

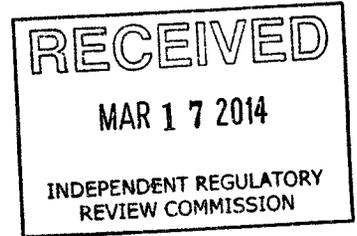
3042



**VIA ELECTRONIC SUBMISSION TO REGCOMMENTS@PA.GOV
AND EXPRESS MAIL**

March 14, 2014

Environmental Quality Board
Rachel Carson State Office Building, 16th Floor
400 Market Street
Harrisburg, PA 17101-2301



Re: Comments on Proposed Amendments to 25 Pa. Code Chapter 78, Environmental Protection Performance Standards at Oil and Gas Well Sites [43 Pa.B. 7377-7415]

To Whom It May Concern,

Burnett Oil Co., Inc. (BOCI) would like to offer the following comments on the proposed amendments referenced above. BOCI is a registered oil and gas operator in Pennsylvania (OGO#39119) and operates both conventional and unconventional wells within the commonwealth.

BOCI prides itself on careful compliance with all state and federal regulations, and on working cooperatively with a variety of agencies, particularly the Pennsylvania Department of Environmental Protection (PADEP). In the spirit of continuing that cooperation, BOCI provides the comments below. If enacted, we feel these changes will enhance environmental protections and give clearer guidelines on compliance while avoiding unnecessary effort by both operators and PADEP.

General Comments

While we acknowledge that updates to Chapter 78 are necessary to reflect operational and technological advances, BOCI believes strongly that any standards imposed on oil and gas operations should not be more stringent than those for other industries. In addition, we hope to avoid provisions that introduce operational complexity or obligations without meaningful environmental benefit or create ambiguities and duplicative requirements.

One general concern is that the PADEP's proposed amendments must allow industry a reasonable amount of time to implement the new and complex operational and design criteria for well sites, impoundments, or other related operations permitted and constructed after the effective date of the final regulation. PADEP has stated on a number of occasions that these proposed requirements, if enacted, would be among the most stringent state oil and gas industry environmental standards in the U.S. The vast majority of the requirements in the Proposal do not include a phased timeframe for implementation by industry. In fact, most requirements would be

immediately applicable upon the effective date of the final regulation. As PADEP is aware, the planning, design, permitting, and construction of oil and gas well sites and related operations are a lengthy and complicated process for operators involving many factors and considerations. A sudden and immediately enforceable change in regulatory requirements would create tremendous uncertainty, particularly for smaller operators such as BOCI.

For example, identification of abandoned and orphaned wells will benefit from further development of the Department's database, and should be postponed until the database and map viewer system is improved. In addition, any reporting that requires new forms to be developed by PADEP or electronic submissions by industry to PADEP should be delayed until PADEP has finalized its forms and implemented its electronic interface. BOCI believes that a phased implementation of many of the operational and design criteria should be included in the rulemaking.

Moreover, as currently proposed, it is unclear as to how the new and revised requirements will apply to existing oil and gas well sites and related operations. It would put an undue burden on the oil and gas industry both financially and practically to require that the Proposal's new operational and design criteria apply to existing operations already working within the scope of PADEP's current regulations. Moreover, a requirement to retrofit or update existing operations would put Pennsylvania at a competitive disadvantage with respect to other states. As such, PADEP should include a clear "grandfathering" provision in the Proposal. PADEP's "grandfathering" provision should state that the new standards in the Proposal should not apply to well sites, impoundments, or other related operations that have been already constructed; to oil and gas well sites where wells have already been drilled; or to well sites, impoundments, or other related operations for which permit applications have been submitted to PADEP by an operator prior to the effective date of the final rulemaking.

Specific Comments

1. Pre-Hydraulic Fracturing Assessment:

With regard to proposed section 78.52a, the regulation should provide clear direction to both the PADEP staff and well operators. The rule should provide a precise limitation of the area of review, both horizontally and vertically from the well bore, based upon potential risks related to hydraulic fracturing and communication with other wells in the area, rather than propose open ended obligations.

The regulation should be amended to direct the operator to: a) consult the PADEP's database to identify only those active, inactive, plugged, abandoned and orphaned wells that are known or reasonably expected to penetrate the area of review (i.e., located within the specified horizontal distance of a planned wellbore and extending deep enough to potentially be impacted by hydraulic fracturing of the target horizon); b) monitor abandoned or orphaned wells that penetrate the area of review during hydraulic fracturing by visual observation or other method approved by the PADEP (allowing exceptions

where an operator does not have access to the well); and c) take appropriate remedial action on any well that is affected by hydraulic fracturing in such a way as to create an environmental risk, recognizing limitations of access and ownership of such well.

2. Waste Management at Well Sites:

BOCI supports regulations that encourage operators to beneficially reuse fluids and drill cuttings in an efficient, environmentally-responsible, and cost-effective manner. As such, Subsection 78.58(b) should be expanded to include other activities that can be conducted without prior approval. These should include settling as well as filtration of solids and removal of free-phase hydrocarbons. In addition, the regulations should include a residual waste storage and processing permit-by-rule option pursuant to the Marcellus Shale Coalition's (MSC's) suggested modifications to the PADEP's proposed Section 78.58 provided by the MSC to the Technical Advisory Board (TAB) for consideration at the August 14-15, 2013 Subcommittee Meeting. This permit-by-rule would provide unconventional operators with authority and flexibility to store and process fluids generated by the development, drilling, stimulation, alteration, operation, or plugging of a well for reuse by the operator. Additionally, the permit-by-rule would significantly reduce truck traffic and air pollution, caused by additional handling and by unnecessary transport of fluids by operators.

3. Water Supply Protection:

The PADEP's proposal that operators would be required to improve each and every water supply to a minimum of SDWA standards is unreasonable since it is well documented that many private water supplies do not meet SDWA standards for water quality parameters for reasons unrelated to oil and gas operations. It is also impractical to require operators to restore an affected water supply to pre-drilling conditions for individual parameters that were better than SDWA standards. In some cases the private water well will have had no pre-drilling samples taken or in other cases the pre-drilling sample may not be sufficient to reflect natural variability in water quality. We believe that it is unreasonable for the PADEP to require that the oil and gas industry address contamination in water supplies unrelated to oil and gas operations, as no other industry in Pennsylvania has been held to such a standard.

Additional Comments and Suggested Amendatory Language

§ 78.1. Definitions.

Borrow pit—An area of earth disturbance activity where rock, stone, gravel, sand, soil or similar material is excavated for construction of well sites, access roads or facilities that are related to oil and gas development.

Comment.

As proposed, this definition would classify all site development activities as borrow pits since these activities involve earth disturbance. A borrow pit would add additional permitting and bonding obligations under other applicable laws as referenced in the proposed Section 78.67, Borrow Pits.

Suggested amendatory language:

Borrow pit—An area of earth disturbance activity where rock, stone, gravel, sand, soil or similar material is excavated to be used for the construction of well sites, access roads or facilities that are related to oil and gas operations. This definition does not include earth disturbance at well sites or otherwise permitted by the Department under the Oil and Gas Act.

Gathering Pipeline—A pipeline that transports oil, liquid hydrocarbons or natural gas from individual wells to an intrastate or interstate transmission pipeline.

Comments:

To avoid confusion MSC suggests the regulation should use the Federal definition for a gathering pipeline contained in 49 CFR Part 192, which is consistent with how the term is defined in Act 13, Section 3218.5.

Suggested amendatory language:

Gathering Pipeline—A pipeline that transports gas from a current production facility to a transmission line or main.

Mine influenced water—Water contained in a mine pool or a surface discharge of water caused by mining activities that pollutes, or may create a threat of pollution to, waters of the Commonwealth. The term may also include surface waters that have been impaired by pollutional mine drainage as determined by the Department.

Comment:

This definition of "Mine influenced water" gives PADEP discretion to include all waters impaired by mine drainage. Given the breadth of the PADEP's list of waters impaired by mine drainage this definition could include many surface waters throughout the Commonwealth, including sections of the major rivers such as the Allegheny, Monongahela, Youghiogheny and West Branch of the Susquehanna, some of which are widely used for public water supplies. Storage and use of such a potentially broad universe of waters, which are routinely used for numerous other purposes by municipalities and industries beyond oil and gas, should not be subject to the special approval requirements of section 78.59b(g).

Suggested amendatory language:

Mine influenced water—Water contained in a mine pool or a surface discharge of water caused by mining activities that pollutes, or may create a threat of pollution to, waters of the Commonwealth.

* * *

Oil and Gas Operations—The term includes the following:

(1) well location assessment, seismic operations, well site preparation, construction, drilling, hydraulic fracturing, completion, production, operation, alteration, plugging and site restoration associated with an oil or gas well;

(2) water withdrawals, residual waste processing, water and other fluid management and storage used exclusively for the development of oil and gas wells;

(3) construction, installation, use, maintenance and repair

of: (i) oil and gas pipelines;

(ii) natural gas compressor stations; and

(iii) natural gas processing plants or facilities performing equivalent functions; and

(4) construction, installation, use, maintenance and repair of all equipment directly associated with activities specified in paragraphs (1), (2) and (3), to the extent that the equipment is necessarily located at or immediately adjacent to a well site, impoundment area, oil and gas pipeline, natural gas compressor station or natural gas processing plant.

(5) earth disturbance associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

Comment:

Although this definition is provided, the proposed regulations also use the phrase "oil and gas activities" in numerous subsections. This creates confusion as to whether different meanings are intended. We suggest that the term "oil and gas operations" be standardized throughout.

Regulated substance—Any substance defined as a regulated substance in section 103 of Act 2 (35 P.S. §6020.103).

Comment:

The definition of the term "regulated substance" is very broad and its use throughout the proposed regulation is often difficult to apply to the oil and gas industry. The term "regulated substance" was adopted in the context of Act 2 which focuses on characterization and remediation of releases causing impacts to environmental media. The term was not designed to be used in the context of affirmative regulatory obligations.

Suggested amendatory language:

Regulated substance --Any substance defined as a regulated substance in section 103 of Act 2 (35 P.S. §6020.103) and listed in 25 Pa. Code Chapter 250.

Well site—The area occupied by the equipment or facilities necessary for or incidental to the drilling, production or plugging of a well.

Suggested amendatory language:

Well site—The area occupied by the equipment or facilities necessary for or incidental to the drilling, production or plugging of a well or multiple wells.

§ 78.11. Permit Requirements.

Suggested amendatory language:

(c) Well permits, once obtained, must be posted at the drilling site during site preparation, drilling, operating or altering the well. Well sites, including access roads, may be constructed prior to issuance of a well permit, in accordance with any necessary permits or approvals required and obtained under the Clean Streams Law.

§ 78.15. Application requirements.

(b) The permit application will not be considered complete until the applicant submits a complete and accurate plat, an approvable bond or other means of complying with section [215] 3225 of the act [(58 P. S. § 601.215)] (58 Pa.C.S. § 3225), the fee in compliance with § 78.19 (relating to permit application fee schedule), proof of the notifications required under section 3211(b.1) of the act (58 Pa.C.S. § 3211(b.1)), necessary requests for variance or waivers or other documents required to be furnished by law or the Department, and the information contained in subsection (c)–(e). The person named in the permit shall be the same person named in the bond or other security.

Comment:

MSC recommends that “complete” permit applications be further clarified, as provided in suggested language for 78.15(d) below, so that the applicant’s obligation to provide information with respect to threatened and endangered species is clear.

(c) The applicant shall submit information identifying parent and subsidiary business entities operating in this Commonwealth with the first application submitted after [effective date] and provide any changes to its business relationships with each subsequent application.

Comment:

The term “any changes to its business relationships” is ambiguous.

Suggested amendatory language:

(c) The applicant shall submit information identifying parent and subsidiary business entities operating in this Commonwealth with the first well permit application submitted after [effective date] and provide any changes to this information with each subsequent well permit application.

(d) The applicant shall provide proof of consultation with the Pennsylvania Natural Heritage Program (PNHP) regarding the presence of a State or Federal threatened or endangered species where the proposed well site or access road is located. If the Department determines, based on PNHP data or other sources, that the proposed well site or access road may adversely impact the species or critical habitat, the applicant shall consult with the Department to avoid or prevent the impact. If the impact cannot be

avoided or prevented, the applicant 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 their habitat.

Suggested amendatory language:

(d) The applicant shall utilize PNDI to identify the presence or absence of a State or Federal threatened or endangered species where the proposed well site or access road is located and shall provide proof of notification and consultation with the applicable resource agency regarding the screening for the presence of such species and their critical habitat in the well permit application. For purposes of consulting with the Department, if the proposed well site or access road will have a probable adverse impact on such species or their critical habitat, the applicant shall submit a proposed plan or measures to avoid, prevent, or minimize the impact in accordance with State and Federal laws pertaining to the protection of threatened or endangered species and their habitat. An applicant's submission of the proposed plan or measures concludes the information required to be submitted to the Department pursuant to subsection (b).

(e) If an applicant seeks to locate a well on a well site where the applicant has obtained a permit under § 102.5 (relating to permit requirements) and complied with § 102.6(a)(2) (related to permit applications and fees), the applicant is deemed to comply with subsection (d).

