

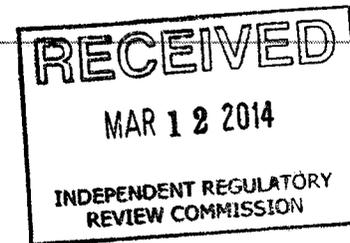
**From:** EP, RegComments <ra-epregcomments@pa.gov>  
**Sent:** Wednesday, March 12, 2014 4:08 PM  
**To:** Environment-Committee@pasenate.com; apankake@pasen.gov; IRRRC; EP, RegComments; eregop@pahousegop.com; environmentalcommittee@pahouse.net  
**Cc:** EP, MS Development  
**Subject:** FW: Comments for proposed regulations for Oil and Gas Activities  
**Attachments:** EQB Comments March 2014.docx; WatershedBoundary.pdf; HPPboundary.pdf; vios\_state\_20140228.txt; Williams 4-18-11 Response to NOV.pdf

Good Afternoon,

Attached is an email comment that DEP received regarding the Proposed Rulemaking 7-484 - Chapter 78 Environmental Protection and Performance Standards at Oil and Gas Well Sites. Our online comment system is not capable of uploading more than 1 electronic document at this time.

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**From:** Anthony Palombaro [<mailto:apalombaro@summitdentalarts.com>]  
**Sent:** Tuesday, March 11, 2014 11:36 AM  
**To:** EP, RegComments  
**Subject:** Comments for proposed regulations for Oil and Gas Activities



Dear EQB,

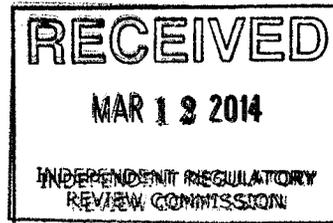
Please accept the attached comments, maps, and supporting files as comments from the Edward L. Rose Conservancy of Susquehanna County Pennsylvania on the proposed new regulations for Oil and Gas Activities

Thank you.

Sincerely,

Anthony Palombaro  
Co-Chair of the Conservation Committee of the E.L Rose Conservancy  
Office address  
241 Church Street  
Montrose, Pa, 18801

3042



Dear Members of the EQB,

On behalf of the Edward L. Rose Conservancy of Susquehanna County I am submitting these remarks in response to your invitation for public comment on "Proposed Regulations for Oil and Gas Surface Activities (Amendments to 25 Pa. Code Chapter 78, Subchapter C)

The very nature of your stated purpose in requesting these comments and for amending these regulations recognizes that gas extraction is a practice with successes and failures and these failures can affect the health and safety of our citizens and detrimentally affect the environment.

From your bulletin requesting comments your goals are -

- "Ensure the protection of public health, safety, and the environment
- "Protect public resources to minimize impacts from oil and gas drilling.
- "Modernize the regulatory program to recognize advances in extraction technology.
- "Specify the acceptable containment practices to prevent spills and releases..

We, the Board of the E.L Rose Conservancy, believe that the proposed changes just scratch the surface of what needs to be added to Act 13 to address your goals as stated above. Further, because we have a special standing as owners and stewards of a conservation easement protected property in an Exceptional Value Watershed in Susquehanna County, we will use this Exceptional Value designation as background and as a reference point for our comments. Please see the attached maps showing the EV area as a whole and another showing the E. L. Rose High Point Preserve (HPP) that covers 168 acres with 2100 feet of frontage on Silver Lake, all within the Silver Creek Exceptional Value Area)

Our points will be-

1. Present a short summary of DEP and other source data that shows that even with best practices, gas extraction has predictable rate of surface and subsurface spills, contaminations and other environmental impacts.
2. Reference existing Chapter 93 requirements that protect High Quality and Exceptional Value watersheds and suggest that your proposed changes to Act 13 Chapter 78 should recognize these requirements within the law and ban and/or

severely limit gas extraction activity in these special environmentally sensitive areas.

