered or threatened species". How/who makes that determination? (1123)

98. **Comment:**§ 102.15 (b)(5)(ii) Should clarify minimum supporting information required, i.e. geo-technical study, site specific testing, etc. (1315)

99. **Comment:** Section 102.15(c) Include a general prohibition against any activity which would violate water quality standards – similar to the prohibition included in regular general permits. (1268)

100. **Comment:** Section 102.15(c). A previous version of the proposed regulation included a condition with a 20% of project area threshold for imperviousness. If the intent of the PBR really is to "promote low impact projects", then this condition should be restored. (1208)

101. **Comment:** Section 102.15(c)(1)-This provision refers again to the ROC and the "registrant," neither of which are defined in the draft proposal. In addition, surveyors should be added to the list of professionals who may be responsible for a given site's design. (1264, 1291)

102. **Comment:** 102.15(c)(1)(i) should capitalize "usgs".(708, 1114)

103. **Comment:** Section 102.15(c)(1) Land surveyor has been excluded from Permit-by-Rule. (1141)

104. **Comment:** 102.15(c)(1) The acronym "ROC" is used here, but has not been defined up to this point. (708, 1114)

105. **Comment:** Phasing is the term phase referring to a block of area, or can for example it be, Phase One install infiltration Basin and Roadways. Phase 2-No more than 6 lots shall be disturbed at any one time. (2)

106. **Comment:** 102.15(c)(1)(i). The items listed here (A through E) cannot reasonably be incorporated onto a site location map and should be listed independently of the location map (remove the word including from (i)) and renumbered accordingly. (1208)

107. **Comment:** § 102.15 (c)(1)(i)(D) Preliminary site design: E&S and PCSM concept plan should be required for pre-submission meeting, preliminary site design will not be helpful for District to make comment. (1315)

108. **Comment:** The Permit-By-Rule pre-application meeting must be attended by all parties that will 'be covered under the "registration of coverage" and makes every project team member accountable for the maintenance and operation of the Post Construction Stormwater Management Best Management Practices. (The Department has not defined "registration of coverage"). The Permit-By-Rule operation should incorporate a termination notice that must be approved by the Department before a responsible party can be removed from the permit. (1259)

109. **Comment:** § 102.15 (c)(1) The registrant should also be required to provide supporting information to show that the project qualifies for PBR; how this project does not include any of the exclusions covered in 102.15(b). Critical stages should be identified at the time of the presubmittal meeting as well. (Will this be part of the Presubmittal Meeting checklist?) (1315)

110. **Comment:** 102.15(c)(1) - YCCD welcomes the requirement for a pre-submission meeting with the Department or the conservation district for the permit-by-rule option. YCCD strongly recommends requiring this for all NPDES-permitted sites. (218)

111. **Comment:** § 102.15 (c)(2) There are terms used here that are not defined in Chapter 102, this could result in confusion or arguments, i.e. river, creek, lake, pond, & reservoir are not defined in Chapter 102. Natural lakes/ponds/reservoirs only? These terms should be defined or the term 'surface waters' could be used with exclusions of wetlands, seeps, springs, estuaries, etc. (1315)

112. **Comment:** Section 102.15(c)(2)(i)- What if the project is within 100 feet – i.e. 50 feet – how can you maintain a 100 foot buffer? (1268)

113. **Comment:** Section 102.15(c)(2)(i)-What happens in the event that a project starts 80 feet from a creek? Why is the "registrant" responsible in this case? Why should an engineer be held responsible, as these are activities going on after the site is developed? Again, it is not clear who is responsible for what and why. (1264, 1291)

114. **Comment:** Section 102.15(c)(2)(i) &(ii) When will the ROC checklist and ROC presubmission meeting checklist be available for review? (1123)

115. **Comment:** 102.15(c) (2) (ii) When the project site contains, is along, or within 100 feet of a river, stream, creek, lake, pond, or reservoir, the registrant shall: Establish new or preserve existing riparian forest buffers at least 150 feet in width between the top of stream bank or normal pool elevation of a lake, pond....Please provide an accessible reference to determine impaired watershed- Chapter 303 (d) (1227)

116. **Comment:** 102.15(c) (2) (ii) What about special protection waters? (1268)

117. **Comment:** Support for preservation for all riparian buffers in all watersheds, with the dimensions to be determined on a site specific basis. (1317)

118. **Comment:** The pre set buffer width requirement doesn't allow flexibility to address site specific requirements. (1314)

119. **Comment:** 102.15(c)(1) All persons seeking coverage under permit-by-rule must first schedule a presubmission meeting with the Department or the conservation district prior to submitting a ROC. The meeting shall also be...This section does not include environmental due diligence. All soil and groundwater samples that were analyzed as part of the applicant's environmental due diligence should be reflected on the site location map. (1227)

120. **Comment:** 102.15(c)(1)(i)(A) At the presubmission meeting (for a PBR), the registrant must provide:...Please include "including any impairments due to sediment or stormwater." If the receiving water is impaired due to sediment or stormwater, this will place more requirements on the discharge(s) from the project and should be known at the resubmission meeting. . (1227)

121. **Comment:** The requirements state that an operator, if known, should be present for the pre-submission meeting. Another section allows the Department to deny the ROC based on the history of the operator. What happens if the ROC is approved with an unknown operator and the Department doesn't like said operator? (1289)

122. **Comment:** 102.15 (c) (3) Allowing a 15 acre maximum disturbance at any given time is not minimizing earth disturbance. A warehouse could be 15 acres in size. Perhaps provide the percentage of maximum disturbed area. Provide percentages, not acreage. (1187)

123. **Comment:** 102.15 (c) (3) 15 acres seems like a high number-would a percentage of the total site be more appropriate? (1268)

124. **Comment:** 102.15(c)(3). We question the inclusion of this arbitrary figure of 15 acres at one time, which represent a significant area of exposure and potential for pollution. We also wonder what will happen if a project exceeds the 15 acres at one time threshold? Considering that the PBR is being proposed to "promote low impact projects", and to be consistent with acreage thresholds for NPDES Phase I, this condition should be revised to read as follows: The earth disturbance must not exceed 5 acres over the life of the project. (1208)

125. **Comment:** Section 102.15(c)(4) should be revised to read: "... or during any stage, of the..." (946, 1191)

126. **Comment:** § 102.15 (c)(4)(i) The statement "significant new or increased changes " should be clarified/defined. (1315)

127. **Comment:** § 102.15 (c)(4)(i) Must it be submitted and approved? (1268)

128. **Comment:** § 102.15 c.5. "Analysis demonstrating that the PCSM BMPs will..." This doesn't flow from section (c) above - do applicants have to perform the analysis? Provide it to DEP? If the latter, how is this different from a general permit? Again, this is a very rigorous standard and not all sites may be able to practically achieve it. (436, 650)

129. **Comment:** **Revise** Section 102.15(c) (5) to read "...or manage onsite the net change.." (1268)

130. **Comment:** Section 102.15(c) (5)- These requirements for the analysis of the 2-year/ 24-hour storm are not reasonable and should be modified to use actual land use. Not doing so substantially increases the difficulty of the necessary analysis. (1264, 1291)

131. **Comment:** 102.15 (c) (5) (i) and (ii) Keep consistent "meadow in good condition or its equivalent" and "meadow in good condition or better" This information is providing two different scenarios. Suggest just leaving as "meadow in good condition" (1187)

132. **Comment:** 102.15 (c) (6) (ii) States "Depart-ment-approved". Should read "Department-approved" (1187)

133. **Comment:** 102.15(c)(5)(ii) includes the same meadow requirement as set forth in Section 102.8(g)(2)(i). (708, 1114)

134. **Comment:** 102,15(c)(5)(ii) requires 20% meadow requirements for existing sites. This should read returned to "existing function", not existing condition. (708, 1114)

135. **Comment:** 102.15(c)(5)(ii) requires 20% meadow requirements for existing sites. PennDOT requests clarification that this requirement would not be applicable to PennDOT, especially on long linear projects. (708, 1114)

136. **Comment:** Section 102.15(c) (6) (i) - What is a "hydrologic routing analysis"? (1264, 1291)

137. **Comment:** 102.15(c)(6)(i) includes the same hydrologic routing analysis for peak rate of discharges required in Section 102.8(g). (708, 1114)

138. **Comment:** 102.1 5(c)(6)(ii) refers to a pre-submission meeting checklist. Please provide the pre-submission meeting checklist form for PennDOT's review. (708, 1114)

139. **Comment:** 102.1 5(c)(6) Should the 1-year/24-hour storm event be included in the analysis to be consistent with requirements of the Department's BMP Manual? (1123)

140. **Comment:** Section 102.15(c) (7)-Surveyors should be added to the list of eligible professionals in this section. (1264, 1291)

141. **Comment:** Section 102.15(c)(7) Certification to be included with the ROC may put undue liability on the professional. (1141)

142. **Comment:** § 102.15 c.7.i. What does it mean to certify that plans are "true and correct" before they are implemented/constructed? (436, 650)

143. **Comment:** Section 102.15(c)(7) (ii), (iii), & (iv) - These sections require the design professional to provide oversight responsibility during construction, oversee and seal plan modifications, prepare and seal record drawings, and to certify the construction. Again, on nearly all Pennsylvania Department of Transportation projects, the design professional is not permitted to perform onsite inspection due to conflict of interest policies. Therefore it will be impossible for the design professional to meet these permit requirements. Provisions should be added to allow PennDOT more flexibility for inspection during construction. . (1247)

144. **Comment:** Section 102.15(c)(7)(iii) Clarify exactly what constitutes "oversight" The Department considered the professional's obligations, authority, and liabilities under this provision? What is the Department's opinion on the impact on the liability exposure to professional firms, as well as the liability of the individual licensed professional? How does the Department expect a professional to control site operations if they are not under contract with the contractor? (1123)

145. **Comment:** Revise Section 102.15(c)(10) to read "... registrant or co-registrant..." (1268)

146. **Comment:** 102.15(c)(11) should be revised to "...conservation district at least 3 days prior to critical stages..". (708, 1114)

147. **Comment:** On private work, these requirements add unreasonable risk to the design professional for actions of the owner/permittee and contractor because the design professional has no legal control of the work. . (1247)

148. **Comment:** The manner in which the current draft has been prepared provides no provisions to allow for municipal review of the Erosion and Sediment Pollution Control Plans for the Permit-By-Rule. Thus, the plans will not have any scrutiny until they are implemented, then potentially fail on a site. The new Regulations should delegate review authority to the local municipality to regulate the PA Code, Title 25, Chapter 102 compliance on sites with permit by rule as part of the municipal review. It could be mandated by the changes in regulations that Municipalities, as part of Municipal review, review the Erosion and Sediment Pollution Control Plans and Post Construction Stormwater Management plans together. This would place the review authority of the plans with the local government that is the most familiar with the local restrictions, and, would pass all the costs associated with this compliance to the Applicant. The public will not be expected to absorb any of the costs of this review. (1248)

149. **Comment:** 102.15 (d) Projects located in High Quality watersheds or watersheds impaired for sediment or stormwater. (947)

150. **Comment:** 102.15 (d) An offset should be included if discharging to impaired waters. (1268)

151. **Comment:** **Revise** Section 102.15(d)(1) to read "... registrants or co-registrants shall utilize..." Should this section include meeting volume reduction and rate requirements? (1268)

152. **Comment:** Section 102.15(d)(1) This section should read: "Permit-by-rule registrants proposing projects that are located in watersheds containing waters of this Commonwealth that have a designated or existing use of high quality or that are impaired for sediment or stormwater shall maintain and protect those waters as required by 25 Pa. Code 93.4a and follow the procedures set forth in 25 Pa. Code 93.4c but may not utilize the social or economic justification process established under 93.4c(b)(iii) (relating to implementation of antidegradation requirements), and, in addition to the 150-foot riparian forest buffer, shall utilize solely nondischarge alternatives, as that term is used in Chapter 93, in their E & S and PCSM Plans. Without limiting the foregoing, registrants shall use the BMPs and design standards listed in the Erosion and Sediment Pollution Control Program Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008 (April 2000), as amended and updated, with particular attention to paragraph 5 on pages 2 and 3, and in the Pennsylvania Stormwater Best Management Practices Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated, with particular attention to section 7.7 on pages 20 and 21 of Chapter 7, in satisfying these requirements and in following these procedures." (946, 1191)

153. **Comment:** Section 102.15(d)(1): "Permit-by-rule registrants proposing projects that are located in watersheds containing waters of this Commonwealth that have a designated or existing use of high quality[,] or [nonspecial protection waters] that are impaired for sediment or stormwater shall [demonstrate that all construction and post construction discharges will not degrade the physical, chemical or biological characteristics of the surface waters]maintain and protect those waters as required by 25 Pa. Code § 93.4a and follow the procedures set forth in 25 Pa. Code § 93.4c but [and] may not utilize the social or economic justification process established under § 93.4c(b)(iii) (relating to implementation of antidegradation

requirements)[.I],and, in addition to the 150-foot riparian forest buffer, [registrants] shall utilize solely nondischarge alternatives, as that term is used in Chapter 93, [BMPs] in their E & S and PCSM Plans. Without limiting the foregoing, registrants shall use the BMPs and design standards listed in the Erosion and Sediment Pollution Control Program Manual, Commonwealth of Pennsylvania. Department of Environmental Protection. No. 363-2134-008 [April 2000). as amended and updated with particular attention to paragraph 5 on pages 2 and 3, and in the Pennsylvania Stormwater Best Management Practices Manual, Commonwealth of Pennsylvania, Department of Environmental Protection. No. 363-0300-002 (December 2006) as amended and updated with particular attention to section 7.7 on pages 20 and 21 of Chapter7 , in satisfying these requirements and in following these procedures." (1191)

154. **Comment:** 102.15(d)(l) states that permit-by-rule registrants may not utilize the SEJ process. PennDOT requests clarification that the SEJ process is allowed for other permit types. (708, 1114)

155. **Comment:** § 102.15 (d)(l) Does the requirement for use of nondischarge alternative BMPs solely for E&S design now prohibit use of sediment basins and traps for PBR projects? These alternatives may not be adequate. (1315)

156. **Comment:** Section 102.15.d.1: Regarding impaired watersheds, the link to the Chapter 303(d) list on the Department's website appears to be down and not functioning. The Department should have a user-friendly data base for impaired streams. (1123)

157. **Comment:** Section 102.15d.1 If non-discharge BMPs are required, and are being used to protect water quality, why does the Department feel the additional need for riparian buffers? (1123)

158. **Comment:** § 102.15 (d)(2)(i) A minimum circulation should be indicated; the term 'general circulation ' is too general. (1315)

159. **Comment:** § 102.15 d.1. "...shall demonstrate that all construction and post-construction discharges will not degrade.. .surface waters..." How is this demonstrated? " ... registrants shall utilize solely nondischarge alternative BMPs..." What does this mean? Controlling the 2-year storm is the definition of "nondischarge"- therefore this seems to be repetitive with c.5. above. (436, 650)

160. **Comment:** § 102.15 (d)(2) Add "The identification of any 303(d) impairments and/or applicable TMDLs." (1268)

161. **Comment:** § 102.15 (d)(2)(i)(B) A 30-day period following publication of the notice during which written comments may be submitted by interested persons to the applicant. [Is it possible to require that these comments be submitted to District/DEP/Municipality] (1315)

162. **Comment:** 102.15(d)(2)(B). DEP and the conservation district should be initial recipients of written comments along with the applicant. If they don't see the comments, there is no way for

the Department or conservation district to assure that the applicant has adequately responded to the comments as required under 102.15(d)(2)(ii). (1208)

163. **Comment:** 102.15 (d) (2) (H) (ii) and (e) Keep consistency “activity is or will be located” and “proposed earth disturbance activity will be located” (1187)

164. **Comment:** 102.15 (d)(2)(i)(H) ... The contents of every public notice must include the following: The existing or designated use of receiving surface water pursuant to Chapter 93...Please include “including any impairments due to sediment or stormwater.” (1227)

165. **Comment:** Public notice requirements should be required for all projects located in HQ or impaired watersheds that qualify for the Permit-by-Rule. (946, 1191)

166. **Comment:** The Proposed Rulemaking should extend the public notice requirements applicable to projects located in high quality or impaired watersheds, with some alterations, to all projects for which coverage under the permit-by-rule is sought. PennFuture recommends that the public notice requirements of Section 102.15(d)(2) be extended to all projects for which coverage under the PBR is sought. (1191)