Comment:

This section is apparently meant to preclude duplicate PNDI clearances for the same location. BOCI understands the purpose of this section to provide for circumstances where the applicant has obtained an ESCGP-2 for a well site, and the PNDI review would therefore not need to be duplicated for the permit application. Because BOCI has experienced several lengthy delays as a result of just such a situation, this is a particularly important change in our view. However, we recommend clarification that this deemed compliance also incorporates the application submission requirements under 78.15(b).

Suggested amendatory language:

(e) If an applicant seeks to locate a well on a well site where the applicant has obtained a permit under § 102.5 (relating to permit requirements), the applicant is deemed to comply with the application submission requirements of subsections (b) and (d) with respect to supplying the required information regarding proof of consultation with the applicable resource agency and the Department.

(f) An applicant proposing to drill a well at a location listed in paragraph (1) shall notify the applicable resource agency, if any, in accordance with paragraph (2) and provide the information in paragraph (3) to the Department in the well permit application.

(1) This subsection applies if the proposed surface location of the well is located:

(i) in or within 200 feet of a publicly owned park, forest, game land or wildlife area.

(ii) in or within the corridor of a state or national scenic river.

Comment:

MSC recommends the Department provide a definition or additional clarifying language to the phrase "corridor of a state or national scenic river".

(iv) in a location that will impact other critical communities. For the purposes of this section other critical communities means special concern species.

Suggested amendatory language:

(iv) in a location that will impact critical habitats of State or Federal threatened or endangered species.

(2) The applicant shall notify the public resource agency responsible for managing the public resource identified in paragraph (1), if any. The applicant shall forward by certified mail a copy of the plat identifying the proposed location of the well, well site and access road and information in paragraph (3) to the public resource agency at least 15 days prior to submitting its well permit application to the Department. The applicant shall submit proof of notification with the well permit application. From the date of notification, the public resource agency has 15 days to provide written comments to the Department and the applicant on the functions and uses of the public resource and the measures, if any, that the public resource agency recommends the Department consider to avoid or minimize probable harmful impacts to the public resource where the well, well site and access road is located. The applicant may provide a response to the Department to the comments.

Suggested amendatory language:

(2) The applicant shall notify the public resource agency responsible for managing the public resource identified in paragraph (1), if any. The applicant shall forward by certified mail a copy of the plat identifying the proposed location of the well, well site and access road and information in paragraph (3) to the public resource agency at least 15 days prior to submitting its well permit application to the Department. The applicant shall submit proof of notification with the well permit application. From the date of notification, the public resource agency shall have 15 calendar days to provide written comments to the Department and the applicant on the functions and uses of the public resource and the measures, if any, that the public resource agency recommends the Department consider to avoid or minimize probable harmful impacts to the public resource where the well, well site and access road is located. The public resource agency shall also provide the relevant portions of any records indicating pre-existing agreements, whether leases, surface use agreements or others, between the agency and the applicant that reflect mitigation measures already adopted for the protection of public resources that may be affected by the proposed well. The applicant may provide a response to the Department to any such comments. With respect to surface landowners who are also a public resource agency to be notified, the notification contained in Section 3211(b)(1), provided it includes the information required by this subsection, satisfies the notification requirements of this subsection.

(3) The applicant shall include the following information in the well permit application on forms provided by the Department:

(i) an identification of the public resource.

(ii) a description of the functions and uses of the public resource;

Suggested amendatory language:

(i) an identification of the public resource, which may include a description of the functions and uses of the public resource,

(ii) a description of the measures proposed to be taken to avoid or mitigate impacts, if any.

(4) The information required in paragraph 3 shall be limited to the discrete area of the public resource that may be affected by the well, well site and access road.

Suggested amendatory language:

(4) The information required in paragraph (3) shall be limited to the discrete, physically separate and distinct area of the public resource that may be affected by the well, well site and access road.

(g) If the proposed well, well site or access road poses a probable harmful impact to a public resource, the Department may include conditions in the well permit to avoid or mitigate those impacts to the public resource's current functions and uses. The Department shall consider the impact of any potential permit condition on the applicant's ability to exercise its property rights with regard to the development of oil and gas resources and the degree to which any potential condition may impact or impede the optimal development of the oil and gas resources. The issuance of a permit containing conditions imposed by the Department pursuant to this subsection shall be an action that is appealable to the Environmental Hearing Board. The Department shall have the burden of proving that the conditions were necessary to protect against a probable harmful impact of the public resource.

Comments:

If Act 13 Sections 3215(c) and (e) have not been invalidated by the Pennsylvania Supreme Court's decision in *Robinson Twp. et al. v. Commonwealth of Pennsylvania et al.*, and if the EQB may proceed with rulemaking to implement that section, BOCI offers the comments below with respect to regulations that would implement those sections of Act 13.

Suggested amendatory language:

(g) Subject to satisfying and complying with the criteria prescribed in subsections (1)-(3), the Department may include conditions in the well permit to avoid or mitigate impacts to the public resource. As prescribed in Section 3215(c)(1) of the act, in determining whether to impose a condition, the Department shall utilize the following three sets of criteria:

(1) Criteria for the Department to use for conditioning a well permit based on its impact to public resources identified in § 78.15(f):

(i) The permit condition is necessary to protect against probable harm.

- (ii) As shown by clear and convincing evidence, the harm to the public resource is probable, as opposed to merely possible or speculative.
- (iii) No permit condition may be more restrictive or limiting with respect to a well, well site or access road than the set-back prescriptions contained in Act 13 unless it is shown by clear and convincing evidence that the existing protections of Act 13, the Clean Streams Law and other applicable statutes are insufficient to protect against the specified harm or unless the applicant consents in writing to the condition.
- (iv) No permit condition may be more restrictive or limiting with respect to a well, well site, or access road, or activities incident thereto, than the existing measures and protections established and required under Chapter 78, Act 13 or any other applicable statute or regulation unless it is shown by clear and convincing evidence that the existing measures and protections are insufficient to protect against the specified harm or unless the applicant consents in writing to the condition.
- (v) The nature of the harm to be avoided or mitigated by the permit condition must be clearly described in the terms of a permit condition and permit condition terms must include a description of the expected duration of the probable harm and the duration of the permit condition. Physical construction or site-specific actions required of an applicant as a condition within a permit shall not extend beyond the discrete area or location of the well, well site, or access road unless the applicant consents in writing.

(2) Criteria for the Department to use in addition to those in paragraph (1), to ensure optimal development of oil and gas resources:

- (i) No condition implicating surface activities or operations that results in a commercially unreasonable burden on an applicant may be imposed.
- (ii) For purposes of conservation and avoiding the waste of recoverable oil and gas resources, no condition that results in alterations to the well design in a way that will reduce the anticipated volume of recoverable gas or oil resources may be imposed.

(3) Criteria for the Department to use in addition to those in paragraphs (1) and (2) above, to protect private property rights of oil and gas owners:

- (i) In accordance with subsection 3215(g)(2) of the act, no permit condition where the proposed condition itself alters or abridges the terms of any lease, deed, surface use agreement or similar contract or agreement between a surface owner and subsurface oil and gas owner, or to which they are subject as signatories or successors in interest, may be imposed.
- (ii) Denial of a well permit is not a prevention, avoidance, or mitigation measure authorized by this section.
- (iii) No permit condition may be imposed if the effect would deprive the owner of the oil and gas rights of the right to produce or share in the oil or gas underlying a surface tract.

(h) A decision to impose or not to impose a condition is non-precedential and does not bind the Department or applicant or require either party to adhere to or include the same condition or conditions addressing the same subject matter in any subsequent permits.

(i) The issuance of a permit containing conditions imposed by the Department pursuant to this subsection shall be an action that is appealable to the Environmental Hearing Board.

(j) In accordance with subsection 3215(g)(1) of the act, § 78.15(d), (f), & (g) are not applicable to a well proposed to be drilled on an existing well site for which at least one well permit has been issued prior to [effective date].

§ 78.51. Protection of water supplies.

(b) A landowner, water purveyor or affected person suffering pollution or diminution of a water supply as a result of **well site construction, well drilling, altering or operating [an oil or gas well] activities** may so notify the Department and request that an investigation be conducted. **Notices shall be made to the appropriate Department regional office or by calling the Department's Statewide toll free number at (800) 541-2050.** The notice and request must include the following:

- (1) The name, address and telephone number of the person requesting the investigation.
- (2) The type, location and use of the water supply.
- (3) Available background quality and quantity data regarding the water supply, if known.
- (4) Well depth, pump setting and water level, if known.
- (5) A description of the pollution or diminution.

(c) Within 10 **calendar** days of the receipt of the investigation request, the Department will investigate the claim and will, within 45 **calendar** days of receipt of the request, make a determination. If the Department finds that pollution or diminution was caused by the **well site construction, drilling, alteration or operation activities** or if it presumes the well operator responsible for polluting the water supply of the landowner or water purveyor under section **[208(c)] 3218(c)** of the act **[(58 P. S. § 601.208(c))] (58 Pa.C.S. § 3218(c))**, the Department will issue orders to the well operator necessary to assure compliance with this section. **The presumption established by section 3218(c) of the act is not applicable to pollution resulting from well site construction.**

Suggested amendatory language:

(b) A landowner, water purveyor or affected person claiming pollution or diminution of a water supply as a result of drilling, altering or operating an oil or gas well may so notify the Department and request that an investigation be conducted. Such notices shall be made to the appropriate Department regional office or by calling the Department's statewide toll free number (800) 541-2050. The notice and request must include the following:

- (1) The name, address and telephone number of the person requesting the investigation.
- (2) The type, location and use of the water supply.
- (3) Available background quality and quantity data regarding the water supply, if known.
- (4) Well depth, pump setting and water level, if known.
- (5) A description of the pollution or diminution.

(c) Within 10 calendar days of the receipt of the investigation request, the Department will investigate the claim and will, within 45 calendar days of receipt of the request, make a determination. If the Department's investigation finds that pollution or diminution was caused

by the drilling, alteration or operation activities or if it presumes the well operator(s) responsible under section 3218(c) of the act, the Department will issue orders to the well operator necessary to assure compliance with this section. The presumption established by section 3218(c) of the act is not applicable to pollution resulting from well site construction.

(d) A restored or replaced water supply includes any well, spring, public water system or other water supply approved by the Department, which meets the criteria for adequacy as follows:

(2) *Quality.* The quality of a restored or replaced water supply will be deemed adequate if it meets the standards established under the Pennsylvania Safe Drinking Water Act (35 P. S. §§ 721.1—721.17), or is comparable to the quality of the water supply before it was affected by the operator if that water supply **exceeded those [did not meet these]** standards, provided that the sample was collected in accordance with §78.52(c)

Suggested amendatory language:

(2) *Quality.* The quality of a restored or replaced water supply will be deemed adequate if it meets the standards established under the Pennsylvania Safe Drinking Water Act (35 P. S. §§ 721.1—721.17), or is comparable to the quality of the water supply before it was affected by the operator if that water supply did not meet those standards.

§ 78.52. Predrilling or prealteration survey.

(a) A well operator who wishes to preserve its defense under sections **[208(d)(1)] 3218(d)(1)(i) and 3218(d)(2)(i)** of the act **[(58 P. S. § 601.208 (d)(1))] (58 Pa.C.S. §§ 3218(d)(1)(i) and 3218 (d)(2)(i))** that the pollution of a water supply existed prior to the drilling or alteration of the well shall conduct a predrilling or prealteration survey in accordance with this section.

(c) The survey shall be conducted by an independent **[certified] Pennsylvania accredited** laboratory. A person independent of the well owner or well operator, other than an employee of the **[certified] accredited** laboratory, may collect the sample and document the condition of the water supply, if the **[certified] accredited** laboratory affirms that the sampling and documentation is performed in accordance with the laboratory's approved sample collection, preservation and handling procedure and chain of custody.

Comment:

Subsection 78.52(c) should be revised to clarify that the laboratory does not need to conduct the survey itself, but simply analyze the samples collected. This section could be misinterpreted as stating that only laboratory employees can perform the survey.

Suggested amendatory language:

(c) The analyses of a pre-drill sample of the water supply shall be completed by an independent Pennsylvania accredited laboratory. A person independent of the well owner or well operator, other than an employee of the accredited laboratory, may collect the sample and document the condition of the water supply, if the accredited laboratory affirms that the sampling and

documentation is performed in accordance with the laboratory's approved sample collection, preservation and handling procedure and chain of custody.

(f) A well operator who wishes to preserve the defense under section [208(d)(2)] **3218(d)(1)(ii) and 3218(d)(2)(ii)** of the act that the landowner or water purveyor refused the operator access to conduct a survey shall confirm the desire to conduct this survey and that access was refused by issuing notice to the person by certified mail, or otherwise document that access was refused. The notice must include the following:

- (1) The operator's intention to drill or alter a well.
- (2) The desire to conduct a predrilling or prealteration survey.
- (3) The name of the person who requested and was refused access to conduct the survey and the date of the request and refusal.
- (4) The name and address of the well operator and the address of the Department, to which the water purveyor or landowner may respond.