3. If we are to attain your stated goals we must have all the data available so laws and regulations are made based on science and not emotion or profit; therefore we believe Act 13 should include provisions that ban gag orders that keep contamination data out of the public domain.
4. As the science and data on spills and adverse events associated with gas extraction is collected we believe that the risk of contamination can be actuarially quantified and that all Pennsylvanians should be protected by 3<sup>rd</sup> party or state sponsored insurance so that if they are impacted by gas extraction environmental damage, they are not left to their own devices to take on multinational corporations.
5. Well head metering - with billions already produced and billions more to come out of the ground, all Pennsylvanian's deserve regulatory accountability on the quantity of our natural resources being extracted from under our feet. "Trust but Verify" as famous past President once said - it's a basic practice that must be implemented.

### **What do we know to be the contamination rate associated with gas extraction in Pa. from 2005 to present?** - (all data unless otherwise noted is

from MarcellusGas.Org which is a web site that compiles DEP published information into a searchable database. Both industry and environmental groups use this site for unbiased data)

1. As of January 2014 there are there are 7982 permitted wells in PA with listed start dates and 7751 show at least one inspection.
2. 231 show no inspections.
3. 1613 wells or 20.2% show cited violations
4. Not searching for all violations but instead selecting for violation codes that reference spills or contamination or violations of clean water regulations (see attached file "violations state") there are 5894 violations cited by PADEP. Careful reading of the inspector's notes associated with some of these violations show they are anything from a few gallons spilled off a truck to thousands of gallons of contaminants lost into streams, even explosions and bubbling annuli.
5. Some of these notes specify fracking fluid spill and contamination which is especially deadly to mayfly species.
6. The Associated Press in a story written by Kevin Begos on January 5, 2014 states that Pennsylvania has confirmed at least 106 water-well contamination cases since 2005 out of more than 5000 new wells. He also states statistics showing similar water-well contaminations in at least 4 other states. In Pa. this represents a 2.12%

rate of water well contamination per 5000 wells using the number stated in the story as the baseline. It represents a 1.3% rate of water well contamination if we use 7982 as the number of started wells as of January 2014.

7. What makes this percentage murky is that it is unknown how many gag orders are in place between land owners and gas companies as requirements for the land owner to receive compensation for environmental damage to their well or land. This practice makes the finding data on the true level of water well or private surface water contamination incomplete.
8. There is no single place where long and short term surface water and aquifer contamination data is being placed and made into easy access for the public to access. In Begos' article he points out that Texas has a much better system of identifying and cataloging complaints, inspections and results so a usable data base is generated. Nothing like it exists in Pa.
9. From a story from Tom Wilbur Friday, November 22, 2013

#### **Cabot buys second polluted residential property in Dimock 12-acre parcel on Carter Road flanked by faulty gas wells**

Cabot Oil & Gas has closed a deal for a second residential property affected by chronic methane pollution in the heart of its prolific gas operations in Susquehanna County, Pennsylvania.

The Texas-based company paid Michael Ely \$140,000 for the 12-acre property that includes a doublewide modular home, according to records filed in Susquehanna County Courthouse Wednesday. The property - now vacant -- borders the intersection of the south end of Carter Road with State Route 3023 in Dimock Township.

The state Department of Environmental Protection has identified at least two malfunctioning gas wells operated by Cabot bordering the property, including the Gesford 3 well, several hundred yards to the north off Carter Road, and the Costello 1 well, just to the south off Route 3023. **The agency has forbidden Cabot to drill more wells in a nine-square mile area around the intersection until the company resolves problems with these and other shale gas wells that - according to the DEP inspectors - are causing methane pollution.**

(it should be noted these deals were accompanied by gag orders so the results of tests done by the individuals or the gas companies are not available to be added to the public data base)

10. Even the gas industry seems to agree that not everything is under their control and sometimes the nature of the process and geologic formations will contribute to violations. We agree that gas extraction is not a perfect process without complications and unintended consequences and that is our point. Things will happen as part of the process no matter how well done. See the attachment "Williams response to 4-18-11..." for the complete letter