167. **Comment:** Section 102.15(d)(2) Why must a public notice be posted once a week for 3 consecutive weeks in a general circulation newspaper prior to the submission for the ROC? As noted previously, ROC still needs to be defined, particularly as to which parties are responsible. This also applies to the PPC plan-when can parties be released from responsibility for the PPC plan? (1264, 1291)

168. **Comment:** The Department should not outsource its public comment responsibilities to PBR registrants. All of the information that the public needs to provide meaningful comment on ROCs should be housed at the appropriate Department Regional Office, and the public should be advised to submit comments to the Department, which can forward copies of those comments to PBR registrants for their response. Section 102.15(d)(2) should be revised accordingly. (1191)

169. **Comment:** 102.15(f) requires the registrant to develop the PPC plan. This is inappropriate for construction contract jobs in that PennDOT does not control the contractors' use of fuels, etc. (708, 1114)

170. **Comment:** 102.15 f.3. Buffers should also be designed in accordance to the PA riparian buffer manual. (436, 650)

171. **Comment:** 102.15 (f) (4) First sentence should read “Both the E&S Plan and PCSM Plan must minimize accelerated erosion” (1187)

172. **Comment:** 102.15 (f) (4) - delete 'the' after "minimize" in the first sentence. (1129)

173. **Comment:** 102.15 f.4. "...achieve no net change..." Under what conditions? (436, 650)

174. **Comment:** 102.15 (g)(2) If discharging to an impaired water, erosion and sedimentation should be prohibited. (1268)

175. **Comment:** 102.15 (g)(4) The wording in this section is unclear and should be revised. Should "outlet protection" be replaced with "diversion"? (1129)

176. **Comment:** 102.15 g.4. & g.5. Reference to "outlet protection" in both sections seems out of place. (436, 650)

177. **Comment:** 102.15(g)(5) - The wording in this section is unclear and should be revised. Should "Outlet protection included" be replaced with "Sediment basins and traps"? (1129)

178. **Comment:** Revise 102.15(g)(5) to read "... protection that shall .." (1268)

179. **Comment:** 102.15(g)(6) - replace 'ponds' with "basins". (1129)

180. **Comment:** Section 102.15(g)(10) should be revised to read: " . . . The registrants shall stabilize . . ." (946, 1191)

181. **Comment:** Section 102.15(g)(10) How are these maintained once the contractor leaves? When will the transfer of obligations occur, and who is financially liable if the BMP fails? (1268)

182. **Comment:** Section 102.15(g)(10) - add "must" after "registrants" in the second sentence. (1129)

183. **Comment:** Section 102.15(h) These BMPs should be expanded and more specific to include the percent of runoff required to infiltrate and the percent of runoff expected to evaporate, etc. To what level will (1)-(5) be maintained? (1268)

184. **Comment:** Section 102.15(h)(2) The wording in this section seems to imply that the Department may require a permittee to construct green roofs (for example) on all their proposed structures if the site is not conducive to infiltration and the proposed improvements do not provide significant amounts of open space, preserved natural areas or reduced impervious area. Is this an accurate interpretation of the Department's intent? (1129)

185. **Comment:** Section 102.15h.4. "...constructed to convey runoff.. ." This seems to be contrary to the other requirements of this subsection. (436, 650)

186. **Comment:** Section 102.15(h)(5)(i)(5) should be revised to read: " . . . for projects in High Quality watersheds or in watersheds impaired for sediment or stormwater" (946, 1191)

187. **Comment:** Section 102.15(i): Where can the ROC checklist be obtained? (1268)

188. **Comment:** Section 102.15(i): The ROC should also include a Preparedness, Prevention and Contingency Plan (PPC Plan). (946, 1191)

189. **Comment:** 102.15(i)(2) (re: ROC under the permit by rule) should be revised to read as follows: An E&S Plan prepared and sealed by a professional ... (1208)

190. **Comment:** 102.15(i)(3) (re: ROC under the permit by rule) should be revised to read as follows: A PCSM Plan prepared and sealed by a professional ... (1208)

191. **Comment:** 102.15(i)(5) should be revised to read as follows: Proof of public notice ... for projects in High Quality watersheds or watersheds impaired for ... (1208)

192. **Comment:** 102.15(i)(5) What are the Departments intentions/actions going to be with the comments generated from the public comment period for high quality watersheds? (1123)

193. **Comment:** 102.15(i)(6) should be revised to read as follows: Proof of consultation with the PNHP and resolution of any conflicts regarding the presence of... PBR authorization should not be provided until PNHP conflicts are resolved. (1208)

194. **Comment:** 102.15(j). Given the significant amount of information that must be reviewed to verify eligibility for coverage under the PBR, including additional requirements for projects located in High Quality watersheds or watersheds impaired for sediment or stormwater, we recommend that the time frame for determination of coverage be increased from an unreasonable 30 days to a more realistic 60 calendar days. (1208)

195. **Comment:** 102.15(j) Is there a requirement to reapply after 5 years? (1268)

196. **Comment:** 102.15 (j) Eligibility verification - ..." The registrant may apply for other permit coverage as referenced in this section if coverage under this permit-by-rule is denied." We suggest the following ... if coverage under this permit-by-rule is denied, "if the ROC is incomplete, inaccurate or if the activity is ineligible for permit-by-rule coverage. Applicants are then required to apply for a General or Individual NPDES permit." (947)

197. **Comment:** 102.15 (j) (2) "An action of the Department or a conservation district denying coverage under this permit-by-rule, or requiring a general or individual NPDES permit ..." We encourage the Department to review Section 11 (2) (c) of the Conservation District Law to make sure there is no inconsistency when any person aggrieved by an action of a district pursuant to 2 Pa. C.S. 105 (relating to local agency law) and what is being proposed in 102. We remember, perhaps in Lebanon County, when a person was aggrieved by an action taken by the District. The District had to rescind the action taken so that the action taken then became an action of the Department and not an action of the District. (947)

198. **Comment:** Section 102.15(l)(1) should be revised to expressly state that coverage under the PBR is immediately & continued after such coverage is revoked, terminated, or suspended, and that registrants are prohibited from further land disturbance unless and until the Department takes final action on a NPDES NOI or application that the registrant may submit. (1191)

199. **Comment:** § 102.15 (l)(1) The Department [or the conservation district] may deny coverage under this permit-by-rule... (1315)

200. **Comment:** § 102.15 (l)(1) Clarify in what situations the Department would revoke coverage under a previously approved permit by rule. (1123)

201. **Comment:** Permit-by Rule coverage should be expressly discontinued after such coverage is revoked, terminated or suspended. (946, 1191)

202. **Comment:** 102.15(1). We feel that the 90 days provided after PBR authorization is revoked, terminated or suspended for submittal of a general or individual NPDES Permit application is excessive. 60 calendar days would be a more reasonable time frame given that construction is likely underway and the reason for the revocation, termination or suspension is the registrant's failure to meet the requirements of this section. (1208)

203. **Comment:** 102.15(i) (proposed) -This provision concerns the processing of ROC for PBRs, and states, in part, that PADEP or the Conservation District will "make a determination of coverage within 30 days" of the submission of a complete ROC meeting the requirements of the regulations. However, a "determination of coverage" may be interpreted to mean something other than the formal written issuance or denial of a PBR. Since the PBR process has been developed by PADEP to provide for relatively quick approvals for low impact projects containing riparian forest buffers, we recommend that this provision be clarified to state that PADEP or the Conservation District will inform the applicant for a PBR in writing whether it is covered by a PBR within 30 days of the submission of a complete ROC meeting the requirements of the regulations. (1323)

204. **Comment:** 102.15(m). Clarify whether ROC here means renewal of coverage versus the registration of coverage ROC used in previous sections of 102.15. We recommend a 50 calendar day time frame prior to expiration of coverage for submittal of renewal requests and recommend a limit of one renewal request per PBR authorization. (1208)

205. **Comment:** 102.15(m) has the acronym ROC which is previously referring to Registration of Coverage. However, here it seems to mean Renewal of Coverage. This should be clarified. (708, 1114)

206. **Comment:** Section 102.15(m): ROC in this section appears to refer to a "renewal of coverage," but ROC is defined in Section 102.1 as a "registration of coverage." Therefore, references in this section to ROC should be changed to "renewal of coverage." (946, 1191)

207. **Comment:** 102.15(o) should be revised to read as follows: Termination of coverage. A permit-by-rule registrant covered under this section shall comply with 102.7 and 102.8(l) (relating to permit termination) to terminate permit coverage. 102.8(l) contains important language relative to submittal with the NOT of record drawings and a final certification statement from a licensed professional that the site was constructed according to the plans. (1208)

208. **Comment:** 102.15 (p) Program audit - We encourage the Department to define when the PBR needs to be audited and suggest that this be done annually. (947)

209. **Comment:** 102.15(p)(1) should include a specified time frame for the proposed PBR audits and a mechanism for reporting publicly the results of the audits. (1208)

210. **Comment:** 102.15(p)"Program Audit" - it is unclear how the Department can the audit the program as stated. How will they determine if plan certifications are correct? How can achievement of the "desired environmental results" be measured? (436, 650)

211. **Comment:** 102.15(p)(1)(ii)What happens if they are not? (1268)

212. **Comment:** 102.15(p)(2) Audit results should also form the basis for denial of future coverage. (1268)

213. **Comment:** However there were several concerns from the VUSP engineering firm representatives that were raised. First, was that the responsibilities of the firm were not articulated. It was thought that the engineering firms would be shouldering a large risk. It should be clear what inspections were needed during the process, and what standards needed to be met. It was also a concern as to the process if a situation arose that the engineer could not seal the project. How would the engineer be protected from being blacklisted by potential clients? Another comment was that the requirements were so restrictive for this option that it was doubtful it would be used. The general consensus of the partners was that the PBR was not yet ready for prime time. (1207)

214. **Comment:** §102.15. This section (Permit-by-rule for low impact projects with riparian forest buffers) should be removed from Chapter 102.) (944, 1204)

215. **Comment:** The Permit-By-Rule for low impact projects with riparian buffers use is limited to small percentages of sites within the Commonwealth due to the Departments exclusions (ex. steep slopes, geologic formations, and sinkhole development). The Department should also consider placing a acreage limit to on the Permit-By-Rule option; the larger the site the less likely the project can meet the low impact development requirement. (1259)

216. **Comment:** We're (Campaign for Clean Water) opposed to the new permit-by-rule proposals. Profit-driven endeavors are notoriously lousy at self-policing. The Dunkard Creek incident is a good example of that. (1285)

217. **Comment:** The new permit-by-rule option should be eliminated. The Chestnut Ridge Chapter of Trout Unlimited strongly opposes the permit-by-rule, especially in special protection watersheds. Special protection watersheds require extra oversight and review to ensure that the water quality is protected and maintained. These special protections cannot be ensured through an expedited permit review process. Rather DEP and the County Conservation Districts should be reviewing such permits carefully and ensuring that the permits require sufficient protection so that the coldwater quality is not degraded. (1286)

218. **Comment:** Mandatory Riparian Forest Buffers should not be imposed with regard to forest management. The proposed change will have a very negative impact on forest health and it's productivity. MRFB's place an unfair and uncompensated burden on forest landowners, particularly small private and family ownerships. The proposed changes could affect 30% to 50% of Pennsylvania's forested acreage at a time when forest-based biomass energy will be of critical importance.(1176, 1202)

219. **Comment:** The continued use of voluntary BMPs promoted through the Timber Forest Harvesters Action Packet and SFI training, is the preferred mechanism to ensure proper and sustainable forestry activities near streams. (1176)

220. **Comment:** The Chestnut Ridge Chapter of Trout Unlimited is concerned with the lack of provisions providing public participation opportunities. Notice of permit applications comment period must be provided. (1286)

221. **Comment:** We deplore the lack of opportunities for public participation. Public notification and a month long comment period should be provided. (1290)

222. **Comment:** We believe that the permit-by-rule would involve a lack of public participation opportunities. This is a great exercise of democracy. And that process would be short cut by the permit-by-rule process. There needs to be a 30 day comment period and it really must be provided. (181, 1309)

223. **Comment:** It's absolutely vital that DEP and the county conservation districts conduct a thorough technical review of all EMS and stormwater management plans. Eliminating such technical review could allow poorly designed plans to be implemented, causing flooding of adjacent properties or damaging nearby streams. We're particularly opposed to the portion of the proposal that would allow the Permit-By-Rule program to be used in high quality and impaired watersheds. High quality waters are among the best in the state and require special protection to ensure that water quality is not degraded. This protection can't be guaranteed without full technical review by DEP and the conservation district. Similarly, impaired waters are also required to be protected against any new discharges that could contribute to the impairment or that are not consistent with the waste load allocations set forth in the TMDL. Ensuring that a draft plan meets these legal requirements can't be done without a full technical review of the draft. (1302)

224. **Comment:** The limits of eligibility review should also be clarified. If this is intended to be a complete review of the project, what is the advantage to using this process? The designer and owner have accepted more liability and there is no difference in processing. The application fees should likewise be less than that for the standard general permit. This process theoretically reduces the work on the Department, while the owner's work in liability and cost have increased. The fee schedule should reflect that. (1234, 1289)

225. **Comment:** The proposed rulemaking should expand on the Permit-by-Rule program audit. (946, 1191)

226. **Comment:** The Proposed Rulemaking should provide more details about the permit-by-rule program audit. PennFuture supports the concept of a PBR program audit but would appreciate more details. When will the audit be conducted? Will it be ongoing? How many ROCs will the Department audit? When will the Department report on the results of its audit? (1191)

227. **Comment: 102.15 – Permit-by-Rule for Low Impact Projects** On March 11, 2009, the Pennsylvania Chamber delivered a letter to the Department (PA Chamber to Ken Murin, Proposed Erosion and Sedimentation Control NPDES Permit-By-Rule) supporting the construction NPDES PBR option for permitting low risk earth disturbances under Chapter 102. At the time of the Chamber's endorsement, the proposed review period was 15 days, which was a distinct advantage over the review periods typically required for a general or individual construction NPDES permit. The Chamber supported the construction NPDES PBR as a permitting strategy that supported the industry and commerce of the Commonwealth while still protecting the environment. Since then, the proposed requirements for the PBR have significantly changed. The PBR review period is now 30 days, and requires the installation of riparian forest buffers. The use exclusions of the PBR are now so substantively restrictive that very few projects would even conceptually qualify. As this concept has evolved, and the Department has attempted to compromise with many disparate interests, the concept has unfortunately devolved to such a point that the attendant restrictions, conditions and timeframes have all but eliminated the construction NPDES PBR from being a useful tool for the regulated community. (1241, 1278)

228. **Comment:** Sadly, the proposed rule does not go far enough. The new rule should: Prohibit the use of the permit-by-rule in high quality waters. The permit-by-rule would fast-track permitting decisions, meaning less time for review and fewer opportunities for public participation. Permits that would impact some of our best rivers and streams require more scrutiny, not less. (1222)

229. **Comment:** Through our correspondence of January 20,2009 to Secretary Hangar, nine southcentral Districts provided suggestions when we expressed concerns about the proposed Permit by Rule (PBR) proposal. The concerns that we expressed still remain. In today's poor economic climate, when state and county governments are unable to sustain their present employee base, we do not see this as a good time to propose such dramatic changes to the program. It would be far better to focus our limited resources on doing a superior job with the E and S portion of the program including the agricultural portion. (947)

230. **Comment:** The permit-by-rule section includes a construction sequence that must be implemented. This section should be removed, because each site is unique and the provided sequence may not provide the most protection against erosion. The design professional should be responsible for determining the construction sequence that will provide the most protection. Additionally, more complex sites that require several phases of construction may not fit into the provided sequence. (1153)

231. **Comment:** The Permit-By-Rule option allows up to 15 acres of land to be disturbed at any one time. This section should include the process required to relocate the limit of disturbance as phased work progresses. (1153)

232. **Comment:** As proposed, the permit-by-rule is so limited, time consuming and complex that it will be of no value to the oil and gas industry. (1184, 1250, 1252, 1261)