Comment:

The rule should provide for a time frame for response and action by the landowner once notice has been provided, so that operators may proceed with operations knowing that access was refused.

Suggested amendatory language:

NEW (g) Refusal shall be presumed if the operator does not receive a response within 30 business days of confirmed receipt.

§ 78.52a. Abandoned and orphaned well identification.

(a) Prior to hydraulically fracturing the well, the operator of a gas well or horizontal oil well shall identify the location of orphaned or abandoned wells within 1,000 feet measured horizontally from the vertical well bore and 1,000 feet measured from the surface above the entire length of a horizontal well bore in accordance with subsection (b). Prior to hydraulically fracturing the well, the operator of a vertical oil well shall identify the location of orphaned or abandoned wells within 500 feet of the well bore in accordance with subsection (b). For the purposes of this section a gas well is a well which is producing or capable of producing marketable quantities of gas or of gas and oil with a gas-oil ratio of more than 100 MCF per bbl. of oil.

(b) Identification shall be accomplished by conducting the following:

- (1) A review the Department's orphaned and abandoned well database.**
- (2) A review of applicable farm line maps, where accessible.**

(3) Submitting a questionnaire on forms provided by the Department to landowners whose property is within the area identified in subsection (a) regarding the precise location of orphaned and abandoned wells on their property.

(c) Prior to hydraulically fracturing a well, the operator shall submit a plat to the Department showing the location and GPS coordinates of orphaned and abandoned wells identified under subsection (b) and proof of notification that the operators submitted questionnaires under subsection (b)(3).

Comment:

The location coordinates for a large number of wells that may exist in the Department's database are likely derived from sources other than field GPS coordinates. Some coordinates may have been derived from old maps. For a variety of reasons, a well with latitude/longitude coordinates in the Department's database may not be visible on the ground.

It seems appropriate that any wells which appear on the Department's database should be identified, provided their total depth extends below the interval that could reasonably be influenced by hydraulic fracturing. A vertical isolation distance of 1,500 feet above the zone to be perforated or isolated for hydraulic fracturing in an unconventional well and 500 feet above the zone to be perforated or isolated for hydraulic fracturing in any other well is a reasonable isolation distance that exceeds the normally expected vertical growth of induced fractures.

A requirement to consult "applicable farm line maps, where accessible" in order to identify wells lacks the clarity required for a regulation. There are many sources of information on old wells in Pennsylvania, including many reports by state agencies, as well as privately owned maps and records maintained by various operators. If the Department's database could be sufficiently enhanced, a review of the database should be an adequate obligation for well identification. A partnership effort between industry and state government seems an appropriate method of compiling available data on historical oil and gas wells.

Because of the generally higher rate, volume and pressure used in hydraulic fracturing of the Marcellus and other deep shales, constructing a more comprehensive database of historical deep wells (those that penetrate to a depth at least 1,500 feet above the Marcellus Shale) would be a priority. It is hoped that with good cooperation, this could be accomplished within a few months, as the state's current database for this set of deeper wells is believed to be nearly complete.

Enhancement of the shallow well database will require significantly more work, time and expense, and is likely a multi-year project.

The proposed language in Subsection 78.52a(b)(3) would require submission of a questionnaire to landowners requesting information on orphaned or abandoned wells on forms provided by the Department. It is unclear how responses to such questionnaires would be directed and what obligations might fall on operators to verify information received. There is far too much uncertainty related to this provision to support it as a regulatory requirement. The requirement to use a questionnaire should be eliminated.

Additionally the oil and gas industry's identification of abandoned and orphaned wells will benefit from further development of the Department's database, and should be postponed until

the database and map viewer system is improved. Accordingly, the Department should consider a phased implementation of this new section.

Suggested amendatory language:

§ 78.52a. Well identification prior to hydraulic fracturing

- (a) Prior to hydraulically fracturing an unconventional well, the operator shall identify in accordance with subsection (b) the location of active, inactive, plugged, orphaned or abandoned wells within 1,000 feet measured horizontally from the surface projection of any portion of the wellbore whose total depth is known or reasonably expected to be less than 1,500 feet above the shallowest vertical depth to be perforated or isolated for hydraulic fracturing. Prior to hydraulically fracturing a conventional well, the operator shall identify the location of active, inactive, plugged, orphaned or abandoned wells within 500 feet of the well bore whose total depth is known or reasonably expected to be less than 500 feet above the shallowest vertical depth to be perforated or isolated for hydraulically fracturing.
- (b) Identification shall be deemed to have been satisfied by conducting a review of the Department's database for active, inactive, plugged, orphaned and abandoned wells.
- (c) Prior to hydraulically fracturing a well, the operator shall submit a plat to the Department showing the location and GPS coordinates of wells identified pursuant to subsection (b) whose total depth is known or reasonably expected to be less than 1,500 feet, in the case of an unconventional well or 500 feet, in the case of any other well, above the shallowest vertical depth to be perforated or isolated for hydraulic fracturing. The operator may notify the Department of any wells that are identified on the Department's database but which have not been located on the ground using reasonable efforts.
- (d) This subsection shall become effective [six months] from final publication in the Pennsylvania Bulletin.

§ 78.53. Erosion and sediment control.

[During and after earthmoving or soil disturbing activities, including the activities related to siting, drilling, completing, producing, servicing and plugging the well, constructing, utilizing and restoring the access road and restoring the site, the operator shall design, implement and maintain best management practices in accordance with] Any person proposing or conducting earth disturbance activities associated with oil and gas activities shall comply with Chapter 102 (relating to erosion and sediment control). [and an erosion and sediment control plan prepared under that chapter.] Best management practices for erosion and sediment control for oil and gas well [operations] activities are listed in the [Oil And Gas Operators Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, Guidance No. 550-0300-001 (April 1997), as amended and updated] Erosion and Sediment Pollution Control Program Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008, as amended and updated, and the Oil And Gas Operators Manual, Commonwealth of Pennsylvania, Department of Environmental Protection, Guidance No. 550-0300-001, as amended and updated.

Comment:

The defined term "oil and gas operations" should be used in lieu of the undefined term "oil and gas activities." All oil and gas operations should comply with Chapter 102, to the extent it applies. However, the second sentence of the proposed language regarding best management practices is not necessary, as the required practices are addressed in Chapter 102 already.

Suggested amendatory language:

Any person proposing or conducting earth disturbance activities associated with oil and gas operations shall comply with the requirements of 25 Pa. Code Chapter 102 (relating to erosion and sediment control).

§ 78.55. Control and disposal planning; emergency response for unconventional wells.

(a) Preparation and implementation of plan for oil and gas operations. [Prior to generation of waste, the well operator shall prepare and implement a plan under § 91.34 (relating to activities utilizing pollutants) for the control and disposal of fluids, residual waste and drill cuttings, including tophole water, brines, drilling fluids, additives, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids and drill cuttings from the drilling, alteration, production, plugging or other activity associated with oil and gas wells.] Persons conducting oil and gas operations shall prepare and implement site specific PPC plans according to § 91.34 and 102.5(l).

Comment:

This provision should clarify that PPC planning is required to the extent 25 Pa. Code §§ 91.34 and 102.5(l) apply to the subject activity. It also appears that Section 78.55(a) overlaps and duplicates requirements that are set forth in Section 78.55(b). While Section 78.55(b) requires well operators to prepare PPC plans for activities at well sites, Section 78.55(a) covers "oil and gas operations" and applies to any "person" conducting such operations thereby introducing significant uncertainty and confusion as to how these provisions are to operate in tandem. We suggest that Section 78.55(a) be clarified to apply only to oil and gas operations that do not take place at well sites (well sites are covered under Section 78.55(b)) and that at such locations, the person or entity in charge of the operations be responsible for preparing and implementing a PPC plan, as appropriate, to eliminate the potential for preparation of multiple, competing PPC plans.

Suggested amendatory language:

(a) Preparation and implementation of plan for oil and gas operations at a location other than a well site. Persons conducting oil and gas operations at a location other than a well site shall prepare and implement site specific PPC plans according to §§ 91.34 and 102.5(l), as applicable.

(b) Preparation and implementation of plan for well sites. In addition to the requirements in subsection (a), the well operator shall prepare and develop a site specific PPC plan prior to storing, using, generating or transporting regulated substances to, on or from a well site from the drilling, alteration, production, plugging or other activity associated with oil and gas wells.

Suggested amendatory language:

(b) *Preparation and implementation of plan for well sites.* The well operator shall prepare a site specific PPC plan, in accordance with §§ 91.34 and 102.5(l), as applicable, prior to storing, using, generating or transporting substances subject to those provisions to, on or from a well site.

§ 78.56. Temporary Storage

(a) Except as provided in §§ 78.60(b) and 78.61(b) (relating to discharge requirements; and disposal of drill cuttings), the operator shall contain **[pollutional] regulated** substances from the drilling, altering, completing, recompleting, servicing and plugging the well, including brines, drill cuttings, drilling muds, oils, stimulation fluids, well treatment and servicing fluids, plugging and drilling fluids other than gases in a pit, tank or series of pits and tanks **or other approved storage structures**. The operator shall install or construct and maintain the pit, tank or series of pits and tanks **or other approved storage structures** in accordance with the following requirements:

Suggested amendatory language:

§ 78.56. Temporary storage in pits, tanks and other approved storage structures

(a) Except as provided in §§ 78.60(b) and 78.61(b) (relating to discharge requirements; and disposal of drill cuttings), the operator shall contain substances generated from and used for the drilling, altering, completing, recompleting, servicing and plugging the well, including brines, drill cuttings, drilling muds, oils, stimulation fluids, well treatment and servicing fluids, plugging and drilling fluids other than gases in a pit, tank or series of pits and tanks or other approved storage structures. The operator shall install or construct and maintain the pit, tank or series of pits and tanks or other approved storage structures in accordance with the following requirements:

(1) The pit, tank, **[or]** series of pits and tanks **or other approved storage structure** shall be constructed and maintained with sufficient capacity to contain all **[pollutional] regulated** substances which are used or produced during drilling, altering, completing, **recompleting, servicing** and plugging the well.

(2) Modular aboveground storage structures that are assembled on site may not be utilized to store regulated substances without Department approval. The Department shall maintain a list of approved modular storage structures on its website. The owner or operator shall notify the Department at least 3 business days before the beginning of construction of these storage structures. The notice shall be submitted electronically to the Department through its website and include the date the storage structure installation will begin. If the date of installation is extended, the operator shall renotify the Department with the date that the installation will begin, which does not need to be 3 business days in advance.

[(2)] (3) A pit shall be designed, constructed and maintained so that at least 2 feet of freeboard remain at all times. If open tanks or open storage structures are used, the tanks and storage structures shall be maintained so that at least 2 feet of freeboard remain at all times unless the tank or storage structure is provided with an overflow system to a standby tank or pit with sufficient volume to contain all excess fluid or [waste] regulated substances. If an open standby tank or open storage structure is used, it shall be maintained with 2 feet of freeboard.

If this subsection is violated, the operator immediately shall take the necessary measures to ensure the structural stability of the pit, or tank or other storage structure, prevent spills and restore the 2 feet of freeboard.

Suggested amendatory language:

(1) The pit, tank, series of pits and tanks or other approved storage structure shall be constructed and maintained with sufficient capacity to contain substances which are used or produced during drilling, altering, completing, recompleting, servicing and plugging the well.

(2) Modular aboveground storage structures that are assembled on site may not be utilized to store substances resulting from the drilling, altering, completing, recompleting, servicing and plugging the well without Department approval. The Department shall maintain a list of approved modular storage structures on its website. The owner or operator shall notify the Department at least 3 business days before the beginning of construction of these storage structures. The notice shall be submitted electronically to the Department through its website and include the date the storage structure installation will begin. If the date of installation is extended, the operator shall re-notify the Department with the date that the installation will begin, which does not need to be 3 business days in advance.

(3) A pit shall be designed, constructed and maintained so that at least 2 feet of freeboard remain at all times. If open tanks or open storage structures are used, the tanks and storage structures shall be maintained so that at least 2 feet of freeboard remain at all times unless the tank or storage structure is provided with an overflow system to a standby tank or pit with sufficient volume to contain all excess fluid. If an open standby tank or open standby storage structure is used, it shall be maintained with 2 feet of freeboard. If this subsection is violated, the operator immediately shall take the necessary measures to ensure the structural stability of the pit, or tank or other storage structure, prevent spills and restore the 2 feet of freeboard.

[(3)] (4) Pits, [and] tanks and other approved storage structures shall be designed, constructed and maintained to be structurally sound and reasonably protected from unauthorized acts of third parties.

(5) For unconventional well sites, unless an individual is continuously present at the well site, a fence or fences shall completely surround all pits to prevent unauthorized acts of third parties and damage caused by wildlife.

Suggested amendatory language:

(5) For unconventional well sites, unless an individual is continuously present at the well site, a fence or fences shall completely surround all pits to discourage unauthorized acts of third parties and damage caused by wildlife.

(6) Unless an individual is continuously present at the well site, operators shall equip all tank valves and access lids to regulated substances with reasonable measures to prevent unauthorized access by third parties such as locks, open end plugs, removable handles, retractable ladders or other measures that prevent access by third parties. Tanks storing freshwater, fire prevention materials and spill response kits are excluded from the requirements of this paragraph.