Williams' Response: Prior to the inspection on March 11, 2011, a large amount of snow (approximately 18.5 inches) and additional rainfall (approximately 3.82 inches) had fallen in the area since March 1, 2011. Approximately 3.79 inches of rain had fallen from March 6 to March 11, 2011 (1.73 inches on March 6, 0.42 inches on March 7, 1.23 inches on March 10 and 0.41 inches on March 11 - data reviewed from Avoca weather station near Scranton, PA). Warmer weather caused the snow to melt rapidly, and with the addition of the rainfall, large amounts of precipitation runoff were noted not only in the area of the access road and Depue pad, but throughout Susquehanna County. While existing controls and BMPs were in place, these extreme weather conditions, "Acts of God" created unexpected and atypical conditions. Since that time, William's contractors have conducted maintenance on all ditches, roadways and disturbed areas at and adjacent to the site. It is also noted that numerous roads are located in the area that the owner of the property utilizes as "tractor trails" and roads to conduct his farming operations. These "tractor trails" and roads appear to have also contributed to the sediment runoff from this snow melt and rain event and are not within Williams' control. It should also be noted that Silver Creek was not designated as an Exceptional Value watershed at the time the APD for this pad was approved, and we were unaware of this new designation. APD's received from the Department for the Depue pad, as recently as April 1, 2011, did not indicate the area was designated an EV Watershed. We will continue to take measures to protect the environment and this EV watershed. Routine inspections and maintenance have been and will continue to be conducted at the Depue well pad and access road.

... but in this paragraph, we found it especially interesting that the gas company invoked "acts of god" and "unexpected and atypical conditions" as the reason of for the run off violation and we are sure they acted in good faith and as quickly as possible to correct the problem... but the point is over the 30 year life of a well there will be more atypical weather and unanticipated geologic, weather and man-made issues.

**Exceptional Value Areas - Can evaluation of the present data and law allow DEP to issue permits for gas extraction activities in Exception Value Areas when we know there will be problems?**



**WATER QUALITY  
ANTIDEGRADATION  
IMPLEMENTATION  
GUIDANCE**

This is the cover of the "Water Quality Antidegradation Implementation Guidance" manual DEP is to use when reviewing permits that may impact water quality and the environment. It is specifically aimed at HQ and EV waters.

**The manual says** - The basic concept of antidegradation is to promote the maintenance and protection of existing water quality for High Quality (HQ) and Exceptional Value (EV) waters, and protection of existing uses for all surface waters because it recognizes that existing water quality and uses have inherent value worthy of protection and preservation. As a required element of a state's water quality standards, the Antidegradation Program introduces levels of protection for deserving waterbodies above the basic standards.

**The law says - in Exceptional Value Waters (EV)**

DEP is supposed to be conducting an antidegradation analysis as part of its review of well permit applications in HQ and EV watersheds. See, e.g. the settlement in Damascus Citizens for Sustainability, Inc. et al. v. Commonwealth of Pennsylvania, Department of Environmental Protection and Newfield Appalachia, LLC, EHB Doc. No. 2010-102-M, notice available at <http://www.pabulletin.com/secure/data/vol42/42-19/838.html>

**The law and the manual also say - (Bold, red, and underline are my emphasis)**

**Exceptional Value Waters - This highest level of protection** requires that "*water quality ... be maintained and protected.*" To be compatible with the federal regulation, Pennsylvania's EV waters classification includes "Outstanding National Resource Waters." In addition, outstanding state, regional, and local waters are also protected at this level. Thus, the Pennsylvania antidegradation regulation provides multiple routes for these waters to qualify for EV protection. **At this highest level, no lowering of water quality is allowed. For point sources, only discharges that produce a nondegrading effluent can be allowed in EV waters.**

In other areas of the manual it says

For EV waters and HQ waters where SEJ has not been demonstrated, protection of existing use is accomplished through maintenance of existing water quality.

*“Existing use protection.”* This section of the regulation contains important elements regarding how DEP will act when, upon evaluation of data, it determines that a waterbody is attaining or has attained an existing use.