233. **Comment:** The requirements of §102.15 Permit-by-rule for low impact projects with riparian forest buffers are so limited in their applicability that its inclusion is not necessary. I can conceive of very few projects that would be covered by the permit-by-rule and fewer applicants willing to make the economic sacrifices necessary to meet the requirements. Additionally, recent Environmental Hearing Board adjudications indicate that infiltration systems and other BMPs traditionally categorized as "non-discharge" alternatives are not sufficient in name only to comply with anti-degradation standards (see Lipton v. DEP and Pine Creek Valley Watershed Association and Crum Creek Neighbors v. DEP and Pulte Homes). These recent decisions make it apparent that applying a uniform requirement to all sites, no matter how restrictive it may appear, does not mean that the standard will protect water quality [proposed 102.15(d)(1)]. Section 102.15 should be removed from the draft regulations. (1260)

234. **Comment:** I am writing to voice my concern regarding the permit-by-rule program proposed in light of the permits revoked for two gas drilling companies. The permit applications completed by the licensed professionals were found to have technical deficiencies after the permits were issued by the Department of Environmental Protection (DEP). The problems with the permits were only found after an appeal by the Chesapeake Bay Foundation (CBF). I have come to understand that the revoked permits had no analysis of the rate or volume of stormwater runoff from the construction or post-construction stages. This runoff resulting from earth disturbances for pipeline construction could pollute streams in the area. With increased interest and activity in oil and gas drilling throughout the state, I hope that we can work together to ensure that the environment and our natural resources are not sacrificed in the process. (1313)

235. **Comment:** As currently drafted, the proposed rulemaking would prohibit the use of a permit by rule within exceptional value watersheds. While I applaud the department's effort to create and implement a permit by rule - which can expedite a permit review timeframe by removing unnecessary delays without relieving a permit applicant of any of their environmental or conservation obligations - I urge the department to rethink its opposition to the use of a permit-by-rule within Exceptional Value waterways. If the department is confident in the environmental safeguards included in its permit-by-rule initiative, then it should be immaterial whether a specific project is located within an Exceptional Value, High Quality or other watershed. This is of particular concern given the penchant for some groups to submit stream redesignation petitions to the department for the purpose of hindering development. (948)

236. **Comment:** If the department is confident in the environmental safeguards included in its permit-by-rule initiative, then it should be immaterial whether a specific project is located within an Exceptional Value, High Quality or other watershed. This is of particular concern given the penchant for some groups to submit stream redesignation petitions to the department for the purpose of hindering development. It appears from the manner in which the proposed regulation

is currently drafted, that renewals of existing National Pollutant Discharge Elimination System (NPDES) permits would need to meet the requirements of this regulation. It seems that this would be a difficult and costly challenge for existing permit holders, many of whom have installed utilities, and other infrastructure based on their current permits. We suggest that the proposed regulation be amended to ensure this outcome does not result. The regulation as currently constructed, would provide for a permit-by-rule approach but would prohibit its use within Exceptional Value watersheds. While we applaud the department's effort to create and implement a permit by rule - which can expedite a permit review timeframe without relieving a permit applicant of any of their environmental or conservation obligations - we urge the department to rethink its opposition to the use of a permit-by-rule within Exceptional Value waterways. (1321)

237. **Comment:** As the Majority Chairman of the House Environmental Resources and Energy Committee, I have grave concerns with the proposed PBR option at section 102.15 and therefore call upon DEP to remove it in its entirety from the proposed chapter 102 regulations. Although PBR may be a laudable attempt to streamline the permitting process and to promote efficiency, it lacks the necessary enforcement and accountability measures to adequately protect the waters of the Commonwealth. Therefore, the PBR proposal is simply untenable for the following reasons; A. No technical review: The most troubling aspect of the PBR scheme is that there would be no technical review on the submitted E&S and PCSM Plans once those plans are sealed by a qualified professional. Because there is no independent technical review by DEP to ensure that the sealed plans comply with all relevant local, state and federal laws, DEP is in fact gambling with the water quality protection, merely hoping that the plans prepared by these self interested professionals will not harm the Commonwealth's waters. But as the incidences involving Fortuna Energy and Ultra Resources amply demonstrate, gambling on private actors pursuing profits to voluntarily regulate themselves and to protect our water supply is a risk that the Commonwealth cannot afford. Proposed remedy: Mandatory technical review by DEP, the conservation districts, or independent consultants. B. No meaningful deterrence: Under the proposal, for the technical soundness of the E&S and PCSM Plans, DEP would rely solely on the qualified licensed professionals who would certify that "E&S and PCSM Plans are true and correct, and are in conformance with Chapter 102 of the rules and regulations." Such reliance elevates the importance of the integrity of the certification made by the licensed professional as well as the importance of meaningful deterrence against infraction. Because the risk of environmental degradation and water pollution with respect to the activities covered by the proposed regulation is high, the penalty must reflect that risk. The lack of any meaningful deterrence against abuse will only invite further abuses by the permittee who is at all times struggling to lower his or her operating expenses. Proposed remedy: (1) \$100,000 fine on the professional for knowingly or recklessly submitting a plan containing material omissions or misstatements, with joint and several liability on the company that hired the professional; (2) mandatory filing of a complaint to the Bureau of Professional and Occupational Affairs; and (3) non-availability of PBR in the future to any company that files a plan containing material omissions or misstatements. C. Insufficient requirement for the certifying professional under PBR, only "a professional engineer, geologist, or landscape architect registered in the Commonwealth of Pennsylvania" may certify that the submitted plan or plans fully comply with relevant laws and regulations. DEP officials indicated that the certifying professional must be practicing in the field relevant to the project. But, as noted by others, an engineer, geologist or landscape architect may lack the expertise or an

adequate training in aquatic biology and hydrology that may be necessary, especially for projects involving protected or impaired watersheds, which expertise DEP and conservation districts possess. Nonetheless, PBR would still allow these professionals who may lack the requisite expertise or training to make the certification of compliance. In other words, this deficiency in the qualification of the licensed professional openly invites incompetence because, given the lack of any review or audit¹, it is highly probable that this incompetence will go undetected, at the expense of our water quality and environment. Proposed remedy: the qualifying licensed professional to certify that he or she has the requisite expertise or training in aquatic biology or hydrology. (1312)

238. **Comment:** I also feel that the "permit by rule" or PBR Program threatens our streams and rivers. Some of our most beautiful and healthy watersheds will be put at risk by this program and I urge you to reconsider this expedited permit process. (420)

239. **Comment:** Unfortunately, the tone of the proposed rulemaking fits well with the cancer of ever growing governmental disregard for individual and personal property rights. There is a better approach, at least to the health and proper management of the forest and the quality of water that the forest produces, and that is the utilization of licensed professional foresters to assist forest landowners in the management of their forests. Imposing unrealistic and indeed impossible standards to the management of a biological system will just not work. Professionalism is required to produce the results required. Licensing foresters will produce better results quicker. (1149)

240. **Comment:** As proposed, the permit-by-rule is very prescriptive and would have limited use to much of the regulated community. Any advantage provided by the promise of an "expedited" 30-day review period is more than offset by the additional, time-consuming "up-front" requirements prior to submission (three weekly newspaper publications, pre-application meeting, etc.). The additional mandatory riparian buffer requirement (and time needed to arrange and design such) and need for licensed professional may well add more to project costs than would be offset by the expedited review. Traditionally, in other Department programs, the term "permit-by-rule" is used where a regulated entity is "deemed" to have a permit without the need to apply for one, provided certain conditions are met. This permit-by-rule does not reduce the permitting burden for either the permittee or the Department. (1152)

241. **Comment:** The permit-by-rule should be available for all waters. By definition it applies to low risk projects with proposed riparian forest buffers. If a landowner is willing to relinquish such a significant part of his/her property to establish a riparian forest buffer, there should be some compensation, at least in the form of a streamlined permitting process, given that no other compensation for removing the property from development is proposed. The goal should be to encourage development that includes more riparian forest buffers. (1223)

242. **Comment:** Permit-by-Rule will not apply to enough projects to justify the costs of the Departments time in establishing the program. We do not feel that projects in our county will qualify for the use of this application. Many counties in the Southwestern part of the state will not qualify based on the requirements of the program as it is set forth. Our County based on its topography will get little use of this provision and we feel that it is not a beneficial component to

the permitting process. With Regards to permit coordination it is only required of the local municipality or County which is issuing building permits. We believe that the department should require documentation that all local municipal ordinances have been addressed prior to issuance of NPDES permits related to construction activity. Better coordination between the Department and local municipalities are crucial to the development, implementation and monitoring of activities that pose risk to waters of the commonwealth. With regards to inadequate plans submitted to the local conservation districts and Department. Provisions should be made to address frequent violations of submissions for review. Too much time and energy is wasted reviewing insufficient plans that are submitted in hopes that the "reviewer" will write the plans for engineers and consultants. Fees should be imposed for inadequacy or a standard format should be introduced that allow for timely reviews by districts and the Department. If the idea that emphasis on Conservation District review and inspection is being promulgated here, then DEP permits should be issued only if proof can be shown by the developer that the development plan meets Conservation District approval. The state cannot pick and choose which type of development will be accorded what permitting process. Right now, the two biggest impacts to our county (mining and natural gas extraction) afford the Conservation District little or no opportunity to comment unless a public complaint occurs. (1266)

243. **Comment:** Eliminate Permit-by-Rule. Based on our own experience reviewing stormwater management plans in Philadelphia, third party reviews of NPDES permit application materials are essential. Without independent review by qualified professionals, plans will be inadequate. This precipitates poor implementation of stormwater control measures and resulting enforcement issues, possibly costing time and money which contradicts the intention of the rule. Consideration for technical comments on a permit by rule application must be appropriately incorporated into the process. As has been the experience in Philadelphia, technical deficiencies are often identified as part of the municipal review. Proof that a notice has been sent to the municipality is all that is required. However, should the municipality have issue with the application it is not clear how these are to be communicated to the DEP and the applicant and whether this will have any effect. We in Philadelphia understand the intense budget pressures facing our governments and the need to expedite sometimes unwieldy permit procedures. More work is needed to understand how to make the NPDES permit process more efficient without sacrificing essential services. (1280)

244. **Comment:** As the Majority Chairman of the House Environmental Resources and Energy Committee, I have grave concerns with the proposed PBR option at Section 102.15 and therefore call upon DEP to remove it in its entirety from the proposed Chapter 102 regulations. Although PBR may be a laudable attempt to streamline the process and to promote efficiency, it lacks the necessary enforcement and accountability measures to adequately protect the waters of the Commonwealth. Therefore, the PBR proposal is simply untenable. (1271)

245. **Comment:** The most troubling aspect of the PBR scheme is that there would be no technical review on the submitted E&S and PCSM Plans once those plans are sealed by a qualified professional. Because there is no independent technical review by DEP to ensure that the sealed plans comply with all relevant local, state and federal laws, DEP is in fact gambling with the water quality protection, merely hoping that the plans prepared by these self interested professionals will not harm the Commonwealth's waters. But as the incidences involving Fortuna

Energy and Ultra Resources amply demonstrate, gambling on private actors pursuing profits to voluntarily regulate themselves and to protect our water supply is a risk that the Commonwealth cannot afford. Proposed remedy: Mandatory technical review by DEP, the conservation districts, or independent consultants. (1271)

246. **Comment:** Under the proposal, for the technical soundness of the E&S and PCSM Plans, DEP would rely solely on the qualified licensed professionals who would certify that "E&S and PCSM Plans are true and correct, and are in conformance with Chapter 102 of the rules and regulations." Such reliance elevates the importance of the integrity of the certification made by the licensed professional as well as the importance of meaningful deterrence against infraction. Because the risk of environmental degradation and water pollution with respect to the activities covered by the proposed regulation is high, the penalty must reflect that risk. However, the penalty for making a false certification to DEP is a minimum fine of \$1,000 under 18 Pa.C.S. 4904. This penalty is woefully anemic to serve as any kind of meaningful deterrence. The insufficiency of the penalty is particularly shocking given that this particular fine applies only to willful, deliberate lies. Although DEP officials have suggested that DEP may file a complaint with the Bureau of Professional and Occupational Affairs, that remedy is not even mentioned in the proposed regulation. Moreover, an official at the Bureau of Professional and Occupational Affairs overseeing the surveyors and engineers stated that he could recall no cases where an engineer or a surveyor was disciplined for submitting a faulty plan to DEP. Therefore, this remedy may be wholly ineffective. DEP officials have also suggested that DEP could refuse to accept any submissions by a licensed professional who has a history of non-compliance. But this measure also falls short because it would be used only in cases involving egregious and repeated violations. Importantly, none of the penalties contemplated by DEP actually punishes the company that hires the professional, leaving the company without any share of the burden of compliance. The lack of any meaningful deterrence against abuse will only invite further abuses by the permittee who is at all times struggling to lower his or her operating expenses. Proposed remedy: (1) \$100,000 fine on the professional for knowingly or recklessly submitting a plan containing material omissions or misstatements, with joint and several liability on the company that hired the professional; (2) mandatory filing of a complaint to the Bureau of Professional and Occupational Affairs; and (3) non-availability of PBR in the future to any company that files a plan containing material omissions or misstatements. (1271)

247. **Comment:** Under PBR, only "a professional engineer, geologist, or landscape architect registered in the Commonwealth of Pennsylvania" may certify that the submitted plan or plans fully comply with relevant laws and regulations. DEP officials indicated that the certifying professional must be practicing in the field relevant to the project. But, as noted by others, an engineer, geologist or landscape architect may lack the expertise or an adequate training in aquatic biology and hydrology that may be necessary, especially for projects involving protected or impaired watersheds, which expertise DEP and conservation districts possess. Nonetheless, PBR would still allow these professionals who may lack the requisite expertise or training to make the certification of compliance. In other words, this deficiency in the qualification of the licensed professional openly invites incompetence because, given the lack of any review or audit, it is highly probable that this incompetence will go undetected, at the expense of our water quality and environment. Proposed remedy: the qualifying licensed professional to certify that he or she has the requisite expertise or training in aquatic biology or hydrology. (1271)

248. **Comment:** There is no need for the proposed exclusion of projects from permit-by-rule coverage in Exceptional Value (EV) watersheds. Concerns about projects in EV watersheds can be fully and adequately addressed just as they can for high quality and impaired watersheds. EQB's proposed blanket exclusion of projects in EV watersheds fails to account for the fact that the oil and gas industry has been operating responsibly and effectively in such watersheds for decades. Moreover, the proposed language focuses on the "potential to discharge to a *watershed*" rather than to EV waters. Thus, this proposal could bar projects from permit-by-rule coverage that touch only the barest edge of such a watershed but which are located miles from EV waters. (1184, 1250, 1252)

249. **Comment:** We request that the Department revise the timeframe for additional information when the Department determines the NOI is incomplete or contains insufficient information. Under the Permit-By-Rule proposed rule, the applicant has 60 days to complete the application. If the additional information is not provided within 60 days the application is administratively withdrawn by the Department and the application fee is retained by the Commonwealth. A new fee is required with requested information. Due to complex nature of the permit applications and the additional information timeline should be extended to least 90 days. (1259)

250. **Comment:** For PBR coverage, how will sinkhole potential or land sliding potential be identified? (e.g. published soil survey; Web soil survey; site specific testing; etc.) (1315)

251. **Comment:** For PBR coverage, how will it be determined if earth disturbance activities are being conducted in or on sensitive areas? For Example: What type of testing and analysis will be required or considered sufficient in making this determination (e.g. site specific testing, case studies, etc.)? (1315)

252. **Comment:** For coverage under PBR or where buffers are required because of EV waters, how are buffers handled if project is within the allotted distance from a watercourse, but the watercourse is not on the subject property? (1315)

253. **Comment:** For projects working under coverage of PBR, what authority does the Conservation District have to request changes in the field upon finding inadequacies/failures during site inspections? Since the plans must be sealed by a professional, do non-engineering District staff have a right to question the design or request changes? (1315)

254. **Comment:** Although PBR does not require an E&S review by the Conservation District prior to the start of construction, many municipalities do require District review per municipal ordinances, per municipal SALDO, to meet MS4 requirements, etc. If E&S plan is not adequate prior to acknowledgement of PBR, can project begin? Once again, PBR requires that the plans be sealed by a professional; do non-engineering District staff have a right to question the design or request changes during review? (1315)

255. **Comment:** For projects working under coverage of PBR that also require Chapter 105 permits (other than small projects permits), what portion of the project is the District required to

review? Although PBR does not require District review, Chapter 105 permits (other than small projects permits) do require District review. (1315)