Suggested amendatory language:

(6) Unless an individual is continuously present at the well site, operators shall equip all tank valves and access lids to substances under this section with reasonable measures to discourage unauthorized access by third parties such as locks, open end plugs, removable handles, retractable ladders or other measures that discourages access by third parties. Tanks storing freshwater, fire prevention materials and spill response kits are excluded from the requirements of this paragraph.

[(4)] (8) A pit, [or] tank or other approved storage structure that contains drill cuttings from below the casing seat, [pollutional] regulated substances[, wastes] or fluids other than tophole water, fresh water and uncontaminated drill cuttings shall be impermeable. [and comply with the following:]

Suggested amendatory language:

(8) A pit, tank, or other approved storage structure that contains drill cuttings from below the casing seat or fluids other than tophole water, fresh water and uncontaminated drill cuttings shall be impermeable, and comply with (9) – (16) of this subsection.

[(iv)] (14) If a liner becomes torn or otherwise loses its integrity, the pit or approved storage structure shall be managed to prevent the [pit] contents from leaking [from the pit]. If repair of the liner or construction of another temporary pit or approved storage structure is not practical or possible, the [pit] contents shall be removed and disposed at an approved waste disposal facility or disposed on the well site in accordance with § 78.61, § 78.62 or § 78.63 (relating to disposal of residual waste—pits; and disposal of residual waste—land application).

Suggested amendatory language:

(14) If a liner becomes torn or otherwise loses its integrity, the pit or approved storage structure shall be managed to prevent the [pit] contents from leaking [from the pit].

§ 78.57. Control, storage and disposal of production fluids

(a) Unless a permit has been obtained under § 78.60(a) (relating to discharge requirements), the operator shall collect the brine and other fluids produced during operation[, **service and plugging**] of the well in a tank[, **pit**] or a series of [**pits or**] tanks, or other device approved by the Department for subsequent disposal or reuse. **Open top structures shall not be used to store brine and other fluids produced during operation of the well.** Except as allowed in this subchapter or otherwise approved by the Department, the operator may not discharge the brine and other fluids on or into the ground or into the waters of this Commonwealth.

Suggested amendatory language:

(a) Unless a permit has been obtained under § 78.60(a) (relating to discharge requirements), the operator shall collect the brine and other fluids produced during operation of the well in a tank or a series of tanks, centralized impoundment, or other device approved by the Department for subsequent disposal or reuse. Open top structures shall not be used to store brine and other fluids produced during operation of the well with the exception of centralized impoundments permitted

under § 78.59c. Except as allowed in this subchapter or otherwise approved by the Department, the operator may not discharge the brine and other fluids on or into the ground or into the waters of this Commonwealth.

§ 78.58. [Existing pits used for the control, storage and disposal of production fluids.] Onsite processing.

[For pits in existence on July 29, 1989, the operator may request approval for an alternate method of satisfying the requirements of § 78.57(c)(2)(iii) (relating to control, storage and disposal of production fluids), the angle of slope requirements of § 78.57(c)(2)(v) and the liner requirement of § 78.57(c)(2)(vi)—(viii) by affirmatively demonstrating to the Department's satisfaction, by the use of monitoring wells or other methods approved by the Department, that the pit is impermeable and that the method will provide protection equivalent or superior to that provided by § 78.57. The operator shall request approval under § 78.57(c)(1).] **(a) The operator may request approval by the Department to process fluids generated by the development, drilling, stimulation, alteration, operation or plugging of oil or gas wells at the well site where the fluids were generated or at the well site where all of the fluid is intended to be beneficially used to develop, drill or stimulate a well. The request shall be submitted on forms provided by the Department and demonstrate that the processing operation will not result in pollution of land or waters of the Commonwealth.**

(b) Approval from the Department is not required for the following activities conducted at a well site or centralized impoundment permitted under § 78.59c:

(1) mixing fluids with freshwater;

(2) aerating fluids; or

(3) filtering solids from fluids.

(c) The operator may request to process drill cuttings only at the well site where those drilling cuttings were generated, by submitting a request to the Department for approval. The request shall be submitted on forms provided by the Department and demonstrate that the processing operation will not result in pollution of land or waters of the Commonwealth.

(d) Processing residual waste generated by the development, drilling, stimulation, alteration, operation or plugging of oil or gas wells other than as provided for in subsections (a) and (b) shall comply with the requirements of the Solid Waste Management Act.

(e) Processing of fluids in a manner approved pursuant to subsection (a) shall be deemed to be approved at subsequent well sites provided the operator notifies the Department of location of the well site where the processing will occur prior to the commencement of processing operations. This notice shall be submitted electronically to the Department through its website and include the date activities will commence.

(f) Sludges, filter cake or other solid waste remaining after the processing or handling of fluids pursuant to subsections (a) or (b), including solid waste mixed with drill cuttings, shall be characterized pursuant to 25 Pa. Code § 287.54 before the solid waste leaves the well site.

Comment:

The regulations should encourage and facilitate the processing, recycling and beneficial reuse of fluids and other waste materials at well sites. The establishment of regulatory provisions to govern the recycling and reuse of oil and gas wastes will protect public health, safety and the environment, as well as be a benefit to the oil and gas industry.

Processing of drill cuttings under Subsection 78.58(c) should be included as one of the activities in Subsection 78.58(d) that does not require compliance with the requirements of the Solid Waste Management Act.

Suggested amendatory language:

§ 78.58. Onsite and offsite processing.

(a) The Department supports the processing, recycling, and beneficial reuse of fluids and other materials generated by the development, drilling, stimulation, alteration, operation or plugging of oil or gas wells, where the processing of the fluids or other materials for recycling or beneficial reuse will not result in pollution of land or waters of the Commonwealth. The operator may process fluids generated by the development, drilling, stimulation, alteration, operation or plugging of oil or gas wells at the well site where the fluids were generated or at the well site where all of the fluid is intended to be beneficially used to develop, drill or stimulate a well. Such processing may not result in pollution of land or waters of the Commonwealth.

(b) Approval from the Department is not required for the following activities conducted at a well site or centralized impoundment permitted under § 78.59c:

- (1) mixing fluids with freshwater;
- (2) aerating fluids;
- (3) filtering solids from fluids;
- (4) physical removal of free phase hydrocarbons;
- (5) the addition of biocides to reuse fluids; or
- (6) any other activity approved by the Department and posted on its website.

(c) An operator may temporarily store and/or process fluids generated by the development, drilling, stimulation, alteration, operation or plugging of an oil or gas well at a well site other than the well sites where the fluids were generated or are to be ultimately reused, so long as the following conditions are met:

- (1) The well site where the storage or processing is to occur is permitted and bonded;
- (2) The well site maintains a current PPC plan that is consistent with the Department's regulations;
- (3) The operator maintains accurate transportation records of the fluids entering and leaving the well site, consistent with Section 3218.3 of Act 13 ;
- (4) Temporary storage complies with applicable requirements of the act and regulations relating to tanks;
- (5) Temporary storage occurs in approved storage structures in accordance with applicable requirements of Sections 78.56 and 78.57;
- (6) Processing of fluids is conducted in accordance with this section;

- (7) Temporary storage and/or processing will not exceed a single consecutive twelve month period; all onsite activity incidental to temporary storage and/or processing must occur within this timeframe;
- (8) The operator must notify the Department of locations where temporary storage and/or processing will occur a minimum of three (3) days prior to the commencement of activity. This notice shall be submitted electronically to the Department through its website and include the intended date(s) of activity commencement;
- (9) An operator that stores, processes or beneficially reuses fluids pursuant to this section in accordance with this paragraph shall be deemed to have a residual waste permit by rule under Article IX of Title 25;
- (10) An operator subject to a permit by rule under this section is not required to apply for a permit under Article IX of Title 25 or comply with the operating requirements of Article IX of Title 25 so long as the authorized storage, processing and beneficial reuse activities are conducted in accordance with this Chapter.

(d) An operator may request approval from the Department to temporarily store and/or process fluids generated by the development, drilling, stimulation, alteration, operation or plugging of an oil or gas well at a location other than a well site or centralized impoundment. The request shall be submitted on forms provided by the Department, accompanied by a written consent from the landowner, and subject to the following conditions:

- (1) The operator prepares and maintains a current PPC plan that is consistent with the Department's regulations for the location;
- (2) The operator maintains accurate transportation records of the fluids entering and leaving the location consistent with consistent with Section 3218.3 of Act 13;
- (3) Temporary storage complies with applicable requirements of the act and regulations relating to tanks;
- (4) Temporary storage occurs only in above ground tanks subject to applicable requirements of Section 78.56 and 78.57;
- (5) Any processing is conducted in accordance with this section;
- (6) Temporary storage and/or processing will not exceed a single consecutive twelve month period and all onsite activity incidental to temporary storage and/or processing must occur within this timeframe;
- (7) The operator must notify the Department of the locations where temporary storage will occur a minimum of three (3) days prior to the commencement of activity. This notice shall be submitted electronically to the Department through its website and include the intended date(s) of activity commencement;
- (8) An operator that stores, processes, or beneficially reuses fluids pursuant to this section in accordance with this paragraph shall be deemed to have a residual waste permit by rule under Article IX of Title 25;
- (9) An operator subject to a permit by rule under this section is not required to apply for a permit under Article IX of Title 25 or comply with the operating requirements of Article IX of Title 25 so long as the authorized storage and beneficial re-use activities are conducted in accordance with this Chapter.

(e) An operator may process drill cuttings at the well site where those drill cuttings were generated where such processing will not result in pollution of land or waters of the Commonwealth.

(f) Sludges, filter cake or other materials remaining after the processing or handling of fluids pursuant to this Section, including materials mixed with drill cuttings, shall be characterized pursuant to 25 Pa. Code § 287.54 before the material leaves the well site.

§ 78.59a. Impoundment embankments.

Embankments constructed for freshwater and centralized impoundments for oil and gas activities must meet the following requirements:

Comment:

Under these proposed oil and gas regulations, the Department will be regulating freshwater impoundments which are not regulated under Chapter 105 or any other portion of Title 25 of the Pennsylvania Code. Regulating only oil & gas freshwater impoundments and no other person, group, or industry's freshwater impoundments appears to unfairly target our industry. We suggest that freshwater impoundments must either be removed from the proposed oil and gas regulations, or that Title 25 be revised to regulate all persons, groups, or industries equally.

Suggested amendatory language:

Unless otherwise approved by the Department, embankments constructed for freshwater and centralized impoundments must meet the following requirements:

(1) The foundation for each embankment must be stripped and grubbed to a minimum depth of 2 feet below existing contour prior to any placement and compaction of fill.

Suggested amendatory language:

(1) The foundation for each embankment must be stripped and grubbed to a minimum depth of 2 feet below existing contour prior to any placement and compaction of fill, or as otherwise approved by the Department.

(2) Any springs encountered in the embankment foundation area shall be drained to the downstream toe of the embankment with a drain section 2 foot by 2 foot in dimension consisting of PennDOT Type A sand, compacted by hand tamper. Geotextiles shall not be used around sand. The last 3 feet of this drain at the downstream slope shall be constructed of AASHTO #8 material.

Suggested amendatory language:

(2) Any springs encountered in the embankment foundation area shall be drained to the downstream toe of the embankment with a drain section 2 foot by 2 foot in dimension consisting of PennDOT Type A sand, compacted by hand tamper; coarse aggregate with a minimum permeability of 1×10^{-3} cm/sec, or an alternate material approved by the Department. Geotextiles shall not be used around sand, unless approved by the Department. The last 3 feet of this drain at the downstream slope shall be constructed of AASHTO #8 material.

(5) Soils to be used for embankment construction shall be classified in accordance with ASTM D-2487 (Unified Soils Classification). Soil samples shall be classified at a minimum rate of 1 sample per 1,000 cubic yards of placed fill. Results of testing of materials shall be provided to the Department upon request.

Suggested amendatory language:

(5) Soils to be used for embankment construction shall be classified in accordance with ASTM D-2487 (Unified Soils Classification). Soil samples shall be classified at a frequency of 1 sample per soil type. Results of testing of materials shall be provided to the Department upon request.

(6) The embankment shall be constructed out of soils designated as GC, GM, SC, SM, CL or ML, only. Soils with split designations where one of the designations is not GC, GM, SC, SM, CL or ML shall not be used. Soils shall contain a minimum of 20% of No. 200 sieve materials or larger. Results of testing of materials shall be provided to the Department upon request.

Suggested amendatory language:

(6) The embankment shall be constructed out of soils designated as GC, GM, SC, SM, CL or ML, only. Soils with split designations where one of the designations is not GC, GM, SC, SM, CL or ML shall not be used. The soils' gradation shall have a minimum of 20 percent retained on the No. 200 sieve, unless site-specific soils with less than 20 percent retained on the No. 200 sieve are part of an alternate design provided by an appropriately trained professional. Results of testing of materials shall be provided to the Department upon request.

(9) Exposed embankment slopes shall be permanently stabilized using one or a combination of the following methods:

(i) Exposed embankments shall be limed, fertilized, seeded and mulched and permanent vegetative ground covering in compliance with § 102.22 shall be established upon completion of construction of the impoundment.