**For all surface waters, the existing uses of the water must be protected when an activity, which may affect a surface water and which requires a DEP permit or approval, is proposed. Existing use protection also includes the protection of threatened and endangered species.**

It is our position therefore that the points made in the “What do we know..” section of our comments show, without a doubt, that even with best practices and intentions, gas extraction has an inherent and quantifiable history of surface spills, surface and aquifer contamination and wells that become inviable. Also it doesn't take much to contaminate the highly sensitive environment of Exceptional Value waters as recent studies show the discharge of even the smallest amount of fracking fluid can be deadly to a population of mayflies which, in the Silver Creek Exceptional Value watershed, are a foundation food source for the biosphere present there. (below is a summary statement from a study on the effects of fracking water on mayflies that supports the statement above - the study is 42 pages long and available upon request ) ....results of two acute toxicity test reports prepared in 2012 by the American Aquatic Testing, Inc. for the Delaware River Basin Commission. These reports show that exposure to produced water in concentrations near 1% will significantly affect mayflies in the short term. In the long term (over the course of a 20-30 day mayfly life cycle), it's even lower: less than 0.25%.

- Half the mayflies across all three species died after 20-30 day exposures to concentrations of less than 0.5% produced water.
- Among the mayflies that survived to reach the adult stage, development time slowed, indicating they were stressed.
- Reproduction rate was significantly reduced in two of three species and somewhat reduced in the third, mostly because mortality increased and development time slowed.
- The water flea was less sensitive than mayflies to produced water, but the fathead minnow was more sensitive than mayflies.
- The produced water was more toxic to mayflies in soft waters (Dyberry Creek) than in moderately hard waters (White Clay Creek).

Taking this point one step further, the laws regarding Exceptional Value waters clearly state that **“At this highest level, no lowering of water quality is allowed.”**

Therefore it seems impossible to us that DEP should be allowed to permit an activity to proceed in an EV area when that activity has a documented rate of contamination, however small, when all regulations, as well as the spirit of the law say it must ...” promote the maintenance and protection of existing water quality for High Quality (HQ) and

Exceptional Value (EV) waters, and protection of existing uses for all surface waters because it recognizes that existing water quality and uses have inherent value worthy of protection and preservation"

We do recognize the SEJ Chapter in the antidegradation manual and its original purpose to be used in consideration of the placement of sewage treatment plants. (Social and Economic Justification for allowing an activity that lowers the existing standards in a HQ waters)

EV waters represent less than 4% of the waters in Pa. and they do not represent a large area of exclusion or economic loss to gas industry interests. While a sewage treatment plant has to be sited to serve an in place population, there is no urgent or economic need to extract gas from under every square inch of Pa. since as stated by the gas industry itself, we are sitting on a lifetime of natural gas. Your new proposed regulations are important to protect all of Pennsylvania and recognize the need to continue to work the rules to reduce the known risks associated with gas extraction. Exceptional Value Waters are a special part of our heritage and deserve the highest protection. The law does not allow for risk or percentages of contamination when it comes to Exceptional Value waters and therefore they should not be exposed to any industrial practices that have documented rates of spills and contamination. These waters are irreplaceable, and there is no social or economic reason to expose them to gas extraction which could change them for generations to come.

### **Ban gag orders that remove the data on environmental contaminations of any kind from the public domain.**

To evaluate the real impact of gas extraction in Pennsylvania we must have accurate and complete data. We understand that it is common practice for participants in legal actions to sign gag orders in order to get compensation paid and avoid legal action in the courts, but in the case of environmental cases that affect all of us, the data/science surrounding the case must stay in the public domain. If this practice is not changed we can't really evaluate the impact an action has on our environment or the benefit a change in best practices or laws as you propose is really having on our communities. Look at the data we presented earlier on water-well contaminations...consider that complete knowledge on the frequency of that devastating occurrence is not really known due to gag orders.

## **Cradle-to-Grave Financial Responsibility and Third Party Insurance:**

As the data presented shows, and even industry will admit, gas extraction comes with risks. Accidents will happen.

Just as drivers are required to have insurance because driving is a risky endeavor where you could injure yourself or your neighbor, so too should every well developer. If natural gas extraction using hydraulic fracturing is as safe as the industry claims, then the premiums should be as insignificant as the risk potential it represents. Yet while the public as individuals and as communities are now being forced to absorb these risks; not all share in the profits where they would be made whole in the case of a contamination.

Requiring accurate and complete data, with no gag orders hiding incidents will illuminate the real risks as will complete, frequent and thorough DEP inspections. Having the complete picture will allow actuaries to calculate what the premiums should be to insure individual landowners and communities against those risks.