256. **Comment:** PBR coverage is not available to a person who has failed and continues to fail to comply or has shown a lack of ability or intention to comply with a regulation, permit and schedule of compliance or order issued by the Department. What determines a failure to comply (e.g. previous or ongoing enforcement?; violations noted on an inspection report?; etc.) (1315)

257. **Comment:** Under PBR coverage in HQ watersheds, only non-discharge alternative BMPs are allowed; does this disallow use of sediment traps and sediment basins in HQ watersheds? Is this a good idea? In addition, the definition provided for nondischarge alternative only addresses PCSM, it does not address E&S BMPs as are required by PBR coverage. (1315)

258. **Comment:** In EV watersheds and under PBR coverage, buffers will be required along rivers, streams, creeks, lakes, ponds or reservoirs. Since several of these terms (i.e. lake, creek, pond) are not defined, how will it be determined if the watercourse/waterbody requires a buffer? (1315)

259. **Comment:** Will a permit fee be required if a project covered under PBR proposes a modification to the project or an amended ROC? If so, Chapter 102 should specify that a permit fee is required with submissions of modifications to PBR projects or amended ROC'S requesting written verification of coverage under PBR. (1315)

260. **Comment:** Is Public Notice, as outlined in Chapter 102, required prior to the submission of a ROC amendment for projects covered under PBR? Prior to the submission of an original ROC Public Notice is required. If new or increased earth disturbance activities not included in the original ROC are later proposed an amended ROC is required to be submitted to the Department or Conservation District so verification of coverage may be determined. Since these proposed changes were not previously included in the original ROC, Public Notice should be required prior to submission of an amended ROC. (1315)

261. **Comment:** DEP should not eliminate technical review of stormwater plans. Without review by the state and without opportunities for public comment, stormwater management will get worse, not better. Pennsylvania's streams cannot afford more pollution and runoff, and we cannot afford increased flooding and drinking water treatment costs. (431)

262. **Comment:** The philosophy of changing responsibility of permit reviews from the Department to 3rd party licensed professionals could have adverse and costly consequences for all parties. (1314)

263. **Comment:** Rouse understands the limited usefulness of presumptive general permitting solutions. For some projects, in some areas, it is very possible that the fact that the Department has blessed one approach that it has demonstrated works everywhere would go a long way to avoiding costly and time consuming permit appeal litigation, streamline worthwhile development projects and foster cooperative relations among all stakeholders. On the other hand, a one size fits all permitting approach should not dominate as we believe it would tend to discourage

creative stormwater anti-degradation solutions that could be used elsewhere, not to mention otherwise appropriate economic development opportunities. Also, the existence of this option should not prejudice an applicant's wish to proceed under a regular permit, causing that application to sit at the bottom of some large pile of applications. (1281)

264. **Comment:** DEP should not eliminate technical review of storm water plans. Without review by the state and without opportunities for public comment, storm water management will get worse, not better. Pennsylvania's streams cannot afford more pollution and runoff, and we cannot afford increased flooding and costs of treating our drinking water. I encourage you to direct DEP to continue to review storm water plans to insure that they meet the standards of the Clean Water Act and do not degrade the quality of the streams of the Commonwealth. (267)

102.32. Compliance and Enforcement Provisions.

1. **Comment:** 102.32 Compliance and Enforcement Provisions Conservation districts should be included in any DEP informal hearing resulting from a request by an aggrieved person because of an action by the conservation district. (640)

Response: Conservation districts would be included in the hearings.

2. **Comment:** 102.32(b) "If the Department finds that pollution or a danger of pollution ..." Please review the language in 102.4 to make sure that the same language is being used between an agricultural E and S plan and a conservation plan to avoid any confusion. (947)

Response: The Department appreciates the comment, and agrees that consistency is important.

3. **Comment:** Section 102.32(c)-If an aggrieved person requests an informal hearing with DEP under this section, how long does the Department have to hear the case? Also, if the aggrieved person does not choose an informal hearing, how does he get a final determination? This section is written in such a way that it is not clear how an appeal would take place. There is no final determination that is appealable unless you have this informal hearing. (1291)

Response: The Department has revised this section. An aggrieved person must request the informal hearing within 30 days of the conservation district action. The Department's decision after the informal hearing is the final action that can then be appealed to the Environmental Hearing Board in accordance with the Environmental Hearing Board Act.

4. **Comment:** 102.32(c) should be revised to read as follows Any person aggrieved by an action of a conservation district under this chapter may request an informal hearing with the Department **and conservation district** within 30 days.... (693, 1208)

Response: If the district is a party to the action, they would be included in the appropriate hearings.

5. **Comment:** 102.32(d). The District is in favor of this reinforcement of the ability of conservation districts to recover expenses associated with enforcement actions. (218, 1208)

Response: The Department appreciates the comment, and appreciates the important role conservation districts play in the implementation of this program.

6. **Comment:** 102.32(d) This is a good addition. (693)

Response: The Department appreciates the supportive comment.

7. **Comment:** **102.32(d)** This needs better definition. Is this standard for anyone who has had a violation noted on an inspection report, received a Field Order, settled under a CACP, COA? (3)

Response: Yes, in general terms, an enforcement action is any action needed to compel a person to comply with the requirements beyond voluntary means.

102.41. Administration by Conservation District

1. **Comment:** An ongoing problem is the disparity between the Department's own regional offices and likewise the Department's local conservation district. Each office has their own sets of rules. For example, one conservation district we work with only allows silt socks, no silt fence. The next conservation district to the north prohibits silt socks since they aren't in the manual. As part of these revisions, consistency needs to be addressed. (1234)

Response: The Department does not believe that this is the appropriate process to address this issue. The commentator is encouraged to contact the Department's regional office to resolve the perceived inconsistencies between districts or the use of the BMPs accepted by the Department.

2. **Comment:** 102.41 (a) Somewhere within the regulations, it would be beneficial to explain that there are two separate delegation agreements that Districts have especially with respect to the Districts role with PCSM. (947)

Response: The delegation agreement is an administrative document to carry out the program and it is not appropriate to include in the discussion of this rulemaking.

102.42. Notification of Application For Permits.

3. **Comment:** 102.42 I do not think this notification has ever been provided....and reducing the threshold to 1 acre will not improve the likelihood of notification. Is this enforceable? If so, how? (1187)

Response: This process works well in some counties but may not work as well in other counties. As a regulatory requirement it is enforceable however, the Department recommends that the conservation districts work with the municipalities on their awareness of the process and benefits it provides.

102.43. Withholding Permits.

4. **Comment:** Section 102.43-The proposal to allow a municipality or county to withhold a building or other permit or final approval until the Department has issued the E&S or NPDES permit, or approved coverage under the General NPDES Permit for Stormwater Discharges Associated With Construction Activities, is not prudent. This is existing language, but with it added, it will come to municipalities' attention and they may start denying approvals. It completely reverses the land development process. Would conditional approvals be allowed? (1291)

Response: Yes, the Department has accepted conditional or preliminary approvals of plans, but they are not considered a final authorization until the Department permit is issued. No earth disturbance may occur until final approvals have been received from both the Department and the municipality.

5. **Comment:** Section 102.43. Withholding permits. We question the addition of “With the exception of local stormwater approvals or authorizations” in this context and recommend it be removed. (1208)

Response: The Department disagrees. The Department wants to assure that the DEP NPDES approval is consistent with any local stormwater ordinances.

6. **Comment:** Section **102.43. Withholding permits.** We recommend the removal of **final** from this section, which is problematic because municipal preliminary approval allows the developer to begin earth disturbance for projects requiring NPDES Permits before permit issuance. To improve coordination between municipal and NPDES reviews/approvals, 102.43 should be revised to read as follows: A municipality or county may not issue a building or other permit, **authorization or approval** to those proposing or conducting earth disturbance activities requiring Department permit. . . (1208)

Response: Receiving local “preliminary approval” does not relieve the developer from obtaining NPDES approval prior to earth disturbance activity. However, removing “final” would clarify that municipalities must not issue any authorization that would allow for earth disturbance activity to occur prior to the NPDES approval. Section 102.43 has been revised to remove “final”.

7. **Comment:** Revise 102.43 to read: ~~“With the exception of local stormwater approvals or authorizations,~~ A municipality or county may not ~~issue a building or other permit~~ **authorize the initiation of earth disturbance by the issuance of a building permit or other permit, authorization or final approval** to those proposing or conducting earth disturbance activities requiring a Department permit until the Department or a conservation district has issued the E & S or individual NPDES Permit, or approved coverage under the general NPDES Permit for Stormwater Discharges Associated With Construction Activities under §102.5 (relating to permit requirements).” The proposed exception for local stormwater approvals or authorizations, which appears to relate to the requirement to provide a stormwater consistency letter prior to NPDES Permit issuance, is confusing and should be deleted. Said consistency does not constitute approval. A plan can be consistent with the local municipal ordinance and not receive approval because of small plan revisions. Final should also be deleted because many municipalities grant preliminary plan approval which allows developers to conduct earth disturbance associated with the construction of public improvements before gaining final approval of their plans. As proposed, a municipality could waive permits or approvals for a project requiring an NPDES Permit and not be in violation of 102.43. We have proposed alternate language in reaction to a Monroe County municipality that told a developer no approvals were needed to build a resort in a subdivision that was approved in the 1970s. (693)

Response: Receiving local “preliminary approval” does not relieve the developer from obtaining NPDES approval prior to earth disturbance activity. However, removing “final” would clarify that municipalities must not issue any authorization that would allow for earth disturbance activity to occur prior to the NPDES approval. Section 102.43 has been revised to remove “final”.

8. **Comment:** § 102.43 Withholding permits. Does this apply to PBR as well? (1315)

Response: Section 102.15 (Permit by rule for low impact projects with riparian forest buffers) has been deleted from this rulemaking.

COMMENTS OUTSIDE OF THE SCOPE OF THE PROPOSED REGULATIONS.

Manuals & Guidance

1. **Comment:** The 2006 **BMP Manual** is no longer current and DEP has denied a recent attempt to update it using volunteer professionals due to internal funding and staffing constraints. But, Chapter 102 refers to the BMP Manual both explicitly and by using standards from it. Chapter 102 updates can not be founded on a static BMP Manual that doesn't grow with the quickly changing stormwater field. Instead the BMP Manual must be updated regularly and Chapter 102 needs to be more flexible by allowing the use of other and more current standards found in other reliable guidance. The first update to the BMP Manual must occur before Chapter 102 is finalized. (1123)

Response: The Department appreciates the comments supplied by the commentator on the Erosion and Sediment Control and Stormwater Management Manual; however, updating the Erosion and Sediment Control and Stormwater Management Manual was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

2. **Comment:** Standards for professional judgment also need to be incorporated into the regulations. The professional community is consistently told to do things because they are in the manual. These sites are the ones that with failing facilities because the professional community is told that they have to warp sites into meeting a general checklist, not professionally designing them. Checklist might be the Department's answers to not having professionally trained and licensed staff review submissions, however, the checklist and manuals are also the reason for failing facilities. (1234)

Response: The DEP technical review checklist and manuals are not the reason for failing facilities. Facilities that fail generally do so because of improper installation or lack of proper maintenance. The Department appreciates the comments supplied by the commentator on the Erosion and Sediment Control and Stormwater Management Manual; however, updating the Erosion and Sediment Control and Stormwater Management Manual was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

3. **Comment:** Several Commentators submitted comments on the **E&S Manual**. Those comments related to the section on Compost Filter Sock in Chapter 4 – Sediment Barriers. (708, 712, 1114, 1124, 1220, 1225, 1242, 1250, 1282)

Response: The Department of Environmental Protection is revising and updating the Erosion and Sediment Control and Stormwater Management Manual. The draft Manual includes specific guidance, performance requirements, and design criteria to support the implementation of the Department's water quality program. Invitation for public comment was published in the *Pa. Bulletin* on August 29, 2009. The comment period was open until December 15, 2009. The listed comments on the E&S Manual will be included in the comment/response document for the E&S Manual.

4. **Comment:** The second issue that I'd like to focus on is the proposed codification of the guidance volume control standards contained-originally in the Pennsylvania **Stormwater BMP Manual**. These proposed revisions are in Section Eight, Chapter 102 of the proposed rule changes. The volume control standards in Chapter Three of the Pennsylvania Stormwater BMP Manual referred to as CG1 were only intended as guidance standards. Many of us on the BMP manual oversight committee would have never agreed to these standards if they wouldn't have been sold as only a guidance in nature. As one way to demonstrate that the stream water quality requirements in Title 25, Chapter 93.4 of the Pennsylvania State Code, the anti-degradation regulations, these anti-degradation regulations state that a waterway's use or water quality cannot be impaired depending on stream classification. (1255, 1306)

Response: The Department appreciates the comments supplied by the commentator on the Erosion and Sediment Control and Stormwater Management Manual; however, updating the Erosion and Sediment Control and Stormwater Management Manual was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations. Section 102.8(g) has been revised in the final rulemaking to provide more flexibility for the applicant.

5. **Comment:** This legislation should include a formal way for the engineering community to provide input into the design parameters for BMPs within the BMP Manual. This is the only way to assure that the manual always reflects "Standard Engineering Practice", the only legally defensible standard recognized by the court for design. A committee to keep the BMP manual document relevant, "A Living Document," should be established within Chapter 102. Often BMPs must be applied differently in different regions of the state. The engineers within each region should be given the opportunity to recommend modifications to the "standard" BMPs so that they are relevant to that regions needs. As the state-of-the-art in stormwater management changes from the construction of large central facilities to diverse low impact green BMPs, the input from the design community could be valuable. There is a concern within the community that inclusion of a fixed water quality criteria based on the retention of the 2-yr synthetic storm could inhibit the development of green BMPs. This requirement (known as CG-1) is better suited for inclusion only in the BMP Manual, and should be subject to review as suggested above. With an engaged, informed, and educated design and construction community assembled through an official training program, keeping the BMP Manual in pace with green technology can be accomplished. (945)

Response: The Department appreciates the comments supplied by the commentator on the Erosion and Sediment Control and Stormwater Management Manual; however, updating the Erosion and Sediment Control and Stormwater Management Manual was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations. Section 102.8(g) has been revised in the final rulemaking to provide more flexibility for the applicant.

6. **Comment:** There needs to be a mechanism in place whereby revisions can be made to the BMP Manual based upon the experiences gained by both design professional and reviewing authorities during the process of implementing its recommendations. (938)

Response: Revisions to guidance document are routinely published and open for public comment. Prior to publication for comment, guidance revisions are often reviewed with the appropriate Department Advisory Committee.

7. **Comment:** As part of these revisions, consistency needs to be addressed. Another topic that repeatedly arises is what is the definition of being unable to infiltrate. Despite having reports from professional geologists stating not to infiltrate, open sinkholes on sites or Municipalities that do not allow infiltration due to sinkhole activity, Department staff has repeatedly told us that we have to infiltrate on specific projects. This defies professional recommendations and good engineering practices. The guidelines for demonstrating that you cannot infiltrate should be incorporated into these regulations. Going hand-in-hand is the loading rates for infiltration facilities. Manual arbitrarily uses 3:1. We work with one conservation district that finds 20:1 acceptable. Another that uses 32:1 and a third that requires a minimum of 6:1 for a facility. None of these are based on site specific testing or soil properties. They are just arbitrary numbers. (1234, 1289)

Response: The Department does not agree that calculation instruction details should be included in the regulation. Such detail will be included in guidance.

8. **Comment:** Related to Chapter 102 revisions is the current process of updating and refining the Stormwater Management manual. This process too is threatened, by budget and staff cuts. Stormwater management and erosion control go hand-in-hand and a threat to one program is a threat to the other. Proper funding and technical support must be provided to DEP's Stormwater Management program as well as Erosion Control. (941)

Response: The Department appreciates the comments supplied by the commentator on the Erosion and Sediment Control and Stormwater Management Manual; however, updating the Erosion and Sediment Control and Stormwater Management Manual was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

9. **Comment:** Support for regular updates for guidance Manuals used in this process. (1317)

Response: The Department appreciates the comment and intends to routinely update the various guidance manuals used in support of this program.