(ii) Compacted rockfill or riprap placed on the downstream face of the embankment as a cover having a minimum depth of two feet. The rockfill must be durable, evenly distributed, and underlain by a Class 2, Type A geotextile.

Suggested amendatory language:

(ii) Compacted rockfill or riprap placed on the downstream face of the embankment as a cover having a minimum depth of two feet. The rockfill shall be durable, evenly distributed, and underlain by a Class 2, Type A geotextile when a course aggregate with very few fines is used as fill.

§ 78.59b. Freshwater impoundments:

MSC general comment:

The proposed regulations have extensive new requirements for impoundments storing fresh water, beyond those any other industry must follow. See also BOCI's comment to 78.59a above. Unless Title 25 is revised to regulate all freshwater impoundments, they should be removed from these subsections.

(c) Freshwater impoundments shall be constructed with a synthetic impervious liner.

Suggested amendatory language:

(c) Freshwater impoundments shall be designed to hold water without significant leaks that could affect the integrity of the embankment.

(d) Unless an individual is continuously present at a freshwater impoundment, a fence shall completely surround the freshwater impoundment to prevent unauthorized acts of third parties and damage caused by wildlife.

Suggested amendatory language:

(d) For unconventional well sites, unless an individual is continuously present at the well site, a fence or fences shall completely surround all pits to discourage unauthorized acts of third parties and damage caused by wildlife.

(e) The bottom of the impoundment shall be at least 20 inches above the seasonal high groundwater table. The applicant may maintain the required separation distance of 20 inches by artificial means such as an under-drain system throughout the lifetime of the impoundment. In no case shall the regional groundwater table be affected. The operator shall document the depth of the seasonal high groundwater table, the manner in which the depth of the seasonal high groundwater table was ascertained, the distance between the bottom of the impoundment and the seasonal high groundwater table, and the depth of the regional groundwater table if the separation between the impoundment bottom and seasonal high groundwater table is maintained by artificial means. The operator shall submit records demonstrating compliance with this subsection to the Department upon request.

Comment:

This subsection requires the same groundwater table determination practices for freshwater impoundments as for produced water pits. This proposal seems unreasonable for freshwater. BOCI recommends that this subsection be removed.

(f) Freshwater impoundments shall be restored by the operator so that the impoundment is registered to by removing excess water and the synthetic liner and returning the site to approximate original conditions, including preconstruction contours, and can support the land uses that existed prior to oil and gas activities to the extent practicable within nine months of completion of drilling the last well serviced by the impoundment. A two-year restoration extension may be requested pursuant to section 3216(g) of the act (58 Pa.C.S. § 3215(g)). If written consent is obtained from the landowner, the requirement to return the site to approximate original contours may be waived by the Department if the liner is removed from the impoundment.

Comment:

Freshwater impoundments, when not needed for operations and not wanted by the surface owner, should be restored in accordance with applicable site restoration plans.

Suggested amendatory language:

(f) Freshwater impoundments shall be restored by the operator to whom the impoundment is registered by removing excess water and the synthetic liner and restoring the site in accordance with a site restoration plan within nine months of completion of the last well serviced by the impoundment. A restoration extension may be requested consistent with the extension requirements described under section 3216(g) of the act (58 Pa.C.S. §3216(g)) that apply to well site restoration obligations.

(g) Prior to storing mine influenced water in a freshwater impoundment, the operator shall develop a mine influenced water storage plan and submit it to the Department for approval.

(1) The mine influenced water storage plan shall be submitted on forms provided by the Department and include the following:

(i) a demonstration that the escape of the mine influenced water stored in the freshwater impoundment will not result in air, water or land pollution or endanger persons or property;

(ii) a procedure and schedule to test the mine influenced water. This testing shall be conducted at the source prior to storage in the impoundment; and

(iii) a records retention schedule for the mine influenced water test results.

Suggested amendatory language:

(i) a demonstration that the escape of the mine influenced water stored in the freshwater impoundment will not result in water or land pollution or endanger persons or property and include;

(c) Centralized impoundments shall not be constructed in any portion of the following areas:

(3) In areas underlain by limestone or carbonate formations where the formations are greater than 5 feet thick and present at the uppermost geologic unit. These areas include areas mapped by the Pennsylvania Geological Survey as underlain by the formations, unless competent geologic studies demonstrate the absence of limestone and carbonate formations.

Comment:

The proposed excerpt appears to have been copied from Pennsylvania's Solid Waste Regulations, which include this provision due to the acidic nature of landfill leachate. Duplicative requirements for activities already addressed through other regulatory programs should not be added to Chapter 78.

Suggested amendatory language:

Delete subsection (c)(3).

(4) Within 500 feet measured horizontally from an occupied dwelling without the written consent of the owner of the building.

Suggested amendatory language:

(4) Within 500 feet measured horizontally from an occupied dwelling to the inside crest of the impoundment's embankment without the written consent of the owner of the building.

(5) Within 100 feet measured horizontally from any solid blue line stream, spring or body of water, except wetlands, identified on the most current 7.5 minute topographic quadrangle map of the United States Geological Survey.

Suggested amendatory language:

(5) Within 100 feet measured horizontally from any solid blue line stream, spring or body of water, except wetlands, identified on the most current 7.5 minute topographic quadrangle map of the United States Geological Survey to limit of disturbance unless a stream encroachment permit is acquired.

(6) Within 500 feet measured horizontally of a private water supply without the written consent of the owner of the water supply.

Suggested amendatory language:

(6) Within 500 feet measured horizontally from a private water supply to the inside crest of the impoundment's embankment without the written consent of the owner of the water supply.

(7) Within 1,000 feet measured horizontally of an existing water well, surface water intake, reservoir or other water supply extraction point used by a water purveyor without the written consent of the water purveyor.

Suggested amendatory language:

(7) Within 1,000 feet measured horizontally from an existing water well, surface water intake, reservoir or other water supply extraction point used by a water purveyor to the inside crest of the impoundment embankment without the written consent of the water purveyor.

(e) Centralized impoundments shall be constructed with a liner system composed of the following components:

(1) A sub-base that:

Suggested amendatory language:

(1) A sub-base that meets the following, or is otherwise approved by the Department:

(vii) Is constructed of a natural clay material and include an upper 6 inches that is:

(A) Free of coarse rock fragments greater than 0.75" in diameter.

(B) Hard, uniform, smooth and free of debris, rock fragments, plant materials and other foreign material.

(C) No more permeable than 1.0×10^{-6} cm/sec., based on laboratory and field testing. Soil compaction and permeability testing shall be conducted on the bottom and sides at a minimum rate of once per 2,500 square feet.

Comment:

Typically, the 6-inch thick subbase layer in a landfill liner system is tested at a frequency of one test per acre. BOCI recommends that the test frequency be one test per acre per soil type.

Suggested amendatory language:

§ 78.59c(e)(vi) (C) No more permeable than 1.0×10^{-6} cm/sec. Laboratory standard Proctor and permeability testing shall be used to delineate limits for field moisture/density testing. Field limits shall be delineated for each soil type used, and at least one Standard Proctor and Permeability test per soil type shall be performed. Field moisture density testing shall be performed at a frequency of one sample per acre per 6-inch thick lift per soil type.

(2) A secondary liner that:

(vi) Is installed according to manufacturer's specifications under the supervision of an authorized representative of the manufacturer. A Department approved quality assurance and quality control plan shall be implemented in the field during the installation of the liner.

Suggested amendatory language:

(vi) Is installed according to manufacturer's specifications under the supervision of an appropriately trained professional. A Department approved quality assurance and quality control plan shall be implemented in the field during the installation of the liner.

(3) A leak detection system that meets the following:

(vii) Create a flow zone between the secondary liner and the primary liner equal to, or more permeable than 1.0×10^{-2} cm/sec., based on laboratory testing and, when required by the Department, field testing.

Comment:

Suggested amendatory language:

(vii) Creates a flow zone between the secondary liner and the primary liner equal to, or more permeable than, 1.0×10^{-2} cm/sec., based on manufacturer/supplier's published specifications.

(viii) Contain a perforated piping system capable of detecting and intercepting liquid within the leak detection zone and conveying the liquid to a collection sump.

Suggested amendatory language:

(viii) If the leak detection zone cannot adequately transmit detection zone flow, the system shall contain a perforated piping system capable of detecting and intercepting liquid within the leak detection zone and conveying the liquid to a collection sump.

(ix) A piping system that meets the following requirements:

(B) The pipes shall be installed as close to perpendicular to the flow as practicable and shall have a minimum post-settlement grade of at least 2%.

Suggested amendatory language:

(B) The pipes shall be installed as close to perpendicular to the flow as practicable and shall have a minimum post-settlement grade of at least 1%.

(C) The minimum diameter of the perforated pipe shall be 4 inches with a wall thickness of Schedule-80 or greater as specified by ASTM, or equivalent.

Suggested amendatory language:

(C) The pipe (if needed) shall be designed under the direction of an appropriately trained professional, or if a design is not prepared, the minimum diameter of the perforated pipe shall be 4 inches with a wall thickness of Schedule-80 or greater as specified by ASTM, or equivalent.

(D) The pipes shall be cleaned and maintained as necessary to ensure the effectiveness of the system.

(x) A minimum bottom slope of 2%.

Suggested amendatory language:

(x) A minimum bottom slope of 1%.

(xi) Designed to allow the operator to monitor and record leakage rates.

(xii) Not contain carbonate stones or aggregate with sharp edges.

Comment:

The waters handled in the oil and gas industry are typically pH neutral and would not affect a carbonaceous aggregate. For an oil and gas impoundment, detection zone problems can be repaired because the contents are not permanently stored. Therefore, it is recommended that this proposed subsection be deleted.

Suggested amendatory language:

Delete subsection (3)(xii).

(4) A primary liner that meets the following:

(vi) Installed according to manufacturer's specifications under the supervision of an authorized representative of the manufacturer. A Department approved quality assurance and quality control plan shall be implemented in the field during the installation of the liner.

Suggested amendatory language:

(vi) Installed according to manufacturer's specifications under the supervision of an appropriately trained professional. A Department approved quality assurance and quality control plan shall be implemented in the field during the installation of the liner.

(4) If during the groundwater elevation study, soil mottling is apparent within the intended confines of the impoundment or within 20 inches of its base, or if the seasonal high water table will be adjusted using engineering controls in order to accommodate the impoundment, the requirements of 289.121-123 (relating to description of geology, soils and hydrology; general requirements; geology and groundwater description; and groundwater quality description) shall be followed and the groundwater monitoring period must be extended to four quarterly tests.

Suggested amendatory language:

(4) If during the groundwater elevation study, groundwater elevation determined by surface water or wells, or soil mottling in the absence of surface water or well data, is apparent within the intended confines of the impoundment or within 20 inches of its base, or if the seasonal high water table will be adjusted using engineering controls in order to accommodate the impoundment, the requirements of §§ 289.121-123 (relating to description of geology, soils and hydrology; general requirements; geology and groundwater description; and groundwater quality description) shall be followed and the groundwater elevations data must be collected within the first five months of the year.

(5) Only passive drainage systems that lower the seasonal high water table and do not alter the supply of receiving water bodies or downgradient groundwater users may be utilized to adjust the seasonal high groundwater table.

(g) An operator that operates a centralized impoundment shall install, operate and maintain a water quality monitoring system that can detect the entry of regulated substances into the groundwater or surface water. The water quality monitoring system shall accurately characterize groundwater flow, groundwater chemistry and flow systems on the site and adjacent area. The system shall include the following:

Comment:

The requirements in Subsection 78.59c(g) below would prevent the use of Best Available Technology. Due to the size of centralized impoundments (approximately 4 acres or less), a drainage layer beneath the impoundment with discrete monitoring points would provide complete coverage, provide leak information in the shortest possible time, and could be used as a control.

Suggested amendatory language:

(g) An operator that operates a centralized impoundment shall install, operate and maintain a water quality monitoring system that can detect the entry of substances contained in the impoundment into the groundwater or surface water. The water quality monitoring system shall accurately characterize groundwater flow, groundwater chemistry and flow systems on the site and adjacent area. The system shall include the following:

(i) Monitoring wells and casing of monitoring wells shall be constructed as follows:

(2) The minimum casing diameter shall be 4 inches unless otherwise approved by the Department in writing.

Comment:

A 2-inch diameter pipe is often used for groundwater monitoring wells. BOCI recommends that the minimum well diameter be changed to 2-inches.

Suggested amendatory language:

(2) The minimum casing diameter shall be 2 inches unless otherwise approved by the Department in writing

(4) Monitoring well casings shall be enclosed in a protective casing that shall:

(ii) Be installed for at least the upper 10 feet of the monitoring well, as measured from the well cap, with a maximum above grade surface of 3 feet, unless otherwise approved by the Department in writing.

Comment:

Considering that conditions are often encountered where 10 feet of casing cannot be installed, this requirement should be removed. Guidance could be included in the Department's policy document for well construction.

Suggested amendatory language:

Delete subsection (4)(ii).

(n) Centralized impoundments shall be restored according to the following requirements:

(2) The site shall be restored to approximate original conditions including preconstruction contours.