As an example and just using the lowest risk data we started with at the beginning, if the real water-well contamination rate is 1.3% that may seem very manageable unless of course you are in the 1.3% and your water supply is lost along with the value of your home. Also consider that 1.3% of the 100,000 - 300,000 wells proposed for Pennsylvania would mean 1300 to 3900 wells would cause water-well contamination as gas extraction expands over the years.

With the amount of resources below our feet we shouldn't be playing Russian roulette with our residents' financial and physical well-being, forcing them to fend for themselves against multinational corporations. We all share at different levels in the economic benefits of gas extraction and we should all be insured against the known risks as well. Therefore, every application for a well should be accompanied by a third party insurance policy or premium paid into a state insurance fund in an amount sufficient to restore the environment and compensate both the State and every citizen directly harmed by any event associated with the drilling and fracking of the well and the disposal of its byproducts. We require bonding and insurance for all types of industrial activities, gas extraction should be no different.

**Metered Wellheads:** Consider that there has been over 6.6 billion Mcf of natural gas self-reported to have been produced at the well head to date in Pennsylvania using the DEP data compiled by MarcellusGas.Org. At a well head price of \$3.35 per Mcf that is over 22 billion dollars and at residential prices of \$16.15 per Mcf over 107 billion dollars at the retail endpoint.

**How can this be an unconfirmed self-reported number when it is a State resource?**

There can be no reliable regulation, royalty compensation, or taxation without state controlled meters on every wellhead. Just as we have meters for natural gas that we use in our homes we deserve the same information from the gas industry. This finite domestic resource should be measured by government calibrated metering as a way to assure clarity and accuracy for those citizens receiving royalties, those communities receiving impact dollars and the state who should start charging an extraction tax.

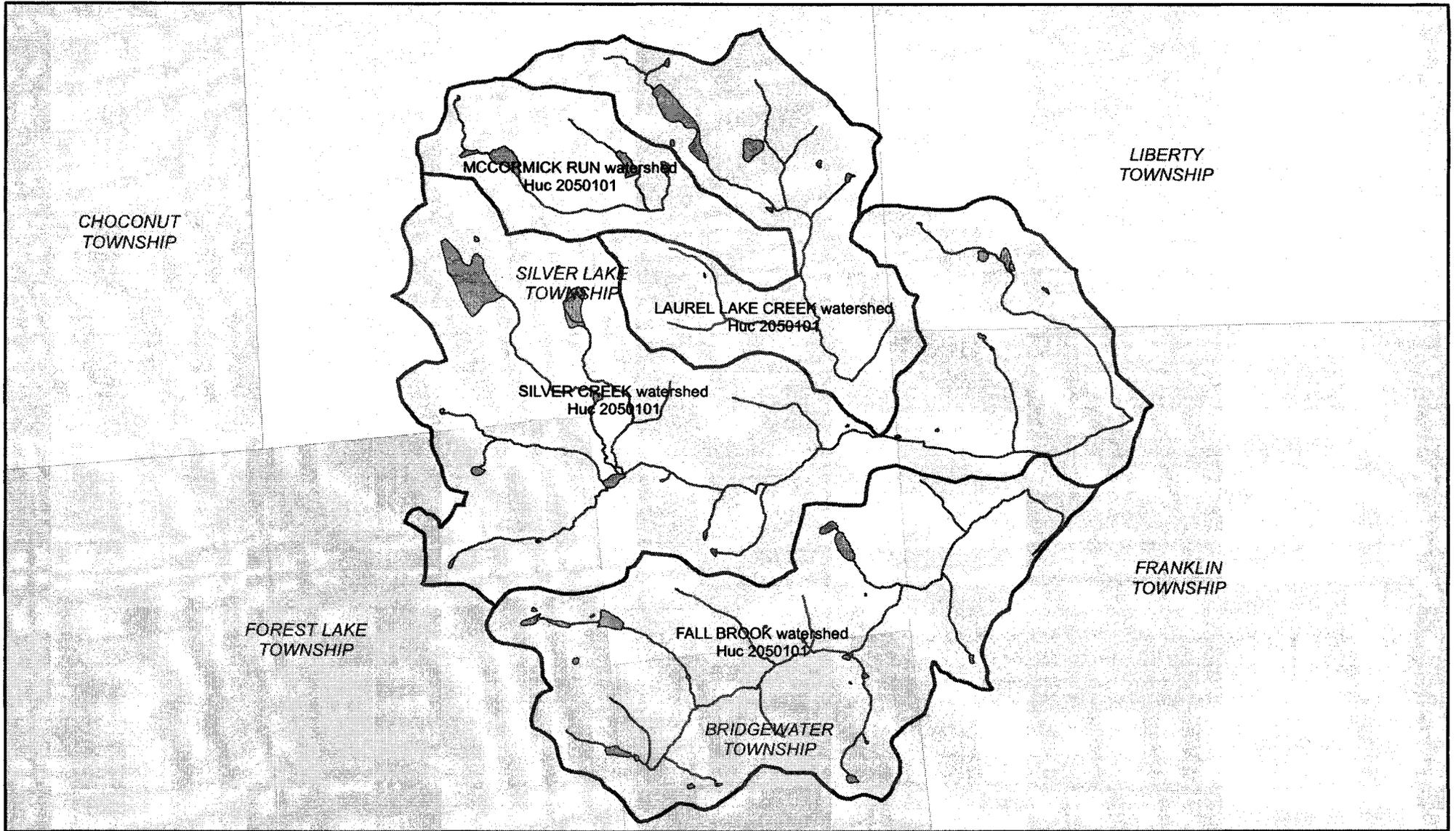
Thank you for your service on the EQB.