10. **Comment:** From reviewing the comments of others that are publicly available, *there is a misperception that inflexible and restrictive guidelines will protect the Commonwealths waters. Past history has shown this is not true.* This is the approach that resulted in detention and retention basins being the sole approach to stormwater over much of the last 30 years, many years past the point where it was known that this approach was insufficient and not meeting our goals. Innovative practices such as porous pavement, disconnected flows, and seepage pits were recommended back in the early 1980's, but were generally not permitted. It should be pointed out that each detention basin built was designed, reviewed and approved based upon a narrow inflexible standard. (1207)

Response: The Department appreciates the comments supplied by the commentator on the Erosion and Sediment Control and Stormwater Management Manual; however, updating the Erosion and Sediment Control and Stormwater Management Manual was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

11. **Comment:** Appendix C of the Stormwater BMP Manual is inadequate and needs to be updated. (1269)

Response: The Department appreciates the comments supplied by the commentator on the Erosion and Sediment Control and Stormwater Management Manual; however, updating the Erosion and Sediment Control and Stormwater Management Manual was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

12. **Comment:** Appendix B of the Guidance states, "This evaluation should be performed by a Certified Forester or a professional trained in the use of this form and procedure." Pennsylvania does not currently license foresters. There is a Certified Forester designation, but that is a voluntary certification through the Society of American Foresters (SAF). Certified Foresters must meet requirements (education and experience) set by the SAF and complete 60 hours of educational training during a three-year period to remain certified. Though this is a good designation, it is voluntary and it may exclude many foresters who would otherwise be qualified to work on this form. We recommend one of the following options: a. Removing "Certified Forester" and replacing it with: "forestry professional with a four-year degree in forestry from an institution accredited by the SAF or a two-year degree in forestry from an institution recognized by the SAP. b. Removing "Certified Forester" and replacing it with: "DCNR-trained Stewardship Plan Writer." These are natural resource professionals that have received training from the Bureau of Forestry and Penn State in the writing of Stewardship plans. Training for Plan Writers is free and takes place yearly, so professionals who are interested in taking the training can sign up to get on the list. (1275)

Response: The Department appreciates the comments supplied by the commentator on the Riparian Forest Buffer Guidance; however, Riparian Forest Buffer Guidance was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

13. **Comment:** I think it is important for the DEP to provide or direct Biologists, Foresters, and the like to the appropriate training for the classification of and restoration of riparian buffers. The "Appendix B" provides preliminary guidance, however I believe that we need some type of certification to eliminate or decrease the questions from conservation districts, DEP, and other agencies. (1)

Response: The Department appreciates the comments supplied by the commentator on the Riparian Forest Buffer Guidance; however, Riparian Forest Buffer Guidance was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

14. **Comment:** We believe that some of the design, construction and maintenance standards in the Draft Riparian Forest Buffer Guidance are inappropriate for use in Special Protection

Watersheds where intact, healthy and ecologically functioning riparian buffers should not be altered. (1208)

Response: The Department appreciates the comments supplied by the commentator on the Riparian Forest Buffer Guidance; however, Riparian Forest Buffer Guidance was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

Comments Regarding Pending Legislation

15. **Comment:** Legislation - sponsored and to be introduced by Representative Kerry Benninghoff, 171st State House District (Center and Mifflin Counties) - is written and being circulated for co sponsorship in the State House. The proposed legislation will be soon introduced in this session of the General Assembly. It should be recognized that this effort was in process prior to the publication of the proposed rule making. By the statements made in the proposed rule making - as to the parties consulted in the development of the proposed rule making and adopted by the Environmental Quality Board - it appears that forestry, the forestry profession, and foresters may have been under represented in the process. This must be changed! Our intent is to help improve, promote and maintain the quality of clean waters and streams. Forester's best understand the dynamics, value and need of forest buffers and riparian forests whether they are in a development or large land holding. Therefore, licensing Pennsylvania foresters is a very important ingredient in protecting Water Quality in Pennsylvania and to the practice of Forestry in Pennsylvania! (1215, 1284, 1294)

Response: The Department appreciates the comments supplied by the commentator on the proposed legislation; however, licensing foresters was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

16. **Comment:** Pennsylvania foresters are trained and equipped professionals who manage all aspects of Pennsylvania's forests and watersheds in a manner which minimizes negative impacts to water quality. Forestry needs to be applied by licensed professional foresters who use objective science based practices and studies that directly apply to Pennsylvania forests and watersheds. Reliance on the skills and judgment of licensed professional foresters should have priority in the management of any forest, forest buffer or riparian forest. The application of scientific forestry does not impair the forests ability to provide high quality water. Scientific forestry nurtures, enhances and protects the forest's ability to provide high quality water. Licensing of foresters places the demand on the science of forestry and uses watershed management with the application of forest buffers and riparian zones ultimately leading to cleaner water and streams. (5)

Response: The Department appreciates the comments supplied by the commentator on the proposed legislation; however, licensing foresters was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations. Further, the Department relied upon numerous references in the development of this rulemaking specifically related to scientific data, studies regarding Riparian Buffers and Riparian Forest Buffers, as well as scientific data, studies regarding Erosion and Sediment Control and Post Construction Stormwater Management. A list of these references is included as the final section in this Comment/Response Document.

17. **Comment:** Pennsylvania foresters need to be licensed to attain the best management of all of the forest! (1149)

Response: Licensing foresters was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

History Code

18. **Comment:** As stated in the disclaimer for 012-0700-001, the policies and procedures as established by the Department ". . . are not an adjudication or a regulation". They are the Department's interpretation of its' working framework. The Department has overstepped its' "administrative discretion" in attempting to circumvent Title 37 for Oil and Gas activities. In Title 37, Chapter 5, Section 507, (a 1 and 2) "Commonwealth agencies.. ..shall cooperate fully with the commission (PHMC) in the preservation of archeological resources.. ..". Agencies such as DEP are required to 'Notify the commission before undertaking any ...projects that may affect the archeological sites.'. and 'Notify the commission when they become aware of any undertaking.. which affects or may affect an archeological site.. . ". By not requiring any form of historical survey prior to earthmoving activities by Oil and Gas in the permitting process, the Department is blatantly ignoring the mandates of the statute. (4)

Response: Nothing in the proposed or final regulatory revisions modifies the requirements related to historic resources. Applicants for permits must satisfy the applicable requirements of the history code. Comments related to Department policy are beyond the scope of the comment and response document related to the Chapter 102 regulations.

19. **Comment:** There are no remedial actions that can be taken to restore archeological sites once disturbed. The only course is one of prevention. (4)

Response: Nothing in the proposed or final regulatory revisions modifies the requirements related to historic resources. Applicants for permits must satisfy the applicable requirements related to historic resources. Comments related to Department policy are beyond the scope of the comment and response document related to the Chapter 102 regulations.

20. **Comment:** Uniform policies and procedures "consistent with the Pennsylvania History Code" effective March 16, 2002 (Document ID # 012-0700- 001) NOT being applied in the permitting process for Oil and Gas. The Department has taken a position that Oil and Gas activities have been exempted from compliance with the History Code I can find NO STATUTORY exemption. Further, in 0120-PM-PY003a Revised 612006, (Policies and Procedures Implementation of the History Code-List of Exemptions May 2006 Bureau of Oil and Gas Management), the only applicable exception is "Individual Well Permits (normally only % to 1 % acre is size)". There is no mention of earth moving activities for pipeline, compression station or similar construction and many of the well sites for Marcellus Shale are several times over the "normal" acreage. (4)

Response: Nothing in the proposed or final regulatory revisions modifies the requirements related to historic resources. Applicants for permits must satisfy the applicable requirements related to historic resources. Comments related to Department policy are beyond the scope of the comment and response document related to the Chapter 102 regulations.

21. **Comment:** The Pennsylvania Department of Environmental Protection should be made to comply with Title 37 in its' permitting of Oil and Gas activities. (4)

Response: Handlers of hazardous materials are required to comply with applicable federal and state regulations, including Title 37. The Department is not a handler of O&G products.

22. **Comment:** If staffing is an issue with PHMC to review the permit applications submitted by DEP in a timely manner, PHMC should grant access to their site maps and delegate this responsibility to the County Conservation Districts. (4)

Response: Nothing in the proposed or final regulatory revisions modifies the requirements related to historic resources. Applicants for permits must satisfy the applicable requirements related to historic resources. Comments related to Department policy are beyond the scope of the comment and response document related to the Chapter 102 regulations.

23. **Comment:** Because of the major significance of even some "small sites" (i.e. The Meadow Croft Rockshelter), there should be no minimal acreage limits established for "exemption" of the historical survey requirement in areas of known, high density archeological sites and certainly no 25 acre exemption as proposed in the current rulemaking changes to 25 PA. Code Ch. 102. (4)

Response: Nothing in the proposed or final regulatory revisions modifies the requirements related to historic resources. Applicants for permits must satisfy the applicable requirements related to historic resources. Comments related to Department policy are beyond the scope of the comment and response document related to the Chapter 102 regulations.

24. **Comment:** The Department (of Environmental Protection) has been remiss in it's' obligations to comply with Pa. Title 37 (The History Code) and the preservation of cultural resources in the permitting process for Oil and Gas activities. The proposed changes to Chapter 102 do not address these shortcomings and if anything the permit-by rule provision will facilitate the further destruction of historical sites. (4)

Response: Nothing in the proposed or final regulatory revisions modifies the requirements related to historic resources. Applicants for permits must satisfy the applicable requirements related to historic resources. Comments related to Department policy are beyond the scope of the comment and response document related to the Chapter 102 regulations.

25. **Comment:** We don't feel that the Department has the authority to bypass the history code in its permit decisions. (943)

Response: Nothing in the proposed or final regulatory revisions modifies the requirements related to historic resources. Applicants for permits must satisfy the applicable requirements

related to historic resources. Comments related to Department policy are beyond the scope of the comment and response document related to the Chapter 102 regulations.

Other Issues

26. **Comment:** I would not live with in fifty miles of a well that I knew was fractured with toxic chemicals used in the process of extracting natural gas. My reasons are as follows. First of all, when inspectors are not required to be onsite to double check the pressure test readings on all the well casings and certify their integrity, this state is heading for big water problems. Unless someone is trying to hide something, this detail should be corrected and be made public if the well is on game or forest lands before the well is fracked. I have a real problem with the chemicals used, not being told to PA. land owners and also not being told to hunters and hikers if the well is on game or forest land. What happens if my hiking water purification bottle is useless against these highly toxic chemicals. How will the hospital know how to treat me if I become sick? Land owners, hunters and hikers are behind the eight ball, because no one knows what is in the water. The chemicals used on game and forest lands should be posted on trees and gates on all state lands unless again , someone does not want you to know. The state of PA. has not made clear what the federal EPA has said about well contamination of this highly toxic extraction process. I read 11 out of 39 wells were contaminated after this process, in the state of Wyoming, is this true? I do not understand why our politicians are not talking about this to the public. This industry does not say how water clean up takes place, look at the Dunkard creek spill thirty four miles of stream wiped out , as of 11/29/ 09 , I have not seen any statements from PA. DEP on how the people are making out with this issue. Where are all of the documents of what was found and can the stream be cleaned up or is it ruined for life? I do not think anyone knows how treat spills , not DEP or the gas industry. I have not seen any documentation from anyone to prove me wrong on this statement. Until I see total transparency of all the chemicals used and the lack of over sight problem fixed, I would have to say that the state of PA. is heading for an environmental disaster of the likes, which no one has ever seen before. Look at the streams still not cleaned up from coal mining. Look what happened to wall street with no oversight , they thought they could self regulate themselves, which is exactly what the gas industry wants, that way, no one will ever know what is in the water. (1217)

Response: The Department appreciates the comments supplied by the commentator on the natural gas well drilling; however, the natural gas well drilling was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

27. **Comment:** We have seen rather recently with acidification not only in freshwater, but in our oceans that may become the number one problem for water, freshwater and saltwater alike. So we need to begin to pay better attention and begin to change our regulations to get ahead of those kinds of disasters. (1219)

Response: The Department appreciates the comments supplied by the commentator on acidification; however, acidification was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

28. **Comment:** The next one is things that are not exactly in the purview of DEP, except that it gets in line to beg with its bowl at the state legislative appropriations process, namely these things currently, in the past and almost certainly to go ahead, would require adequate funding and staff to oversee and enforce EMS permits. And I submit that the entire DEP effort in the last 20 years has been significantly under-funded, both funding and therefore by staff, leading to a compliance by non-investigation of things. This is not the fault of the DEP, per se. (1307)

Response: The Department appreciates the comments supplied by the commentator on the state legislative appropriations; however, state legislative appropriation was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

29. **Comment:** Now, those mine shafts are filled up and over 35 years those - that limestone is collapsing and I'm just concerned with that - if that box culvert were to let loose because of the excessive sediment running into those streams from more building, if that would collapse it would - it could very much collapse our economic highway system right in this area because that southern corridor is the main artery up into the north on the east coast here. (1311)

Response: The Department appreciates the comments supplied by the commentator on the mine shafts; however, mine shafts were not included in the proposed rulemaking and are therefore outside of the scope of the proposed regulations.

30. **Comment:** I am very concerned about the erosion of stream banks in Lower Merion Township due to overuse of impervious space and flagrant over use of non-essential water. Pass laws that stop the sale of Jacuzzis and home swimming pools. Raise the cost of water so we stop wasting water. And enact stronger laws that limit impervious surfaces. (885).

Response: The Department appreciates the comments supplied by the commentator on the over use of water; however, water use was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

31. **Comment:** Water testing on a more regular basis is also vitally important. (1031)

Response: The Department appreciates the comments supplied by the commentator on the water testing; however, water testing was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

32. **Comment:** Under the existing 102/NPDES delegation agreement, not the PCSM delegation agreement, we have some concerns, if in fact something goes awry from a stormwater perspective on a General NPDES permitted site, if the Department will actually provide us with the indemnification protection that we think that we have. We would encourage the Department, both the Central Office and the 6 Regional offices, along with all of the delegated Districts to provide further training on exactly what the Department is expecting from the Districts with our involvement with PCSM plans. Presently, we feel that there is too much inconsistency and uncertainty across the state which leads to problems. (947)

Response: The Department appreciates the comments supplied by the commentator on the delegation agreement; however, the delegation agreement was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

33. **Comment:** The expenditure of time by agencies associated with implementation of stormwater management and E&S includes the clarification of expectations to designers (often one plan at a time), communications with contractors (usually through enforcement action), assisting developers to understand requirements (often second hand through either the contractors or the designers), coordinating with township officials, and training agency review staff. Because the Conservation Districts have real and legitimate apprehensions regarding accepting the delegation of authority, additional DEP time is required. More staff time is required to respond to the inquiries from the manufactures of BMPs. To reduce the time required for implementation of stormwater management and E&S, all of these entities should be included in an official training program to reduce staff man-hours implementing these new regulations. (945)

Response: The Department appreciates the comments supplied by the commentator on the training; however, training was not included in the proposed rulemaking and is therefore outside of the scope of the proposed regulations.

34. **Comment:** In spite of presenting the township with proof of misrepresented setbacks on his building permit and requests to enforce township's stormwater ordinances, the township has yet to take any action. When we complain to the regional office of the Department of Environmental Protection about the way our concerns were handled, the Conservation District mixed current 2009 recommendations with our 2005 approved plan, saying we were the bad guys for not implementing the conservation plan. We're confident that if the responsible parties removed their concentrated flow of stormwater from our property, the natural contour of the land was returned and the area remains in perennial forages, erosion would be reduced to a minimum. We have a neighbor who is breaking clean water laws and stormwater ordinances and suffers no consequences. Why has no one questioned his violation of state laws and township ordinances in constructing this pond? In fact, the victims of his actions are being held responsible for his bad behavior. Everyone has commended us on preserving our farm, but that sentiment rings hollow when a blind eye is turned to our appeal to help us protect our farm's natural resources. What would mean much more and, in fact, be very helpful to us is if current laws and ordinances were enforced. We'll attach the applicable ordinances and laws that we believe apply to this testimony. (1295, 1296)

Response: The Department appreciates the comments supplied by the commentator on the municipal ordinances; however, municipal ordinances were not included in the proposed rulemaking and are therefore outside of the scope of the proposed regulations.