Comment:

Such sites should be restored in accordance with approved site restoration plans.

Suggested amendatory language:

Delete subsection (2).

(3) The site shall support the land uses that existed prior to oil and gas activities to the extent practicable.

Suggested amendatory language:

(3) The site shall support the land uses that existed prior to construction of the impoundment to the extent practicable.

(4) Excavated impoundments shall be backfilled above finished grade to allow for settlement and so the impoundment will no longer impound water.

Suggested amendatory language:

(4) During impoundment reclamation, backfill shall be placed to promote positive post-settlement drainage.

§ 78.61. Disposal of drill cuttings

(a) *Drill cuttings from above the casing seat—pits.* The owner or operator may dispose of ~~and~~ cuttings from above the casing seat determined in accordance with § 78.83 [(b)](c) (relating to surface and coal protective casing and cementing procedures) in a pit at the well site if the owner or operator satisfies the following requirements:

(1) The drill cuttings are generated from the well at the well site.

(2) The drill cuttings are not contaminated with [pollutional material] **a regulated substance**, including brines, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids or drilling fluids other than tophole water, fresh water or gases.

Suggested amendatory language:

(2) The drill cuttings are not contaminated with brines, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids or drilling fluids other than tophole water, fresh water or gases.

(b) *Drill cuttings from above the casing seat—land application.* The owner or operator may dispose of drill cuttings from above the casing seat determined in accordance with § 78.83 [(b)](c) by land application at the well site if the owner or operator satisfies the following requirements:

(1) The drill cuttings are generated from the well at the well site.

(2) The drill cuttings are not contaminated with [pollutional material] **a regulated substance**, including brines, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids or drilling fluids other than tophole water, fresh water or gases.

Suggested amendatory language:

(2) The drill cuttings are not contaminated with brines, drilling muds, stimulation fluids, well servicing fluids, oil, production fluids or drilling fluids other than tophole water, fresh water or gases.

§ 78.64a Containment systems and practices at unconventional

well sites.

(b) Well sites shall be designed and constructed using containment systems and practices that prevent spills of regulated substances to the ground surface and to prevent spills from leaving the well site.

(c) All regulated substances, including solid wastes and other regulated substances in equipment or vehicles, shall be managed within a containment system. This subsection does not apply to fuel stored in equipment or vehicle fuel tanks unless the equipment or vehicle is being refueled at the well site.

Suggested amendatory language:

(b) Well sites shall be designed and constructed using containment systems and practices that prevent spills to the ground surface and to prevent spills from leaving the well site during drilling and hydraulic fracturing operations.

(c) Containment systems shall be used when drilling mud, hydraulic oil, diesel fuel, drilling mud additives, hydraulic fracturing additives, or hydraulic fracturing flowback are stored on an unconventional well site. This subsection does not apply to fuel stored in equipment or vehicle fuel tanks unless the equipment or vehicle is being refueled at the well site.

(d) Pits and centralized impoundments that comply with this Chapter are deemed to meet the requirements of this section.

(e) Containment systems must meet all of the following:

Suggested amendatory language

(g) Unless otherwise approved by the Department, containment systems must meet all of the following:

(1) Be used on the well site when any equipment that will be used for any phase of drilling, casing, cementing, hydraulic fracturing or flowback operations is brought onto a well site and when regulated substances including drilling mud, drilling mud additives, hydraulic oil, diesel fuel, hydraulic fracturing additives or flowback are brought onto or generated at the well site.

Comment:

This proposed subsection is overly broad (e.g., it would apply to cement in cement trucks) and conflicts with Act 13, Section 3218.2, which provides a specified list of materials that require storage in containment systems. The subsection is unnecessary because it is redundant with revised subsection (b) and (c) above.

Suggested amendatory language:

Delete subsection (e)(1).

(2) Have a coefficient of permeability no greater than 1×10^{-10} cm/sec.

(3) The physical and chemical characteristics of all liners, coatings or other materials used as part of the containment system, that could potentially come into direct contact with regulated substances being stored, must be compatible with the regulated substance and be resistant to physical, chemical and other failure during handling, installation and use. Liner compatibility shall satisfy ASTM Method D5747 Compatibility Test for Wastes and Membrane Liners or other standards as approved by the Department.

Suggested amendatory language:

(3) The physical and chemical characteristics of all liners, coatings or other materials used as part of the containment system, that could potentially come into direct contact with the listed materials being stored, must be compatible with the materials and be resistant to physical, chemical and other failure during handling, installation and use. Liner compatibility shall satisfy ASTM Method D5747, ASTM D543, or other standards as approved by the Department.

(f) Secondary containment: An operator shall utilize secondary containment when storing additives, chemicals, oils or fuels. The secondary containment must have sufficient containment capacity to hold the volume of the largest container within the secondary containment area plus 10% to allow for precipitation, unless the container is equipped with individual secondary containment such as a double walled tank. Tanks that are manifolded together shall be designed in a manner to prevent the uncontrolled discharge of multiple manifolded tanks. A well site liner that is not used in conjunction with other containment systems does not constitute secondary containment for the purpose of this subsection.

Comment:

Per 3218.2(d) of Act 13, there is no mandatory secondary containment requirement when storing additives, chemicals, oils or fuels. We recommend striking the first sentence because it is unnecessary and redundant with revised subsection(c) above.

Suggested amendatory language:

(f) Areas where additives, chemicals, oils or fuels are to be stored must have sufficient containment capacity to hold the volume of the largest container stored in the area plus 10% to allow for precipitation, unless the container is equipped with individual secondary containment such as a double walled tank. Tanks that are manifolded together shall be designed in a manner to prevent the uncontrolled discharge of multiple manifolded tanks. A well site liner that is not used in conjunction with an impervious berm does not constitute secondary containment for the purpose of this subsection.

(g) Subsurface secondary containment systems may be employed at the well site. Subsurface secondary containment shall meet the following requirements:

Suggested amendatory language

(g) Subsurface secondary containment systems may be employed at the well site. Unless otherwise approved by the Department, subsurface secondary containment shall meet the following requirements:

(4) Not be used to store regulated substances.

Suggested amendatory language:

Delete subsection (g)(4).

(5) A written Standard of Operational Procedure for the inspection, maintenance and repair of the subsurface secondary containment system shall be included in the preparedness, prevention and contingency plan.

(h) All surface containment systems shall be inspected weekly to ensure integrity. If the containment system is damaged or compromised, the well operator shall repair the containment system as soon as practicable. The well operator shall maintain records of any repairs until the well site is restored. Stormwater shall be removed as soon as possible and prior to the capacity of secondary containment being reduced by 10% or more.

Suggested amendatory language for the last sentence of (h):

(h) Stormwater shall be removed as soon as practicable and prior to the capacity of secondary containment being reduced by 10% or more.

(i) Regulated substances that escape from primary containment or are otherwise spilled onto a containment system shall be removed as soon as possible. After removal of the regulated substances the operator shall inspect the containment system. A Department approved leak detection system capable of rapidly detecting a leak shall satisfy the requirement to inspect the integrity of a subsurface containment system. Groundwater monitoring wells shall not constitute a leak detection system for the purpose of this subsection. If the containment system did not completely contain the material, the operator shall notify the Department and remediate the affected area in accordance with §78.66.

Suggested amendatory language:

(i) Substances that escape from primary containment or are otherwise spilled onto a containment system shall be removed as soon as possible. After removal of the substances, the operator shall inspect the containment system. A Department approved leak detection system capable of rapidly detecting a leak shall satisfy the requirement to inspect the integrity of a subsurface containment system. Groundwater monitoring wells shall not constitute a leak detection system for the purpose of this subsection. If more than five gallons of a substance escapes the containment system, the operator shall notify the Department in accordance with § 78.66 as applicable.

(j) Stormwater that comes into contact with regulated substances stored within the secondary containment area shall be managed as residual waste.

Comment:

Stormwater that has not been discharged or discarded is not residual waste. This subsection is unnecessary.

Suggested amendatory language:

Delete the subsection (j)

(k) Inspection reports and maintenance records shall be available at the well site for review by the Department.

Suggested amendatory language:

(k) Inspection reports and maintenance records shall be available for review upon request by the Department.

§ 78.65. Site restoration.

(g) The well operator shall forward a copy of the well site restoration report to the surface landowner if the well operator disposes of drill cuttings or residual waste at the well site.

Comment:

BOCI recommends that the well pad restoration section be clarified to emphasize a site restoration plan as the governing document that addresses PCSM and the restoration requirements provided in Sections 3216(c) and (d) of Act 13.

Requests for extension that include the information described in Act 13 should be approved, denied, or deemed to be approved within 90 days of submission to the Department. The regulation should be structured to allow for renewable two year extensions of the restoration deadline provided the site restoration plan and appropriate PCSM measures are fully implemented. This extension process is critical to avoid unnecessary earthmoving activities for reconstruction of a well pad should an operator plan to drill and produce additional wells on the same pad location at some later time in the future.

Suggested amendatory language:

a. Site Restoration Plan

Site restoration plan – meets the requirements of 25 Pa. Code Chapter 102 sections 102.8(b), (c), (e), (f), (h), (i), (l) and (m), if applicable, and Section 3216 of Act 13. The plan addresses interim site restoration required after completion of drilling and final restoration of the well site after all wells have been plugged.

Each restoration phase of the plan shall provide for:

- i. The timely removal or fill of all pits used to contain produced fluids or residual wastes;
- ii. The removal of all drilling supplies and equipment not needed for production, including containment systems; and
- iii. Site appropriate BMPs including a BMP which minimizes accelerated erosion and sedimentation, and other measures to be employed to minimize accelerated erosion and sedimentation in accordance with The Clean Streams Law.

b. General

- (1) The owner or operator shall restore the land surface within the area disturbed during siting, drilling, completing and producing a well.
- (2) A drill hole or bore hole used to facilitate the drilling of a well shall be filled with cement, soil, uncontaminated drill cuttings or other earthen material before moving the drilling equipment from the well site.
- (3) If a well site is constructed and a well is not drilled, the well site shall be restored within 30 calendar days after the expiration of the well permit unless the Department approves an extension in accordance with Section 3216(g) of the Act.

c. Site Restoration Implementation

- (1) An area is restored under this subsection if the following are met:
 - i. All PCSM BMPs identified in the site restoration plan are installed and properly maintained.
 - ii. Remaining impervious areas are minimized, including areas where soil amendments have been added to harden the soil or are underlain with an impermeable liner.
 - iii. Earth disturbance associated with oil and gas activities that are not included in an approved site restoration plan, and other remaining impervious surfaces, shall comply with applicable post construction stormwater management requirements in 25 Pa. Code Chapter 102.
 - iv. The site is permanently stabilized according to 25 Pa. Code § 102.22(a).

d. Interim restoration after drilling

- (1) Within nine (9) months after completion of drilling a well, the owner or operator shall restore the well site according to the approved restoration plan. When multiple wells are drilled on a single well site, post-drilling restoration is required within nine months after completion of drilling all permitted wells on the well site or 30 days after the expiration of all existing well permits on the well site, whichever occurs later in time. Drilling supplies and equipment not needed for production may be stored on the well site.

when express written consent of the surface landowner is obtained and the supplies or equipment are maintained in accordance with § 78.64a, where applicable.

e. Extension of site restoration period after drilling

(1) The restoration period may be extended by the Department for additional periods of time, not to exceed two years each, upon demonstration by the well owner or operator that:

- i. The extension will result in less earth disturbance, increased water reuse or more efficient development of the resources; or
- ii. Site restoration cannot be achieved due to adverse weather conditions or a lack of essential fuel, equipment or labor.

(2) The demonstration under 78.65(e)(1) shall:

- i. Be submitted within six (6) months after the completion of drilling for approval by the Department.
- ii. Include a site restoration plan that provides for:
 - (A) the timely removal or fill of all pits used to contain produced fluids or industrial wastes;
 - (B) the removal of all drilling supplies and equipment not needed for production;
 - (C) the stabilization of the well site that shall include interim postconstruction storm water management best management practices; or
 - (D) other measures to be employed to minimize accelerated erosion and sedimentation in accordance with The Clean Streams Law.
- iii. Provide for returning the portions of the site not occupied by production facilities or equipment to approximate original contours and making them capable of supporting the uses that existed prior to drilling the well upon restoration.

(3) Requests for extension that include the information described in (e)(2) above will be approved, denied, or deemed to be approved within 90 days of submission to the Department.

f. Restoration after plugging all wells on well site

1. Within nine (9) months after plugging a well, the owner or operator shall remove all production or storage facilities, supplies and equipment and restore the well site according to the approved site restoration plan.
2. Within sixty (60) days after restoration of the well site, the operator shall submit a well site restoration report to the Department. The report shall be made on forms provided by the Department and shall identify the following:
 - i. The date of land application of any topsoil water, the results of pH and specific conductance tests and an estimated volume of discharge.