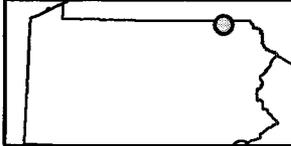
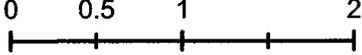
Respectfully submitted,

Anthony Palombaro

Co-chair of the Conservation Committee of the E.L. Rose Conservancy

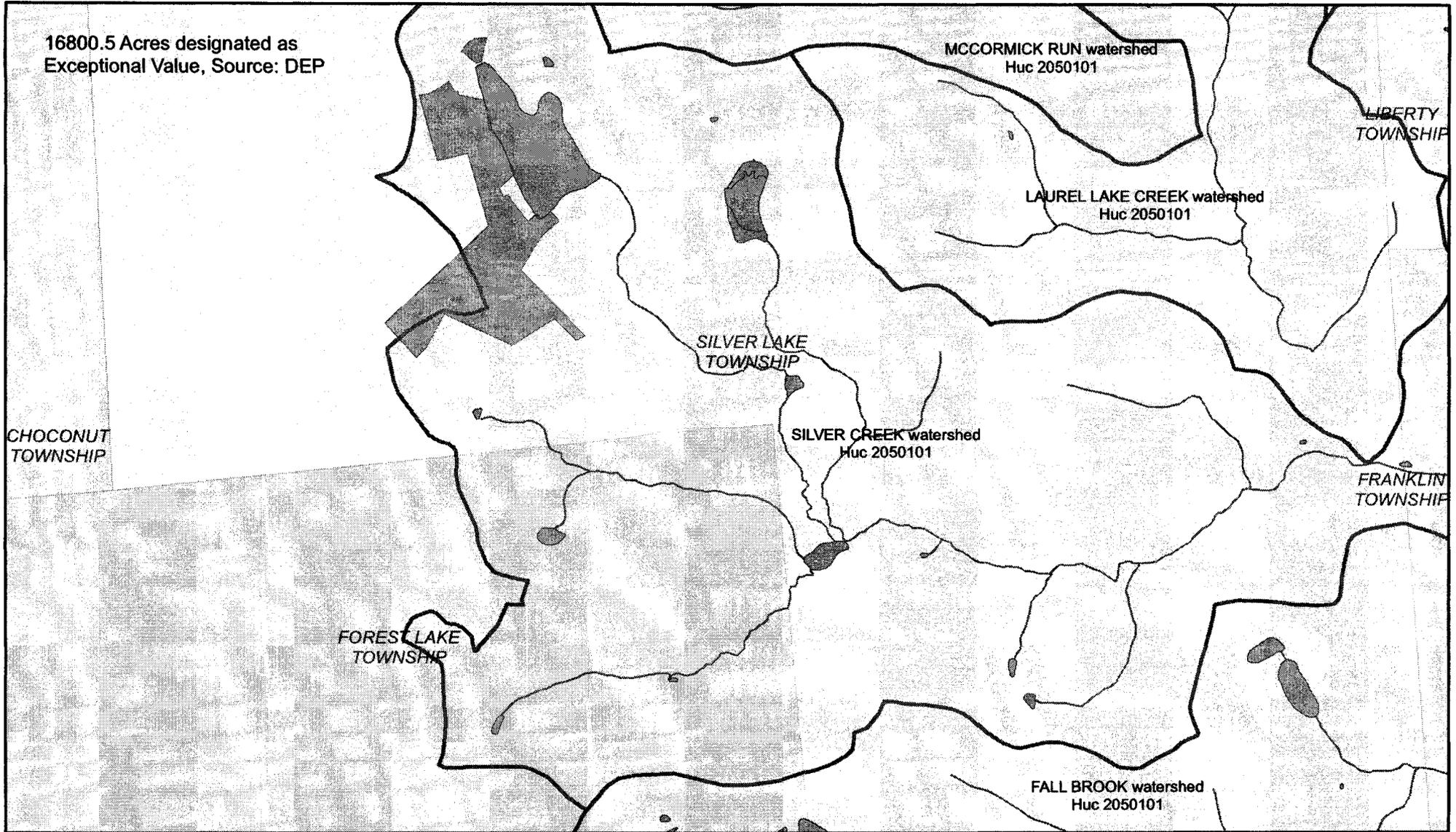
**Exceptional Value Silver Creek Watershed Boundary  
throughout Bridgewater, Forest Lake, Franklin, Liberty and Silver Lake Townships.**