ONE PAGE SUMMARIES



PECO Energy Company – Summary of Proposed E&S Regulations

PECO appreciates the opportunity to provide comments to the Department on the proposed E&S regulations. We have reviewed the proposed regulations and we are pleased to see that PECO already practices most of the proposed changes to the regulations. Our concerns are centered on the procedures and processes where we have little to no control. Delays of any sort add to the difficulties of meeting FERC/NERC-mandated outages and failure to meet these schedules could result in large-scale regional outages and severe federal fines. PECO's main points concerns are summarized below.

1. One of our concerns is focused on the time that it has taken to obtain permits and approvals and the delays that we have encountered during the permitting process. We feel that the regulations offer the regulatory agencies too much latitude on interpretation and little accountability to process otherwise simple permit applications. We strongly endorse mandated agency review times, tighter language to reduce ambiguity and interpretation of the regulations, and a more streamlined permit/plan application package. Additionally, permit delays due to under-staffing or lack of a prescribed response time at the agency level associated with state and federally threatened and endangered species continues to be source of contention.

2. While it is important to understand the utility of BMPs and where they work best, there is significant discrepancy between various county conservation districts on which BMPs they prefer. The Department should provide more stringent and prescribed guidelines on the applicability of each BMP. Moreover, the concept of restoration implies a pre-defined starting point or baseline. We strongly recommend the department establish baselines for the State's regulated waterbodies, rather than placing the burden of establishing a baseline on the permittees, then having this baseline accepted by the Department and conservations districts.

3. Development and maintenance of riparian buffers in exceptional value watersheds would significantly increase costs that would ultimately be passed on to the rate payer. Most of our permitting requirements are associated with re-conductoring projects, which is the replacement of the electrical wires or the replacement of the static wire with an optical ground wire (part of the Smart Grid Program). While PECO has adopted the Department's policy of avoidance of wetlands and streams in these projects, it is still required to obtain the necessary State and Federal wetland permits as well as a letter of adequacy from the local conservation district for an E&S Plan. These riparian buffer requirements would add significant delays, result in additional cost, be largely self-defeating given that incompatible trees must be removed from the ROW, and create an unnecessarily complicated process for what is otherwise a very simple project that shouldn't require permitting.

PECO is requesting the opportunity to work with the Department to develop a Soil Erosion and Sediment Control package that meets the spirit of the proposed regulations, perhaps a programmatic permit, but provides PECO with variances in the regulations that help maintain electrical reliability throughout its service territory, while keeping the otherwise significant costs needed to implement these changes, but more importantly, reduce the time to review and approve such plans, while maintaining the company's environmental responsibility.

SUMMARY OF COMMENTS
PROPOSED CHAPTER 102 REGULATION REVISIONS
BY: Michael E. Stover, P.E.

To adopt the proposed Chapter 102 revisions as written will result in severe negative economic, political and environmental impacts to the Commonwealth. On one hand, the agricultural community will benefit immensely as the revisions remove any remaining vestiges of responsibility for farmers to control accelerated erosion and sediment releases due to plowing and tilling operations. Despite long standing recognition that such operations contribute between 60 and 80% of the total sediment pollution occurring in Pennsylvania, DEP has seen fit to remove any and all control over such work and in fact, is attempting to illegally delegate oversight of agricultural activities to the NRCS, a federal agency with no statute authority to regulate or enforce Commonwealth laws and regulations. One example of the apparent influence by that federal agency is the proposed adoption of the soil loss tolerance factor "T", a non field measurable amount of sediment releases which will only serve to shield the agricultural community from any liability in its continuing annual release of millions of tons of sediment into Commonwealth waterways. This one act will ultimately demonstrate to the people and governments involved in restoring the Chesapeake Bay that Pennsylvania is only providing lip service to it's pledges to be a major contributor in such efforts. With no requirements for E&S plan preparers, no permitting requirements, no plan reviews and with no way to measure "T" compliance, there will be no regulation whatsoever of the agricultural community under the Chapter 102 regulations. As a final item to ensure non interference by DEP, Ag E&S plans only have to incorporate measures that are "cost effective and reasonable". How can anyone dispute or enforce this standard?

The selective application of involvement by "licensed professional" in these revisions represents an illegal interpretation of the provisions of Act 367 of 1945, P.I. 913. No. 367, as amended. Either the work of preparing E&S and PCSM plans meets the Act 367 definition of "Practice of Engineering" or it does not. If, as I strongly believe, it does, then all such plans must be prepared by a licensed professional engineer. The same requirement would apply to site inspections and completion certifications. Other definitions in Act 367 specifically prohibit geologists and land surveyors from engaging in engineering work. These two professionals are included in the 102 revisions' definition of "licensed professional" and must be removed. If, by some legal determination, it is decided that this work does not meet the "Practice of Engineering" definition, it remains that no licensed engineer that I know of will accept the liability for inspecting or certifying work designed by persons "trained and experienced", a term not defined in the regulations and for which no screening criteria exists.

The costs of adopting these revisions for most of the regulated community will be extreme. The objective of charging application/review fees (which will prompt unspecified fee increases by the conservation districts) to make this program economically self sufficient, and the increased engineering fees will effectively destroy residential and small commercial development across rural Pennsylvania. The agricultural community will, of course, bear none of these costs and large residential/commercial developments will easily absorb the increases. But for a small subdivision or single new home owner/builder, these increased costs along with other recent DEP on-lot sewage disposal requirements will result in increases of \$20,000+ and effectively destroy this opportunity for rural home ownership. The overall economic loss for this loss of future development in Pennsylvania may be catastrophic.

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1. Permit-by-rule (PBR). We feel that this provision should be eliminated from the proposed regulations. It was conceived at a time when there was a tremendous backlog of permits in the DEP Northeast Regional Office. While the Department was trying to devise a permit instrument on a statewide basis that would resolve a permit backlog issue driven by workload in the Northeast Region, there was a parallel effort by Conservation Districts in the northeast and DEP to revise the delegation agreement to provide for post construction stormwater management (PCSM) review. Districts felt that this was the best strategy to pursue as it maintained the integrity of the program through an upfront technical / engineering review of proposed PCSM Plans and provided for concurrent reviews of both Erosion and Sedimentation Control and PCSM Plans. Currently, three Conservation Districts in the Northeast, as a result of this parallel initiative, have assumed PCSM delegation agreements. In Monroe County, this effort included reconfiguring office space, securing a new position through County Government, negotiating a competitive salary, securing a long term commitment for funding between County Government and the District, and crafting the revised delegation agreement that provided for the responsible administration of the program. It is our contention that this effort by Conservation Districts to address this problem has created a situation where the permit-by-rule is no longer necessary.

We are also opposed to the permit-by-rule because it does not provide for a technical or engineering review, which would ensure good design and management strategies. Instead it will result in the Department needing to exponentially expand its compliance assistance to Conservation Districts since compliance will be achieved after contracts are let and construction has begun. For example, the Department recently revoked an expedited ESCGP-1 permit when it was discovered that the plans, which lacked an engineering review, contained inaccurate calculations and improper technical detail, and did not provide for best management practices where required. According to DEP, "DEP took this action because of numerous technical deficiencies discovered after our approval of the permits."

This permit-by-rule is actually a general permit (GP) in every respect, but it could not be proposed as a GP because §92.81(a)(8) prohibits the use of a GP in special protection waters and because this category of activities will individually and cumulatively have the potential to cause significant adverse environmental impact. We therefore question the legality of including this general permit (PBR) in Chapter 102.

If the PBR remains in the revised regulations, its use should be prohibited in high quality watersheds given the high potential for sediment pollution and degradation in the absence of a collaborative engineering review and prohibited in counties in which the Districts have assumed the engineering review of PCSM plans, and the Registration of Coverage should require that copermittees be identified to demonstrate compliance with §102.15(b)(4). The PBR calls into question the need for a delegation in which Districts and county governments have invested such a large amount of equity. Our solution (revised delegation agreement) provides for appropriate protection while at the same time expediting permit issuance.
2. Responsibility for long-term PCSM operation and maintenance. In the Paradise Creek (Monroe County) Watershed Assessment, it was found that a majority of the structural PCSM BMPs were failing. Many failures resulted from a lack of maintenance. Chapter 102 is not the correct vehicle to address this topic because the state will not be able to administer or enforce such a program. We feel that Act 167, the Stormwater Management Act, is better suited for O&M on a watershed scale as opposed to providing for it on a site by site basis. We agree that it is important for Chapter 102 to require that a schedule of O&M be provided and that a legal instrument be required.
3. Mandatory Riparian Forested Buffers. The Department repeatedly acknowledges the importance of buffers in special protection waters. We support mandatory buffers on permitted sites, wetlands, and in special protection and impaired waters. This is consistent with the scientific community's assessment of the benefits of buffers to protect, maintain, reclaim and restore the waters of this Commonwealth. It also supports local governments' efforts to incorporate sustainable land use practices and sends a strong message to those considering implementing such strategies. While we have not suggested mandatory buffers in non-impaired or non-special protection waters, they should be considered to prevent further degradation. By making buffers voluntary, plan designers will fit them in at the end of the design phase rather than properly planning from them, which will result in buffers rarely being proposed. The development community may be more amenable to buffers if buffers are required to be incorporated into the constraints mapping early in the design process and if limited project appurtenances in buffers are listed as "allowable activities" as suggested in our comments. We are opposed to the proposed buffer establishment and management requirements because they serve as a deterrent to voluntary buffers and require inappropriate disturbance within EV riparian areas.
4. PCSM Design Strategy. The proposed rulemaking indicates that the Department is not committed to producing a regulation consistent with current sustainable development strategies as implied by the lack of a requirement for an alternatives analysis which progresses from nonstructural to structural. Chapter 102 should promote sustainable planning and design strategies and prioritize the use of nonstructural BMPs in the development of PCSM Plans. By doing so, it becomes easier to comply with anti-degradation requirements in special protection waters, reduces costs of compliance, and minimizes complications with long term O&M.

PENNSYLVANIA CAMPAIGN FOR CLEAN WATER

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RE: PROPOSED RULEMAKING on 25 PA. CODE CH. 102-Summary of Comments from the Campaign for Clean Water:

1. The new "permit-by-rule" option should be eliminated. We strongly oppose the permit-by-rule (PBR). An expedited permit review process puts rivers and streams at risk, is poor policy, and violates core requirements of the Clean Water Act. Specifically:
 - The PBR cannot apply in High Quality (HQ) watersheds because its application would violate Pennsylvania's Chapter 93 antidegradation regulations.
 - The PBR cannot apply in impaired watersheds because thorough, individual analyses of new discharges to those watersheds must be conducted.
 - The proposed PBR violates the Clean Water Act because it does not require meaningful agency review of NPDES permit effluent limits by the permitting authority and does not provide for public participation opportunities.
 - The PBR option should not be made available for large developments and developments that are not near a stream.
 - The PBR will likely result in economically costly and environmentally damaging problems that will develop during or after construction.
2. Minimum 100 foot forest riparian buffers should be mandatory for all earth disturbances requiring an NPDES permit. The Campaign's full *Buffers 100* proposal should be adopted into regulation.
3. Permittees should bear the legal responsibility of ensuring long term operation and maintenance of post-construction stormwater management best management practices.
4. We support the requirement for earth disturbance activities associated with oil and gas development to obtain NPDES stormwater permits.
5. The threshold for requiring an E&S permit for timber harvesting and road maintenance should be reduced to 5 acres.
6. New regulations requiring temporary stabilization of construction sites and erosion and sediment control plans for animal heavy use areas are positive steps, but a soil amendment and restoration requirement should be added.
7. The increase of application fees will help cover current costs associated with reviewing applications and plans.

Summary of Comments on Proposed Rulemaking, 25 Pa. Code Ch. 102, Erosion and Sediment Control and Stormwater Management, 39 Pa.B. 5131 (August 29, 2009)

1. *The Proposed Rulemaking would improve the current regulatory program in a number of ways.* The Proposed Rulemaking represents an improvement in erosion and sediment control and stormwater management in several respects, including: regulating animal heavy use areas; requiring erosion and sediment control permits for certain oil and gas activities; codifying post-construction stormwater management requirements; updating permit fees; encouraging, and in some cases mandating, riparian forest buffers; and requiring preconstruction and presubmission meetings.
2. *The Proposed Rulemaking should limit the availability of the permit-by-rule.* The PBR should not be available in special protection and impaired watersheds. The rigorous analyses required of activities in these watersheds simply is not conducive to the kind of expedited approach contemplated by the PBR.
3. *The Proposed Rulemaking should require the recording of an environmental covenant to address responsibility for the long-term operation and maintenance of post-construction stormwater management best management practices.* Environmental covenants are the best way to ensure that the Department will be able to enforce the long-term O&M of PCSM BMPs, which is essential to their success and, therefore, to safety and water quality.
4. *The Proposed Rulemaking should require the protection of all waters with riparian forest buffers.* The science overwhelmingly supports riparian forest buffers, and mandating their establishment or preservation would not amount to a regulatory taking. The Proposed Rulemaking should require riparian forest buffers at least 100 feet wide between areas of earth disturbance and all waters, including wetlands. At a minimum, the Proposed Rulemaking should require riparian forest buffers at least 150 feet wide between areas of earth disturbance and all special protection waters (high quality as well as exceptional value), including wetlands.
5. *The Proposed Rulemaking must be amended to ensure consistency with the Antidegradation regulations.* The Proposed Rulemaking is inconsistent with or obscures the requirements of the Antidegradation regulations, which is likely to lead to the revocation or suspension of permits, as recent Environmental Hearing Board precedent instructs.
6. *The Proposed Rulemaking should extend the public notice requirements applicable to projects located in high quality or impaired watersheds, with some alterations, to all projects for which coverage under the permit-by-rule is sought.* Without providing advance notice and an opportunity for public participation at a meaningful time for all projects, the Proposed Rulemaking is susceptible to legal challenge.
7. *The Proposed Rulemaking should expressly discontinue coverage under the permit-by-rule after such coverage is revoked, terminated, or suspended.*
8. *The Proposed Rulemaking should expand on its additional best management practices requirements for agricultural activities near rivers and streams.*
9. *The Proposed Rulemaking should provide more details about the permit-by-rule program audit.*
10. *The Proposed Rulemaking contains several minor issues that must be addressed.* These issues are specified in the full comment letter.

Summary of Comments of First Energy Corp.

Proposed Rulemaking to Amend 25 PA Code Chapter 102 (relating to erosion and sediment control and stormwater management)

Earth disturbance activities undertaken by regulated utilities in Pennsylvania consist primarily of multi-mile linear projects over real estate owned by others, i.e., non-utility third party owners. Utilities are most often engaged in projects to which they have rights-of-way or easements. In many situations, the utility is not the landowner. FirstEnergy's concerns in this proposed rulemaking focus on the unique situation of the utility industry, which must maintain, repair, upgrade, and install miles of overhead lines on property owned by third parties.

1. Permit-by-Rule

The permit-by-rule proposed as a shortened and streamlined process is unlikely to be of any significant advantage to the regulated utility industry. The restrictions on its applicability and the extensive prescriptive requirements of the permitting process and package are equivalent to or more stringent than the requirements for the General and/or Individual NPDES Permit. FirstEnergy supports a permit-by-rule, where a regulated entity is "deemed" to have a permit under specific identified conditions without the need to submit an application.

2. Responsibility for Long-term Operation and Maintenance of the Post Construction Stormwater Management (PCSM) Plan

Identifying a responsible party to ensure long-term operation and maintenance of the PCSM Plan is crucial, but it is not feasible or practical to require utility companies to assume that responsibility on land they do not own. If the electric utility assumes these operational costs, they may be passed on to the ratepayer. If the property owner becomes responsible, he then assumes the cost as a private citizen who is penalized because he provided right-of-way for utility services. This additional cost will begin to be reflected in the utilities' right-of-way costs, which in turn, may be passed on to the ratepayer.

3. Forested Riparian Buffers

Because this is only one of many Best Management Practices (BMPs) in the PA Stormwater Manual, FirstEnergy questions whether its inclusion as a required BMP is appropriate in this rulemaking. Furthermore, the language as proposed for the forested riparian buffer is too prescriptive and unworkable when it is applied to linear utility projects that are often constructed on non-utility property subject to existing rights-of-way and easements.

FirstEnergy opposes mandating this BMP to be used for work along all Pennsylvania creeks and streams because it is not convinced that the assumed environmental benefits of forested riparian buffers will decrease erosion and sedimentation due to earth disturbance activity in every situation.