- ii. A description of the method used for disposal or reuse of the free liquid fraction of the waste, and the name of the hauler and disposal facility, if any.
 - iii. The location, including GPS coordinates, of the pit in relation to the well, the depth of the pit, the type and thickness of the material used for the pit subbase, the type and thickness of the pit liner, the type and nature of the waste, the type of an approved solidifier, a description of the pit closure procedures used and the pit dimensions.
 - iv. The location of the area used for land application of the waste, and the results of a chemical analysis of the waste soil mixture if requested by the Department.
 - v. The types and volumes of waste produced and the name and address of the waste disposal facility and waste hauler used to dispose of the waste.
 - vi. The name, qualifications and basis for determination that the bottom of a pit used for encapsulation is at least 20 inches above the seasonal high groundwater table.
 - vii. The test results required by §§ 78.62 and 78.63 for all unconventional wells or any conventional wells with a horizontal well bore.
3. The well operator shall forward a copy of the well site restoration report to the surface landowner if the well operator disposes of drill cuttings or residual waste at the well site.

§ 78.66. Reporting and remediating releases.

Suggested amendatory language:

§ 78.66. Reporting and remediating spills or releases.

(ii) A spill or release of 5 gallons or more of a regulated substance over a 24-hour period that is not completely contained by a containment system.

Suggested amendatory language:

(b) Reporting releases -

(1) An operator or responsible party shall report the following spills and releases to the Department in accordance with paragraph (2):

(i) A spill or release resulting or causing a danger of pollution of the waters of this Commonwealth as required by § 91.33 (relating to incidents causing or threatening pollution); or

(ii) A spill or release of 5 gallons or more of brine over a 24-hour period that is not completely contained by a containment system.

(2) In addition to the notification requirements of 25 Pa. Code § 91.33, the operator or responsible party shall contact the appropriate regional Department office by telephone or call the Department's statewide toll free number 1-800-541-2050 as soon as practicable, but no later than 2 hours after discovering the spill or release. To the extent known, the following information shall be provided:

(i) The name of the person reporting the incident and telephone number where that person can be reached.

(ii) The name, address and telephone number of the responsible party.

(iii) The date and time of the incident or when it was discovered.

(iv) The location of the incident, including directions to the site, GPS coordinates or the 911 address, if available.

(v) A brief description of the nature of the incident and its cause, what potential impacts to public health and safety or the environment may exist, including any available information concerning the contamination of surface water, groundwater or soil.

(vi) The estimated weight or volume of each regulated substance spilled or released.

(vii) The nature of any injuries.

(viii) Remedial actions planned, initiated or completed.

Suggested amendatory language:

(2) In addition to the notification requirements of 25 Pa. Code § 91.33, the operator or responsible party shall contact the appropriate regional Department office by telephone or call the Department's statewide toll free number 1-800-541-2050 as soon as practicable, but no later than 2 hours after discovering the spill or release. To the extent known, the following information shall be provided:

(i) The name of the person reporting the incident and telephone number where that person can be reached.

(ii) The name, address and telephone number of the responsible party.

(iii) The date and time of the incident or when it was discovered.

(iv) The location of the incident, including directions to the site, GPS coordinates or the 911 address, if available.

(v) A brief description of the nature of the incident and its cause, what potential impacts to public health and safety or the environment may exist, including any available information concerning impacts to surface water, groundwater or soil.

(vi) The estimated weight or volume of the substance spilled or released.

(vii) The nature of any injuries.

(viii) Remedial actions planned, initiated or completed.

(3) Upon the occurrence of any spill or release, the operator or responsible party shall take necessary corrective actions to:

(i) Prevent the regulated substance from reaching the waters of the Commonwealth.

(ii) Prevent damage to property.

(iii) Prevent impacts to downstream users of waters of the Commonwealth.

Suggested amendatory language:

(3) Upon the occurrence of any spill or release, the operator or responsible party shall take appropriate action to:

(i) Prevent the substance from reaching the waters of the Commonwealth.

(ii) Prevent damage to property.

(iii) Prevent impacts to downstream users of waters of the Commonwealth.

(4) The Department may immediately approve temporary emergency storage or transportation methods necessary to prevent or mitigate harm to the public health, safety or the environment. Storage may be at the site of the incident or at a site approved by the Department.

Suggested amendatory language:

(4) The Department shall not require a permit or other formal authorization for temporary remediation methods necessary to prevent or mitigate harm to the public health, safety or the environment. Treatment and storage may be at the site of the incident or at an alternative appropriate site. The operator or responsible party shall promptly notify the Department if treatment or storage will take place at a location that is not the site of the incident.

(5) After responding to a spill or release, the operator shall decontaminate equipment used to handle the regulated substance, including storage containers, processing equipment, trucks and loaders, before returning the equipment to service. Contaminated wash water, waste solutions and residues generated from washing or decontaminating equipment shall be managed as residual waste.

Suggested amendatory language:

(5) After responding to a spill or release, the operator shall decontaminate equipment, including storage containers, processing equipment, trucks and loaders, where necessary and appropriate, before returning the equipment to service,

(c) Remediating releases - Remediation of an area affected by a spill or release is required. The operator or responsible party must remediate a release in accordance with one of the following:

(1) Spills or releases to the ground of less than 42 gallons at a well site that do not impact or threaten to pollute waters of the Commonwealth may be remediated by removing the soil visibly impacted by the release and properly managing the impacted soil in accordance with the Department's waste management regulations. The operator or responsible party shall notify the Department of its intent to remediate a spill or release in accordance with this paragraph at the time the report of the spill or release is made. Completion of the cleanup should be documented through the process outlined in 25 Pa.Code § 250.707(b)(1)(iii)(B) (relating to statistical tests).

Suggested amendatory language:

(1) Spills or releases to the ground of less than 42 gallons at a well site that do not impact or threaten to pollute waters of the Commonwealth may be remediated by removing the soil visibly impacted by the release and properly managing the impacted soil in accordance with the Department's waste management regulations. The operator or responsible party shall notify the Department of its intent to remediate a spill or release in accordance with this paragraph at the time a report of the spill or release is made or thereafter when such a determination is made.

§ 78.68. Oil and gas gathering lines.

(a) All earth disturbance activities associated with oil and gas gathering line installations and supporting facilities shall be limited to the construction right-of-way, work space areas, pipe storage yards, borrow and disposal areas, access roads and other necessary areas identified on the erosion and sediment control plan.

Comment:

The Department's proposed language in this subsection would not be necessary in light of BOCI's proposed change to Section 78.53 above. Gathering line construction is an "oil and gas operation", as defined in Act 13, and erosion and sediment control requirements for oil and gas operations are addressed in Section 78.53.

Suggested amendatory language:

Delete Subsection 78.68(a).

(d) Backfilling of the gathering line trench shall be conducted in a manner that minimizes soil compaction to ensure that water infiltration rates of the soil have not been decreased.

Suggested amendatory language:

(d) Backfilling of the gathering line trench shall be conducted in a manner that minimizes soil compaction to ensure that vegetative growth can be established during restoration.

(f) Materials staging areas shall be outside of a jurisdictional floodway of any watercourse or greater than 50 feet from any body of water.

Suggested amendatory language:

(f) Materials staging areas shall be outside of a jurisdictional floodway of any watercourse or greater than 50 feet from any body of water, unless an alternative plan is approved by the Department.

(g) The gathering line operator shall maintain the pipeline right-of-way, service roads and points of access to minimize the potential for accelerated erosion and sedimentation and to manage post construction stormwater and minimize impacts to existing riparian buffers in accordance with 25 Pa. Code Chapter 102.

Suggested amendatory language:

Delete subsection 78.68(g).

(h) All buried metallic gathering lines shall be installed and placed in operation in accordance with 49 CFR Pt. 192 or 195 (relating to transportation of natural and other gas pipeline; minimum Federal safety standards; and transportation of hazardous liquids by pipeline).

Comment:

This paragraph should be revised to only reference the relevant corrosion control aspects of the Federal regulations, consistent with Act 13.

Suggested amendatory language:

(h) All buried metallic gathering lines shall be installed and placed in operation in accordance with 49 CFR 192, Subpart I, or 49 CFR 195, Subpart H (relating to corrosion control)

§ 78.68a. Horizontal directional drilling for oil and gas pipelines.

(a) Any horizontal directional drilling associated with pipeline construction related to oil and gas operations, including gathering and transmission pipelines, that occurs beneath any body of water or watercourse must be authorized by the Department in accordance with 25 Pa. Code Chapters 102 (relating to erosion and sediment control) and Chapter 105 (relating to dam safety and waterway management).

Suggested amendatory language:

(a) Any horizontal directional drilling that is associated with construction of oil and gas pipelines, including gathering and transmission pipelines, that occurs beneath any body of water or watercourse must be authorized by the Department in accordance with 25 Pa. Code Chapter 105 (relating to dam safety and waterway management).

(b) Prior to commencement of any horizontal directional drilling activity, the directional drilling operator shall develop a PPC plan pursuant to 25 Pa. Code § 102.5(l) (relating to permit requirements). The PPC plan shall include a site specific contingency plan that describes the measures to be taken to control, contain and collect any discharge of drilling fluids and minimize impacts to waters of the Commonwealth. The PPC plan must be present on site during drilling operations and made available to the Department upon request.

Comment:

This provision is redundant of the Department's proposed Section 78.55(a), which would apply to all "oil and gas operations", as defined.

Suggested amendatory language:

Delete subsection 78.68a(b).

(e) Materials staging areas shall be outside of a floodway, as that term is defined in 25 Pa. Code Chapter 105, of any watercourse or greater than 50 feet from any body of water.

Suggested amendatory language:

(e) Unless an alternative plan is approved by the Department, materials staging areas for horizontal directional drilling operations shall be outside of a floodway, as that term is defined in 25 Pa. Code Chapter 105, of any watercourse or greater than 50 feet from any body of water.

(g) Horizontal directional drilling operations shall be monitored for pressure and loss of drilling fluid returns. Bodies of water and watercourses over and adjacent to horizontal directional drilling operations shall also be monitored for any signs of drilling fluid discharges. Monitoring shall be in accordance with the PPC Plan.

Suggested amendatory language:

(g) Horizontal directional drilling operations shall be monitored for pressure and loss of drilling fluid returns. Bodies of water and watercourses over and adjacent to horizontal directional drilling operations shall also be monitored for any signs of drilling fluid discharges. Monitoring for signs of drilling fluid discharge shall be in accordance with the PPC Plan.

(h) Horizontal directional drilling activities shall not result in a discharge of drilling fluids to waters of the Commonwealth. If a discharge occurs during horizontal directional drilling activities, the drilling operator shall immediately implement the contingency plan developed pursuant to subsection (b).

Suggested amendatory language:

If a discharge of drilling fluids to waters of the Commonwealth occurs during horizontal drilling activities, the drilling operator shall immediately implement the contingency plan portion of the site-specific PPC plan.

(i) When a drilling fluid discharge or loss of drilling fluid circulation is discovered, the loss or discharge shall be immediately reported to the Department, and the operator shall request an emergency permit under 105.64 (relating to emergency permits), if necessary.

Comment:

It may not be practical or reasonable to report all "loss of drilling fluid circulation", particularly when the fluid does not come to the surface.

Suggested amendatory language:

(i) When a drilling fluid discharge is discovered, the operator shall request an emergency permit under 105.64 (relating to emergency permits), if necessary.

(k) Horizontal directional drilling fluid returns and drilling fluid discharges shall be contained, stored and recycled or disposed of in accordance with Part I, Subpart D, Article IX (relating to residual waste management).

Comment:

BOCI supports the beneficial reuse of drilling fluid, and requests that provisions for such be included in the proposed subsection.

Suggested amendatory language:

(k) Horizontal directional drilling fluid returns and drilling fluid discharges shall be contained, stored and recycled or disposed or beneficially reused in accordance with Part I, Subpart D, Article IX (relating to residual waste management).

§ 78.68b. Temporary pipelines for oil and gas operations.

Suggested amendatory language:

§ 78.68b. Temporary pipelines.

(a) Temporary pipelines must meet applicable requirements in Chapters 102 and 105 (relating to erosion and sediment control; dam safety and waterway management).

Suggested amendatory language:

(a) Temporary pipelines must meet applicable requirements in Chapter 105 (relating to dam safety and waterway management).

(b) Temporary pipelines that transport fluids other than fresh ground water, surface water, water from water purveyors or approved sources, shall be installed aboveground except when crossing pathways, roads or railways where the pipeline may be installed below ground surface.

Comment:

There are instances where it may be more practical and/or less invasive to cross watercourses and/or bodies of water below ground surface.

Suggested amendatory language:

(b) Temporary pipelines that transport fluids other than fresh ground water, surface water, water from water purveyors or approved sources, shall be installed aboveground except when crossing pathways, roads, railways, watercourses, or bodies of water where the pipeline may be installed below ground surface.

(c) Temporary pipelines cannot be installed through existing stream culverts, storm drain pipes or under bridges without approval by the Department pursuant to § 105.151 (relating to permit application for construction or modification of culverts and bridges).

Comment:

There may be instances where culverts, casing, or apparatuses which could be construed as culverts were previously installed for the specific purpose of installing temporary piping across impediments.

Also, with respect to bridges, language should be added to clarify that this applies only to bridges over water (i.e. bridges subject to 25 Pa. Code Chapter 105, Subchapter C).