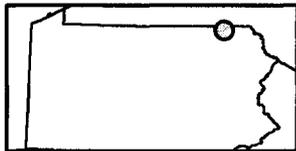
<p>Edward L Rose Conservancy</p> 		<p>16800.5 Acres designated as Exceptional Value, Source: DEP</p> <p> Watershed Boundary</p>	
<p>path: HD14/maps11/SLT</p>			

# Exceptional Value Silver Creek Watershed Boundary throughout Bridgewater, Forest Lake, Franklin, Liberty and Silver Lake Townships.

16800.5 Acres designated as  
Exceptional Value, Source: DEP



Edward L Rose  
Conservancy



-  HPP, 2008
-  Watershed Boundary



path: HD14/maps11/SLT

Entire state 5894 hits

num	violation_code
82	102.11 - Failure to design, implement or maintain BMPs to minimize the potential for accelerated erosion and sedimentation.
58	102.22 - Failure to achieve permanent stabilization of earth disturbance activity.
496	102.4 - Failure to minimize accelerated erosion, implement E&S plan, maintain E&S controls. Failure to stabilize site until total site restoration under OGA Sec 206(c)(d)
12	102.4HQBMP - Failure to implement Special Protection BMPs for HQ or EV stream.
124	102.4INADPLN - E&S Plan not adequate
92	102.4NOPLAN - No E&S plan developed, plan not on site
1	102.5NPDES - Failure to obtain an NPDES Permit for Stormwater Discharges Associated With a Construction Activity.
4	105.11 - Person constructed, operated, maintained, modified, enlarged or abandoned a water obstruction or encroachment but failed to obtain Chapter 105 permit.
7	105.11 - water obstruction or encroachment constructed, operated, maintained, modified, enlarged or abandoned without a 105 permit.
2	105.44 - Failure to implement work according to specifications in 105 Permit.
1	105.44 - Permittee has failed to perform work according to specifications as approved.
13	105GEN - Encroachment-General
2	105IMP - Failure to implement Encroachment Plan
53	105NOPERMIT - Encroachment without Permit or Waiver
12	201A - Failure to have permit on site during drilling
22	201E - Failure to comply with terms and conditions of permit
68	201F - Failure to notify DEP, landowner, political subdivision, or coal owner 24 hrs prior to commencement of drilling

| 161 | 201G - Failure to post permit number, operator name, address, telephone number in a conspicuous manner at the site during drilling

| 59 | 201H - Failure to properly install the permit number, issued by the department, on a completed well.