4. Obligation to Restore and Reclaim Water Quality and Existing and Designated Uses

A person involved in earth disturbance activities should be obligated both to protect and maintain the quality and existing and designated uses of waters of the Commonwealth during the activity and to implement BMPs to protect and maintain the water quality after the activities. However, FirstEnergy does not support the Department's position that the restoration and reclamation of the waters in the project area that have not been degraded by the current project should become the responsibility of the current permittee/developer.

FirstEnergy requests that the Department retain the words "to the extent practicable" in §§102.4(b)(4)(v) and 102.8(b)(9), and add it to the definition of BMP in §102.1, and to §102.11(a)(1) and (a)(2), to be consistent with the other sections using these terms. The words, "to the extent practicable" afford the permittee an opportunity to take a realistic position in restoring and reclaiming the water quality and existing and designated uses of the waters of the Commonwealth.

I. Summary of MSC's Comments

Pennsylvania currently has extensive requirements for controlling accelerated erosion and preventing sediment pollution from various earth disturbance activities. These requirements have been effective in achieving the stated purpose of minimizing accelerated erosion and sedimentation to protect, maintain, reclaim and restore the quality of waters and the existing designated uses of waters within the Commonwealth. The EQB now proposes to change these effective requirements to "enhance requirements related to agriculture; clarify existing requirements for accelerated E&S control; incorporate updated Federal requirements; update permit fees; codify PCSM requirements; add requirements related to riparian forest buffers; and introduce a permit-by-rule option." The EQB has taken more than forty printed pages to provide this elaboration and to revise the current program without any stated justification for the need for much of what is now proposed. The MSC will limit its comments to those provisions of the proposed rule that directly relate to oil and gas activities.

First, the MSC believes that longstanding and well-established erosion and sedimentation control requirements have been fully effective in regard to oil and gas activities. The proposed rules include several new and burdensome requirements that would adversely affect these activities. No new requirements should be added without adequate justification and no such justification is expressed in connection with this proposed rulemaking. Second, the federal Energy Policy Act of 2005 expressly exempts stormwater discharges associated with oil and gas activities from NPDES permitting programs. Therefore, it is inappropriate to impose any requirements for stormwater discharges associated with oil and gas activities as a result of NPDES permitting rules. Third, regardless whether or not it is lawful to subject the oil and gas industry to a stormwater permitting program, there is simply no justification for imposing the proposed permitting requirements upon the oil and gas industry. Fourth, as currently drafted, the proposed permit and permit-by-rule processes would provide no improvement on current permitting mechanisms for the oil and gas industry. Oil and gas construction activities are significantly different from other types of construction projects and are expressly regulated by the Pennsylvania Oil and Gas Act. However, to improve upon the current program, the Department should create a general permit program solely for such activities. The MSC includes with these comments a proposal for an oil and gas industry-specific general permitting program.

II. Comments on EQB's Proposed Rulemaking

As mentioned above, the EQB describes its proposed amendment of 25 Pa. Code Ch. 102 as necessary to "enhance requirements related to agriculture; clarify existing requirements for accelerated E&S control; incorporate updated Federal requirements; update permit fees; codify PCSM requirements; add requirements related to riparian forest buffers; and introduce a permit-by-rule option." 39 Pa.B. 5131. The MSC provides the following comments on those topics.

SUMMARY
November 24, 2009

Position Paper of the Pennsylvania-Delaware Chapter of the American Society of Landscape Architects (ASLA)

Re: Proposed Rulemaking – Chapter 102, Erosion and Sediment Control and Stormwater Management

Primary Concerns:

- **Record Plan Certification.** The certification required by Section 102.8, Subsection (l) pertaining to Record Plans transfers added liability from the contractor, owner and PCSM plan preparer to the licensed professional observing the construction. The certificate is too absolute, especially since a PCSM is not required to be prepared by a licensed professional. By signing the certificate, the licensed professional is assuming a level of liability well beyond the standard of care required by law.
- **Permit-by-rule Certification.** The certification required by Section 102.15, Subsection (c)(7) pertaining to the E & S and PCSM Plans required by the permit-by-rule have some of the same wording problems as noted with the PCSM Record Plan certificate.
- **Responsible Professional.** There appear to be inconsistencies in who is permitted to prepare what plans. This may further confuse who is responsible for work performed.
 - In Section 102.1, licensed professional is defined as "Professional engineers, landscape architects, geologists and land surveyors licensed to practice in this Commonwealth."
 - In Section 102.4, Subsection (b)(3), E & S Plans are required to be prepared by "a person trained and experienced in E & S control methods and techniques."
 - In Section 102.5, Subsection (e), the "licensed professional" responsible for critical stages of construction must attend the preconstruction meeting when an NPDES permit is required.
 - In Section 102.8, Subsection (e) a PCSM Plan is required to be prepared by "a person trained and experienced in PCSM design methods and techniques."
 - In Section 102.8, Subsection (k) a "licensed professional" or a designee shall be responsible during critical stages of implementation of the approved PCSM Plan.
 - In Section 102.8, Subsection (l) a "licensed professional" is required to certify the Record Plans.
 - In Section 102.15, Subsection (c)(1) a "professional engineer, geologist or landscape architect" is required to attend a pre-submission meeting prior to submitting an ROC for a permit-by-rule.
 - In Section 102.15, Subsection (c)(7) the applicant is required to retain the services of a "professional engineer, geologist or landscape architect" for preparation of E & S and PCSM Plans to be submitted with the ROC.
- **Increase in Permit applications and fees.** Section 102.6, Subsection (b)(2) establishes fees that are ten times the current fee. We agree the fees should offset the cost of review and monitoring by the Department; but we disagree with the one cost for all projects. A graduated scale based on the limit of earth disturbance is more appropriate. As proposed, the amount of these fees is out of scale for smaller projects.

Summary of Donald P. Oaks, Forestry Consultant CF ACF Comments on Proposed Rule Making Erosion and Sediment Control and Storm Water Management [39 PA.B. 5131] Sat., Aug. 29, 2009

Buffers as proposed are:

- A detriment to the health of the forest.
- A safety hazard to forest users.
- An injury liability concern for the forest landowner and forest users.
- A property value liability.
- A financial liability to the landowner.
- A reason for the landowner to exclude recreation use by others.

Landowner use and enjoyment of the property is restricted to the point that it is a taking.

- No off road vehicular travel is permitted.
 - Off road vehicular travel is not defined in the PRM
- Housing, grazing or otherwise maintaining animals is prohibited
 - Are domestic animals excluded from all activities including work in the buffer?
- Zone 1 of buffer is taken outright.
 - Landowner is burdened with cost of excluding invasive and exotic species.
 - Landowner is burdened with cost of maintaining continuous 60% crown closure.
 - The landowner would appear to be required to manage the buffer to prevent defoliation by insect pests.
- Zone 2 of buffer is unrealistically and inappropriately regulated.
 - Maintenance of at least 60% uniform crown closure is unrealistic and inappropriate.
 - More light is needed at times to provide opportunity for natural regeneration of the forest.
 - The buffer requirements defy the science and logic of management of the forest.
- The landowner is denied the enjoyment of the buffer except for passive recreational activities.
 - Passive recreational activities are not defined in the PRM.
- The landowner is inappropriately legally obligated to surrender the buffer area in perpetuity to either:
 - A recorded deed restriction, or
 - A conservation easement, or
 - A local ordinance, or
 - Conditions contained within the Permit.
- However, the landowner is inappropriately legally obligated to pay taxes, costs and suffer economic loss for the required management of the buffer and restricted from otherwise profitable management of the buffer.
- The PRM must be considered in its total future impact which will be progressively restrictive of landowner rights. Even this PRM asks shall we be more restrictive.
- The imposition of regulation upon landowners is partially a result of or an effort to attain political support from groups that seeks to inappropriately remove landowner rights to enjoyment of property.
- The Riparian Forest Buffer Guidance Document No. 394-5600-001 September 26, 2009 Draft is evidence of administrative expansion of regulations beyond the PRM.
 - Expansion of buffer widths to top of slopes in steep terrain which could be the top of the mountain.
 - Expansion of buffer width to compensate for other ownerships, structures highways etc.
 - Inclusion of protection of values otherwise not within the legislated responsibility of DEP.
 - Wildlife travel corridors
 - Protection of Plants
 - Any protection for purposes other than water quality and aquatic organisms.
- The PRM hearings were rife with calls for buffers on every stream and permits for every timbersale. It is clear that the agenda is to impose governmental control upon the landowners far beyond that which is reasonable to protect water quality. The agenda of the 140+ Environmental Non Governmental Organizations (NGO's) that claim ownership of this effort is solely to control otherwise legitimate landowner activities that the NGO's disagree with. DEP should not be a weapon inflicting harm upon the landowner.
- The Environmental Quality Board should return this PRM to the table where private sector forestry professionals are fully represented (they were not) and a reasonable approach is applied to insure water quality. If the EQB does not do this then the IRRC should do so. **This is unreasonable regulation!**



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Summary of Comments on Proposed Rulemaking: 25 PA Code Ch. 102

Submitted electronically November 28, 2009

1. **Scope of the permit-by-rule:** The proposed rulemaking should exclude the availability of the proposed permit-by-rule (PBR). Pike County Conservation District believes that the PBR will negatively impact land and water resources, add to an already confusing and complex permitting system, increase the costs of land development and create complicated enforcement scenarios that will be very difficult to manage. This was demonstrated recently when DEP revoked three erosion and sediment control permits because of numerous technical deficiencies discovered after the permits were approved and subsequently appealed. At the very least, the PBR option should not be available in any Special Protection (High Quality or Exceptional Value) watersheds given the high potential for water quality degradation in the absence of a detailed technical review of E&S and PCSM plans.
2. **Responsibility for long-term PCSM operation and maintenance (O&M):** A site-specific and enforceable operation and maintenance plan for both structural and non-structural BMPs is critical for meeting stormwater management goals. Comments are provided regarding legal instruments to better define O&M responsibilities, but those options are only as good as the will and resources available to enforce them, especially after permits expire or are terminated and properties change hands. Rather than focusing on complex O&M schemes that ultimately depend on non-existent enforcement mechanisms, a better approach would be to produce a regulation requiring sustainable development strategies and site design that limit the amount of stormwater that must be managed and reduce reliance on maintenance-intensive structural PCSM BMPs.
3. **Mandatory Riparian Forest Buffers:** The rulemaking should include a provision for mandatory riparian buffers with widths appropriate for protection of designated and existing uses. There is a significant body of scientific data supporting the importance of riparian buffers in stormwater management and water resources protection. Making buffers voluntary hasn't worked. In not including mandatory buffers in the final proposal, the Commonwealth is missing an enormous opportunity to protect and maintain existing and designated uses of waters of the Commonwealth, reduce and mitigate flood impacts, ease streambank erosion and related infrastructure damages, and reap the long-term economic benefits of the ecosystem services known to be provided by buffers.
4. **Codification of Post Construction Stormwater Management Plan requirements**
We support the inclusion of post construction stormwater management requirements in the proposed regulation as a codification of existing requirements in the NPDES stormwater permitting program. However, we believe the proposed regulation fails to take full advantage of site design and non-structural BMP approaches to meet erosion control and post-construction stormwater management and antidegradation goals and reduce long-term operation and maintenance problems.
5. **Organization of the Proposed Regulation**
We find the overall organization of the proposed regulation to be very confusing and cumbersome, with E&S, PCSM and permitting information scattered throughout in non-contiguous sections lacking a logical order. While it may seem insignificant given the scope of the proposal, we believe that better organization will greatly improve the utility of the regulation for the regulated community.
6. **Consistency with DEP Post Construction Stormwater Management Delegation**
The proposed regulation fails to recognize the Department's relatively new PCSM delegation agreement with certain conservation districts, including Pike, which have hired and trained Professional Engineers to oversee PCSM plan reviews/site inspections at the district level. Throughout the regulation, there are provisions relating to Department review of alternative designs, BMPs or stormwater management strategies For PCSM delegated districts with PEs on staff, this added step contradicts roles and responsibilities set forth in the delegation agreements and may unnecessarily delay the NPDES Permit review process.

Comments on Proposed Changes to Pennsylvania's Erosion & Sediment Control / Stormwater Management Regulations [25 Pa. Code CH. 102]

TO: Environmental Quality Board,
P. O. Box 8477, Harrisburg, PA 17105-8477
Email: RegComments@state.pa.us

FROM: Andrew Potts, P.E., Water Resources Engineer
225 Mechanics Alley, West Chester, PA 19382

DATE: November 30, 2009

Summary comments (first page)

As a strong proponent of natural conservation, environmental protection, and sustainable stormwater management, I support the goals of the proposed regulatory changes to strengthen and improve the consistency of Erosion and Sediment (E&S) control and post-construction stormwater management (PCSM) in Pennsylvania. However, the proposed rulemaking is somewhat ambiguous, hard-to-follow, and repetitive in places. I suggest that a clear, concise summary be prepared comparing the existing regulations with those being proposed. Other general comments include the following:

1. *D. Background and Purpose, Codification of PCSM requirements:* I support the inclusion of specific PCSM requirements and agree that PADEP has incorporated some requirements through the NPDES program over the last several years.
2. I support the inclusion of a mandatory riparian buffer for pertinent Exceptional Value (EV) waters. I further recommend that 75-foot buffers be required for all perennial streams (especially High Quality ones) with appropriate exceptions for linear projects, utility connections, access, etc.
3. While a "permit-by-rule option" may be appropriate in some cases, the procedures, requirements, and applicant benefits are unclear at this point.
4. I agree that Pennsylvania's water resources and aquatic ecosystems will benefit from the proposed changes (if clarified and revised appropriately). I also agree that the regulated community could benefit from improved consistency between different counties/municipalities.
5. Compliance costs: As currently proposed, I anticipate that costs would increase somewhat significantly particularly due to the requirements for professional construction oversight (which one could argue should be done anyway), preparation of record drawings (it is unclear how much it might cost to have design professionals "certify" as-built plans), and operation & maintenance (O&M) of both PCSM facilities and riparian buffers.
6. The proposed PCSM requirement (volume control of the 2-year storm) is very rigorous and some sites/projects will have difficulty meeting it. Clearly defined exemptions, off-site mitigation options, or alternative (still protective) standards should be included.



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Summary of Comments on Proposed Rulemaking 25 PA CODE CH. 102

- 1. The Proposed "Permit-By-Rule Option" Should be Eliminated**
 - a. Option would violate Pennsylvania's Antidegradation provisions when applied in High Quality watersheds
 - b. Option would violate the Clean Water Act when applied in impaired watersheds.
 - c. Option constitutes insufficient agency review under the Clean Water Act.
- 2. Greater Assurance is Needed Concerning Long-Term Operation and Maintenance (Post Construction Stormwater Management)**
 - a. Codification of Post-Construction Stormwater Management Plan Requirements
 - b. Specification of the Responsible Party
 - c. Transfer of Responsibility
 - d. Communication of Actions Required
 - e. Financial Capacity
 - f. Deed Covenants
- 3. PEC Supports Expanding NPDES Permitting Requirements to Include "Oil and Gas Activities" and "Operation of Animal Heavy Use Areas"**
- 4. PEC Supports the Increase of Permit Application Fees**
- 5. The Proposed Riparian Buffer Requirement Should be Expanded to, at a minimum, include High Quality Watersheds**
- 6. The Threshold for Requiring an Erosion & Sediment Control Permit for Timber Harvesting and Road Maintenance Should be Reduced Using Site Specific Analysis**



SUMMARY OF PENNSYLVANIA BUILDERS ASSOCIATION COMMENTS
Draft Rulemaking—Title 25, Chapter 102
(Erosion & Sediment Control and Post-Construction Stormwater Management)
November 30, 2009

1. This proposed regulation will hinder development and significantly drive up the cost to design and install projects, creating a great deal of additional paperwork for everyone involved. Certain jurisdictions will use this regulation to make it even more difficult to get necessary approvals in order to develop land.
2. As we interpret the proposed regulation, renewals of existing NPDES permits would need to meet the requirements included in the new proposal. This would be an extraordinarily difficult and costly challenge for existing permit holders, many of which have installed utilities, roads, curbing, and the like based on the terms of their current permit, and we strongly suggest that the proposed regulation be revised in order to ensure that this outcome does not result.
3. The regulation must make explicit that builders and developers will be able to transfer responsibility for the long-term operation and maintenance of PCSM BMPs to another party once a project is completed.
4. The scope of the proposed regulation now includes the promotion of "low-impact development." Pursuing this objective eliminates choice, and many municipalities are not doing low-impact development because they see it as a conduit to higher density. The Department needs to guard against trying to dictate a land-use template for sovereign townships, as townships do have the ability to do low-impact development if they so choose.
5. PBA opposes any mandatory statewide buffer requirement. The imposition of a buffer requirement, as proposed in this draft regulation, discriminates against properties in exceptional value (EV) watersheds, discriminates against developers as a class, and fails to impose similar requirements on agricultural operations, which contribute far more nutrient and sediment pollution to Pennsylvania waterways than do new developments.
6. PBA believes that the optional "permit-by-rule" proposal developed by the Department is an encouraging, enlightened approach to the twin issues of protecting Pennsylvania's waterways and preserving economic opportunity, if it includes incentives that will ensure that this optional approach is a viable one that project applicants will choose to utilize.