Suggested amendatory language:

(c) Temporary pipelines cannot be installed through existing stream culverts, storm drain pipes or under bridges subject to Chapter 105, Subchapter C, without approval by the Department pursuant to § 105.151 (relating to permit application for construction or modification of culverts and bridges); except where such structures were previously specifically installed for this purpose.

(d) The section of a temporary pipeline crossing over a watercourse or body of water, except wetlands, shall not have joints or couplings. Temporary pipeline crossings over wetlands shall utilize a single section of pipe to the extent practicable. Shut off valves shall be installed on both sides of the temporary crossing.

Comment:

There may be instances where the width of a stream exceeds the length of a section of temporary pipe, thus a joint or coupling may be required to install the crossing.

Suggested amendatory language:

(d) The section of a temporary pipeline crossing over a watercourse or body of water, except wetlands, shall have the minimum number of joints or couplings. Temporary pipeline crossings over wetlands shall utilize a single section of pipe to the extent practicable. Shut off valves shall be installed on both sides of the temporary crossing.

(f) Highly visible flagging shall be placed at regular intervals, no greater than 75 feet, along the entire length of the temporary pipeline.

Suggested amendatory language:

(f) Highly visible flagging, or other alternative marking method approved by the Department, shall be placed at regular intervals, no greater than 75 feet, along the entire length of the temporary pipeline.

(g) Temporary pipelines shall be pressure tested prior to being first placed into service and after the pipeline is moved or altered. A passing test is holding 125% of the anticipated maximum pressure for two hours. Leaks or other defects discovered during pressure testing shall be repaired prior to use.

Suggested amendatory language:

(g) Temporary pipelines shall be pressure tested prior to being first placed into service and after the pipeline is moved or altered. For temporary pipelines that transport fluids other than fresh ground water, surface water, water from water purveyors or approved sources, a passing test is holding 125% of the anticipated maximum pressure for two hours. Leaks or other defects discovered during pressure testing shall be repaired prior to use.

(j) Temporary pipelines not in use for more than 7 calendar days shall be emptied and depressurized.

Suggested amendatory language:

(j) Temporary pipelines not in use for more than 7 calendar days shall be emptied or depressurized.

(m) An operator must keep records regarding the location of all temporary pipelines, the type of fluids transported through those pipelines, and the approximate period of time that the pipeline was installed. Such records must be made available to the Department upon request.

Suggested amendatory language:

(m) An operator must keep records regarding the location of all temporary pipelines, the type of fluids transported through those pipelines, and the approximate period of time that the pipeline was in use. These records should be kept for the duration of the use of the pipeline and for a period of one (1) year after the end of use. Such records must be made available to the Department upon request.

§78.69. Water management plans.

(a) WMPs for unconventional well operators. An unconventional well operator shall obtain a Department approved WMP under section 3211 (m) of the act (relating to well permits) prior to withdrawal or use of water sources for drilling or completing an unconventional well.

Comment:

Language noting that a water management plan is not needed for water source locations outside of Pennsylvania should be added. The section title should also

modified to make it clear that the entire Section 78.69 only applies to unconventional well operators.

Suggested amendatory language:

§78.69. Water management plans for unconventional well operators.

(a) *WMPs for unconventional well operators.* An unconventional well operator shall obtain a Department approved WMP under 3211(m) of the act (relating to well permits) prior to withdrawal or use of water sources from within this Commonwealth for drilling or completing an unconventional well.

(b) Implementation. The requirements imposed by the Susquehanna River Basin Commission pertaining to:

(1) posting of signs at water withdrawal locations.

(2) monitoring of water withdrawals or purchases.

(3) reporting of withdrawal volumes, in-stream flow measurements and water source purchases and.

(4) record keeping shall be implemented in the Ohio River Basin. Reports required in all river basins of the Commonwealth shall be submitted electronically to the Department.

Comment:

The SRBC "requirements" that the Department would impose under this section are ambiguous as written. Some SRBC requirements are part of individual water withdrawal docket conditions and could not be implemented outside of the SRBC. In addition, the Department would impose conditions on water withdrawals or purchases solely by this industry in the Ohio River basin without imposing such conditions on other industries withdrawing or purchasing water.

Suggested amendatory language:

Delete section 78.69(b).

(c) Reuse plan. An unconventional well operator submitting a WMP application shall develop a reuse plan for fluids that will be used to hydraulically fracture wells. A wastewater source reduction strategy in compliance with 25 Pa. Code Chapter 95.10(b) will satisfy the reuse plan requirement. An unconventional well operator shall make the reuse plan available for review by the Department upon request.

(d) When applicable, the requirements of this section are presumed to be achieved for those portions of a WMP for which there is an approval from the Susquehanna River Basin Commission, the Delaware River Basin Commission or the Great Lakes Commission. Nothing in this subparagraph shall effect the requirement in (a) for a WMP approved by the Department.

Comment:

A process for amending WMPs should be added to this section.

Suggested amendatory language:

NEW (e) *Amendments*. Amendments to an approved water source in a WMP may be submitted during the 5 year term for withdrawal or use of the approved water source, on forms provided by the Department. Such amendments will be considered valid if no response from the Department is received within 30 days of receipt of submission of the form requesting the amendment.

(e) Expiration. Individual water sources within a WMP are valid for 5 years.

(f) Renewal. A WMP renewal application shall be submitted at least 6 months prior to the expiration of the 5 year term for withdrawal or use of a water source under a WMP.

Comment:

Proposed Subsections 78.69(e) and (f) should be revised to allow for the administrative extension of individual water sources within a WMP where the operator has submitted a timely renewal application, in the event that the Department does not act in a manner to renew the individual water source before the 5 year expiration date.

Additionally, a phase-in period of 6 months from the effective date of the final regulation should be added to the proposed renewal subsection (f) for water sources approved under a WMP.

Suggested amendatory language:

(e) *Expiration*. Individual water sources within a WMP are valid for 5 years, unless the approval to use the individual water source is administratively extended or renewed.

(f) *Renewal and Extension*. A renewal application for individual water sources within a WMP shall be submitted at least 6 months prior to the expiration of the 5 year term for withdrawal or use of the individual water source. If the Department does not act upon a timely submittal of a renewal application by the WMP holder within the 5 year term, the approval of the individual water source is deemed to be administratively extended until such time as the Department acts on the unconventional well operator's renewal application for that individual water source. This subsection shall go into effect 6 months after the effective date of the final regulation.

(g) Suspension and revocation. The Department may suspend or revoke an approved water source within a WMP for failure to comply with the WMP or for any reasons contained in sections 3252, 3259 and 3211(m) of the act (58 Pa. C.S. §§ 3252, 3259, 3211(m)).

(i) Denial. The Department may deny approval of a WMP for any of the following reasons:

(1) The WMP application is administratively incomplete.

(2) The WMP will adversely affect the quantity or quality of water available to other users of the same water sources.

(3) The WMP will not protect and maintain the designated and existing uses of the water sources.

(4) The WMP will cause an adverse impact to water quality in the watershed as a whole.

Suggested amendatory language:

(i) The Department shall review and approve water management plans based upon a determination that the proposed withdrawal, when operated in accordance with the proposed withdrawal operating conditions set forth in the plan, including conditions relating to quantity, withdrawal rate and timing and any passby flow conditions, will:

- (1) Not adversely affect the quantity or quality of water available to other users of the same water sources;
- (2) Protect and maintain the designated and existing uses of water sources;
- (3) Not cause adverse impact to water quality in the watershed considered as a whole; and
- (4) Include a reuse plan for fluids that will be used to hydraulically fracture wells,

The Department shall notify an operator in writing if it has denied an operator's application for the withdrawal or use of a water source for inclusion in the operator's WMP.

§ 78.73. General provision for well construction and operation.

(a) The operator shall construct and operate the well in accordance with this chapter and ensure that the integrity of the well is maintained and health, safety, environment and property are protected.

(b) The operator shall prevent gas, oil, brine, completion and servicing fluids, and any other fluids or materials from below the casing seat from entering fresh groundwater, and shall otherwise prevent pollution or diminution of fresh groundwater.

(c) Orphaned or abandoned wells identified pursuant to section 78.52a that likely penetrate a formation intended to be stimulated shall be visually monitored during stimulation activities. The operator shall immediately notify the Department of any change to the orphaned or abandoned well being monitored and take action to prevent pollution of waters of the Commonwealth or discharges to the surface.

Suggested amendatory language:

(c) Orphaned or abandoned wells in the vicinity of a well which is hydraulically fractured that are identified pursuant to section 78.52a and that can be located on the ground using reasonable efforts shall be monitored during periods of actual fluid pumping operations, provided that surface access to such wells can be obtained. Such monitoring shall include a visual inspection

of the well at least every four hours, or following each stage of hydraulic fracturing, whichever is shorter, or other monitoring arrangement approved by the Department. The operator shall immediately notify the Department of any change to the well being monitored and take action to prevent pollution of waters of the Commonwealth or discharges to the surface.

(9) The freshwater and centralized impoundment, if any, used in the development of the well.

(c) When the well operator submits a stimulation record, it may designate specific portions of the stimulation record as containing a trade secret or confidential proprietary information. The Department will prevent disclosure of the designated confidential information to the extent permitted under the Right-to-Know Law (65 P. S. §§ 67.101—67.3103) **or other applicable state law.**

[(d) In addition to submitting a stimulation record to the Department under subsection (b), and subject to the protections afforded for trade secrets and confidential proprietary information under the Right-to-Know Law, the operator shall arrange to provide a list of the chemical constituents of the chemical additives used to hydraulically fracture a well, by chemical name and abstract service number, unless the additive does not have an abstract service number, to the Department upon written request by the Department.]

Comment:

Section 78.122 sets forth requirements relating to well records and completion reports. With respect to the proposed revisions to Section 78.122(b) related to well completion reports, the revisions recognize the fact that vendors and service providers hired by well operators do not disclose to the operators certain information about the chemicals added to the stimulation fluid because that information is considered by the vendor or service provider to be a trade secret or confidential proprietary information. This dynamic is reflected in the current oil and gas regulations at 25 Pa. Code § 78.122(d), which recognizes the relationship among operators, vendors and service providers by allowing operators to arrange to have their vendors and service providers provide certain information directly to the Department when necessary. MSC appreciates that the Department has retained this concept in its proposed revisions to Chapter 78 and supports those proposed changes to Section 78.122(b).

In a scenario where a vendor or service provider is providing information directly to the Department in accordance with Section 78.122(b), as proposed, it is the vendor or service provider that considers the information to be a trade secret or confidential proprietary information.

Suggested amendatory language:

(c) When a stimulation record is submitted, specific portions of the stimulation record may be designated as containing a trade secret or confidential proprietary information. The Department will prevent disclosure of the designated confidential information to the extent permitted under the Right-to-Know Law (65 P. S. §§ 67.101—67.3103) or other applicable state law.

§ 78.123. Logs and additional data.

(a) If requested by the Department within 90 calendar days after the completion **[of drilling]** or recompletion **of drilling [of a well]**, the well operator shall submit to the Department a copy of the electrical, radioactive or other standard industry logs run on the well.

(b) In addition, if requested by the Department within 1 year of the completion **[of drilling]** or recompletion **of drilling [a well]**, the well operator shall file with the Department a copy of the drill stem test charts, formation water analysis, porosity, permeability or fluid saturation measurements, core analysis and lithologic log or sample description or other similar data as compiled. No information will be required unless the operator has had the information described in this subsection compiled in the ordinary course of business. No interpretation of the data is to be filed.

[(b)] (c) Upon notification by the Department prior to drilling, the well operator shall collect additional data specified by the Department, such as representative drill cuttings and samples from cores taken, and other geological information that the operator can reasonably compile. **Interpretation of the data is not required to be filed.**

[(c)] (d) **[The information requested by the Department] Data required** under subsections **[(a)] (b)** and **[(b)] (c)** shall be **retained by the well operator and filed with [provided to] the Department [by the operator, within] no more than** 3 years after completion of the well, **[unless the Department has granted an extension or unless the Department has requested information as described in subsection (d). If the Department has granted an extension, the information shall be submitted in accordance with the extension, but in no case may the extension exceed 5 years from the date of completion of the well.] Upon request, the Department shall extend the deadline up to five years from the date of completion of the well.**

[(d)] (e) **[In accordance with the request of the Department, the operator shall submit the information described in this section for use in investigation or enforcement proceedings, or in aggregate form for statistical purposes.] The department shall be entitled to utilize information collected under this subsection in the enforcement proceedings, in making designations or determinations under section 1927-A of The Administrative Code of 1929 and in aggregate form for statistical purposes.**

Suggested amendatory language:

(a) If requested by the Department, the well operator shall, within 90 days of completion or recompletion of drilling, submit a copy of any electrical, radioactive or other standard industry logs which have been run. Any such data submitted under this subsection shall be held confidential by the Department for a period of three years following completion of drilling or deepening.

BOCI would like to thank PADEP for the opportunity to comment on the proposed revisions to Chapter 78 and for the Department's consideration of our comments. Should any of our comments require clarification or should you wish to discuss them in more detail, please do not hesitate to contact me at (724) 503-1370 or via email at rhilliard@burnettoil.com.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Hilliard", written in a cursive style.

Robert T. Hilliard
Regulatory Manager
Burnett Oil Co., Inc.