Energy Association of Pennsylvania

POSITION SUMMARY

The Energy Association of Pennsylvania ("EAPA" or "Association") is a trade association working with the major electric and natural gas distribution companies in the Commonwealth. As with most utility work involving earth disturbance, its members engage primarily in linear multi-mile projects which most often occur on real estate owned by third parties. The utilities use of the property is primarily pursuant to easements and/or rights-of-way. Further, utilities are closely regulated by other agencies such as the PA Public Utility Commission and FERC and must adhere to certain other rule-making bodies such as NERC, which enforces national standards. While a project could extend 10 miles in a 50-foot right of way, it might only disturb soil at a discrete point rather than along the entire project route. The proposed amendments to Chapter 102 appear more applicable to earth disturbance activities in traditional "box development" construction projects, i.e., building construction and developments on a non-linear single-owner lot. Moreover, and importantly, the proposed amendments should be considered in the context of a cost/benefit analysis which recognizes that increased utility costs for prescriptive regulations will be recovered from ratepayers in subsequent base rate proceedings.

EAPA requests that the Department consider flexible and less prescriptive requirements for multi-mile linear utility projects which are clearly in a separate category and generally do not result in grade changes or increased impervious surface area. Moreover, following project completion and site stabilization, these types of projects do not necessarily require long-term maintenance of PCSM BMPs. As proposed, O&M obligations do not terminate when sedimentation is stabilized or when a Notice of Termination is approved. Since the utility is very often not the landowner, the obligation to take on a long-term O&M role under existing agreements or to add language to a third-party deed may not be practicable. Again, the issue of cost versus benefit to utility ratepayers should be considered by the EQB prior to imposing these proposed changes on the utility industry.

Additionally, EAPA suggests that proposed language surrounding riparian forest buffers is too prescriptive and unworkable for utility projects. A "one size fits all" approach is not the answer. Even if limited to projects located within an Exceptional Value watershed, conflicts exist as FERC and NERC regulations do not permit woody vegetation to be planted on a pipeline or where it could interfere with overhead electric transmission lines.

Lastly, while EAPA appreciates the Departments efforts to provide for an expedited "permit-by-rule" process, the proposed regulation offers no real advantage to regulated entities. As proposed, the "permit-by-rule" upfront preparation requirements are costly, extensive and prescriptive. Further, the 30-day review period does not provide a streamlined review; rather it mirrors the current review time frame.

EAPA respectfully requests that the Board review and consider amending its proposed erosion and sediment control regulations to offer greater flexibility for multi-mile linear utility projects that are distinct from general construction projects. The Energy Association suggests consideration of rules or guidelines similar to those found in Virginia for utility projects and Delaware for emergency utility work, as well as consideration of the proposed changes in the context of a cost/benefit analysis which recognizes the impact on ratepayers to increased utility costs.



Pennsylvania Council of
Professional Geologists
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November 30, 2009

PCPG Comment Summary – Draft Amendment to 25 Pa. Code Chapter 102

The Importance of Site Characterization

There is much concern within our membership regarding inclusion of 2-yr storm criteria without regard for the project's physical setting, especially when infiltration to groundwater is a primary project objective. To that end, the establishment of Site Characterization requirements above and beyond what is currently in the BMP manual is essential.

Appendix C of the current BMP manual provides guidance for conducting “desktop” assessments of soils and geologic conditions, and encourages designers to consider site conditions early in the process. Detailed descriptions are provided for conducting percolation tests and double ring infiltrometer testing. The PCPG believes that Appendix C of the BMP Manual is thoroughly inadequate. In order to ensure the long term performance of BMP's, particularly those that are designed to handle the bulk of the excess runoff from the two year storm, detailed subsurface soil AND geologic investigations are critical to the design process.

In practice, since the manual is not a regulation, but only “guidance”, applicants have a strong incentive to minimize these efforts. Frankly, the regulated community is far from convinced that stormwater BMP's designed to infiltrate large volumes of stormwater comprise a practical, cost effective solution to the problem. However, even when an applicant appreciates the complexity of the system and elects to follow the current guidance in full, the guidance does not prescribe adequate characterization of subsurface conditions. It is quite common to find sites that have relatively well drained soils that would appear adequate for infiltration purposes after conducting the minimum required number of percolation and or/double ring infiltrometer tests. But the minimum testing will not quantify depth to bedrock or the water table if it is located just below the reach of a backhoe, and will not quantify the ability of underlying aquifer to assimilate high volume, short term discharges of stormwater. The result is localized groundwater mounding, poorly draining BMP's, and often the discharge of groundwater in areas not intended for stormwater discharge such as basements and other structures. A frequent problem is that basins are typically designed and constructed, by necessity, at the lowest elevation of a site. These areas are typically groundwater discharge zones and are therefore not ideal for infiltration. This is a situation that needs to be characterized at the beginning of the project before the BMPs are designed and constructed.

Therefore any revised stormwater regulations should mandate the performance of sufficient site characterization.

**SUMMARY OF COMMENTS OF
SPECTRA ENERGY TRANSMISSION, LLC
Submitted on November 30, 2009**

Pennsylvania Department of Environmental Protection's Draft Erosion and Sediment Control and Stormwater Management Regulations, published in 39 Pa. Bulletin 5131 (August 29, 2009)

- I. The EQB ought to extend the comment period on the Draft Regulations and consider withdrawing the Draft Regulations in light of U.S. EPA's issuance of Final Effluent Limitations Guidelines for Discharges for the Construction and Development Point Source Category, 40 CFR Part 450, published on November 23, 2009.
- II. The Draft Regulations need to be clarified so that it is clear that construction, placement and maintenance of pipelines in the Riparian Forest Buffer area are permitted by the regulations.
- III. The Draft Regulations sweep into the definition of "Oil and gas activities" transmission facilities when it appears that the intention was to regulate oil and gas drilling and not pipelines. FERC regulated natural gas pipeline construction should be excluded from the "oil and gas activities" requirements.
- IV. The proposed erosion and sediment control requirements would impose inspection, monitoring and reporting requirements that would be infeasible for lengthy linear projects and would be inconsistent with EPA's new Federal regulations and the FERC's construction requirements for interstate natural gas pipelines.
- V. The draft permit requirements place undue burdens on pipeline projects.
- VI. The Postconstruction stormwater management ("PCSM") regulation should be revised to be more flexible.
- VII. E & S Plans ought to be consistent from Conservation District to Conservation District which can be accomplished either by mandating uniform E & S Plans or allowing for statewide E & S Plans for linear projects such as pipelines.
- VIII. The definitions in the Draft Regulations are inconsistent with the definitions in other provisions of the law and ought to be reconciled so that they are the same as similar regulatory terms.

References

The Department relied upon the following references in the development of this rulemaking.

References for scientific data, studies regarding riparian buffers and riparian forest buffers:

- Abernethy, B. and I. D. Rutherford. 1998. Where along a river's length will vegetation most effectively stabilize stream banks? *Geomorphology*. 23(1):55-75.
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pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

POLICY OFFICE

May 17, 2010

Mr. Kim Kaufman, Executive Director
Independent Regulatory Review Commission
333 Market Street, 14th Floor
Harrisburg, PA 17120

Re: Final-Form Rulemaking – Erosion and Sediment Control and Stormwater Management (#7-440)
Final-Form Rulemaking – Wastewater Treatment Requirements (#7-446)

Dear Mr. Kaufman:

Pursuant to Section 5.1(a) of the Regulatory Review Act, please find enclosed copies of two final-form rulemakings for review and comment by the Independent Regulatory Review Commission (IRRC). The Environmental Quality Board (EQB) approved these final-form rulemakings at its May 17, 2010, meeting.

The final Erosion and Sediment Control and Stormwater Management rulemaking includes amendments to 25 *Pa Code*, Chapter 102 to enhance and supplement existing erosion and sediment and stormwater management pollution control regulations and best management practices in order to prevent sediment pollution, including post construction stormwater runoff, from entering the surface waters of the Commonwealth during and after various earth disturbance activities. The major purposes of the final rulemaking are to: incorporate the federal Clean Water Act "Phase II" National Pollutant Discharge Elimination System (NPDES) permit requirements for stormwater discharges associated with construction activities, codify post construction stormwater management (PCSM) requirements, including long-term operation and maintenance requirements of PCSM best management practices (BMPs), include specific antidegradation implementation provisions, update agricultural planning and implementation requirements, update erosion and sediment (E&S) control requirements, and establish riparian buffer and riparian forest buffer provisions.

The EQB adopted the proposed rulemaking on June 16, 2009, with provision for a 90-day public comment period and three public hearings. The proposal was published in the *Pa Bulletin* on August 29, 2009, at 39 *Pa.B.* 5131, and public hearings were conducted by the EQB on the proposal in Cranberry Township on September 29, 2009, in Harrisburg on October 1, 2009, and in Allentown on October 5, 2009. As a result of the public comment process, which concluded on November 30, 2009, the EQB received valuable input from over 1,300 commentators, including comments from individuals, agencies, legislators, organizations, conservation districts, advisory committees and the Independent Regulatory Review Commission. In direct response to public comments, the Department made several significant changes to the rulemaking, including removing the proposed permit-by-rule provision, which was opposed by many commentators, and added exemptions and waivers from the mandatory riparian buffer requirements, as

requested by various sectors of the regulated community. In addition, at the request of commentators, the Department has added a grandfathering provision in the final rulemaking for NPDES permit renewals related to post construction stormwater management. Other provisions in the final-form rulemaking include amendments that clarify requirements for agricultural-related activities, including plowing and tilling and animal heavy use areas; revisions to the permit fee to include an administrative filing fee and tiered fee approach based on acreage; clarifications to the post-construction stormwater management provisions for long-term operation and maintenance, and the incorporation of a new federal effluent guideline for construction activities.

During the development of the final rulemaking, the Department met with the Water Resources Advisory Committee (WRAC) on February 19, 2010, and the Agricultural Advisory Board (AAB) on February 17, 2010 to discuss the revisions being considered to the rulemaking. On March 17, 2010, the Department presented the draft final-form rulemaking to WRAC. After extensive discussion, WRAC voted to approve the final-form rulemaking, contingent upon the Department making modifications to clarify several elements of the rulemaking. Subsequent to discussions with WRAC, the Department has made the committee's requested changes to the rulemaking.

The final Wastewater Treatment Requirements rulemaking amends 25 *Pa Code*, Chapter 95 in order to protect the Commonwealth's water resources from new and expanding mass loadings of Total Dissolved Solids (TDS). TDS is the combined content of all inorganic salts, organic matter and other dissolved materials in water, which cause toxicity through increases in salinity, changes in the ionic composition of the water, and toxicity of individual ions. The rulemaking was prompted in response to escalating TDS levels in Pennsylvania's rivers, including the Monongahela River basin, where in the fall of 2008, the concentrations of TDS and sulfates in the river increased to historic levels. Water quality analyses performed for the major watersheds of the Commonwealth have proven that the occurrences in the Monongahela River basin are not an anomaly. To date, many of the rivers and streams of Pennsylvania have a very limited ability to assimilate additional TDS, sulfates and chlorides, including Beaver, Shenango and Neshannock Rivers, which have also shown similar upward trends in TDS concentrations. This rulemaking will protect the Commonwealth's water resources, including drinking water intakes on streams throughout the state, as well as sustain the economic viability of current water users.

The EQB adopted the proposed rulemaking on August 18, 2009. The proposal was published in the *Pa Bulletin* on November 7, 2009, at 39 *Pa.B.* 6467. Public comments were accepted by the EQB until February 12, 2010. In addition, four public hearings were conducted by the EQB to accept public testimony. Public hearings were held on December 14, 2009 in Cranberry Township, December 15, 2009, in Ebensburg, December 16, 2009, in Williamsport, and December 18, 2009 in Allentown. Over 4,220 commentators provided comments to the EQB on the rulemaking, a majority of which supported the proposed rulemaking and its attempts to safeguard water resources throughout the Commonwealth.

The final rulemaking differs from the proposed rulemaking in several important aspects. While the intent of the proposed rulemaking was to address new, larger sources of TDS, commentators

May 17, 2010

were confused whether the proposal would also apply to existing loadings of TDS authorized by the Department. In the final rulemaking, the Department is clear that this rule only applies to new and expanded discharges of high TDS wastewater. Additionally, to clarify the scope of the rulemaking, the final regulations now contain more specific treatment requirements for wastewater generated from natural gas drilling activities, because it is wastewater from the extraction of natural gas that is of much higher concentration and represents higher overall loadings of TDS when compared to those from other industries. Acknowledging that a one-size-fits-all approach in the proposed rulemaking was counterproductive, the final rulemaking also now includes an effluent standard of 2,000 mg/l for sectors other than natural gas well operations and allows a variance from this standard under certain conditions specific to the watershed in which the discharge is located. By utilizing this approach, assimilative capacity in watersheds can be more acutely monitored, resulting in effluent limitations on dischargers when the loading within the water body is nearing the limit of assimilative capacity.

The draft final rulemaking was presented to WRAC on April 14, 2010. During this discussion, WRAC members sought further clarification on several aspects of the rulemaking, which the Department has addressed in the final-form regulations. Based on the understanding that additional improvements would be made to the rulemaking based upon comments by the committee, WRAC unanimously concurred that the rulemaking should proceed to the EQB for final consideration.

The Department will provide assistance as necessary to facilitate the Commission's review of these final-form rulemakings under Section 5.1(e) of the Regulatory Review Act. Please contact me at 717.783.8727 if you have any questions or need additional information.

Sincerely,



Michele L. Tate
Regulatory Coordinator

Enclosures

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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF POLICY

TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO
THE REGULATORY REVIEW ACT

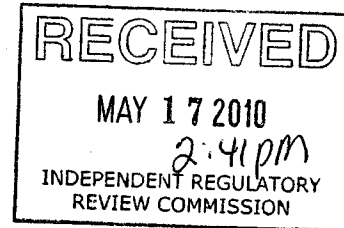
I.D. NUMBER: 7-440

SUBJECT: Erosion and Sediment Control and Stormwater management

AGENCY: DEPARTMENT OF ENVIRONMENTAL PROTECTION

TYPE OF REGULATION

- ☐ Proposed Regulation
- ☒ Final Regulation
- ☐ Final Regulation with Notice of Proposed Rulemaking Omitted
- ☐ 120-day Emergency Certification of the Attorney General
- ☐ 120-day Emergency Certification of the Governor
- ☐ Delivery of Tolled Regulation
- a. ☐ With Revisions b. ☐ Without Revisions



FILING OF REGULATION

DATE

SIGNATURE

DESIGNATION

5-17-10

D. Neuf

Majority Chair, HOUSE COMMITTEE ON
ENVIRONMENTAL RESOURCES & ENERGY

Rep. Camille George

5-17-10

R. Hattis

Minority Chair, HOUSE COMMITTEE ON
ENVIRONMENTAL RESOURCES & ENERGY

5/17/10

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Majority Chair, SENATE COMMITTEE ON
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Senator Mary Jo White

5-17-10

Leo Kucwicz

Minority Chair, SENATE COMMITTEE ON
ENVIRONMENTAL RESOURCES & ENERGY

5/17/10

D. Cooper

INDEPENDENT REGULATORY REVIEW COMMISSION

ATTORNEY GENERAL (for Final Omitted only)

LEGISLATIVE REFERENCE BUREAU (for Proposed only)