| 1 | 201I - Drilling with an expired permit

| 4 | 201PRMT - Drilling, altering, or operating a well without a permit

| 77 | 201TAG - Failure to install, in a permanent manner, the permit number on a completed well

| 8 | 203TAG - Failure to affix, in a permanent manner, a registration number on a well within 60 days of registration

| 3 | 205A - Drilling w/in 200 ft of building or water well w/o variance

| 17 | 205B - Drilling w/in 100 ft of surface water or wetland w/o variance

| 60 | 206C - Failure to restore well site within nine months after completion of drilling, failure to remove all pits, drilling supplies and equipment not needed for production.

| 5 | 206D - Failure to restore site w/in 9 months of plugging well

| 49 | 206REST - Failure to restore site w/in 9 months of completion of drilling or plugging

| 16 | 207B - Failure to case and cement to prevent migrations into fresh groundwater

| 4 | 208A - Failure to restore a water supply affected by pollution or diminution

| 6 | 209BOP - Inadequate or improperly installed BOP, other safety devices, or no certified BOP operator

| 1 | 210H - Failure to properly install the permit number, issued by the department, on a completed well.

| 2 | 210IMPRPLUG - Failure to plug zones having borne gas, oil, or water

| 99 | 210UNPLUG - Failure to plug a well upon abandonment

| 30 | 212CMPLRPT - Failure to submit completion report within 30 days of completion of well

| 4 | 212PRODRPT - Failure to submit annual production report

| 132 | 212WELLRCD - Failure to submit well record within 30 days of completion of drilling

| 2 | 287.54A - Person or municipality has not performed waste analysis or no copy submitted to the Department.

| 22 | 301 - Failure of storage operator to maintain and/or submit required information, such as maps, well records, integrity testing informatio, pressure data

| 82 | 301CSL - Stream discharge of IW, includes drill cuttings, oil, brine and/or silt

| 41 | 301UNPMTIW - Industrial waste was discharged without permit.

| 43 | 307CSL - Discharge of industrial waste to waters of Commonwealth without a permit.

| 248 | 401 CSL - Discharge of pollutional material to waters of Commonwealth.

| 9 | 401CAUSEPOLL - Polluting substance(s) allowed to discharge into waters of the Commonwealth.

| 5 | 401CLS - Discharge of pollutional material to waters of Commonwealth.

| 44 | 401CSL - Discharge of pollutional material to waters of Commonwealth.

| 1 | 402611 - Failure to meet effluent limits of permit

| 295 | 402CSL - Failure to adopt pollution prevention measures required or prescribed by DEP by handling materials that create a danger of pollution.

| 32 | 402CSL B - Failure to meet requirements of permit, rules and regulations, or order of DEP.

| 76 | 402POTNLPOLL - There is a potential for polluting substance(s) reaching Waters of the Commonwealth and may require a permit.

| 2 | 509 - Failure to comply w/ order, CO&A, hindrance to personnel, misrepresentation under OGA

| 43 | 51017 - Administrative Code-General

| 477 | 601.101 - O&G Act 223-General. Used only when a specific O&G Act code cannot be used

| 2 | 6018.301 - Operator has mismanagement Residual waste.

| 26 | 6018.301 - Residual waste is mismanaged.

| 2 | 6018.302A - Unlawful Management of RSW

| 1 | 6018.610 8II - Unlawful transfer of RSW

| 1 | 6018.610-2 - Person or municipality operates a facility without a permit.

| 2 | 6018.610-4 - Handles solid waste contrary to rules and regulations, or orders of the Department, or any permit condition, or in any manner as to create a

public nuisance.

| 187 | 691.1 - Clean Streams Law-General. Used only when a specific CLS code cannot be used

| 2 | 691.401WPD - Failure to prevent sediment or other pollutant discharge into waters of the Commonwealth.

| 3 | 691.402 - Potential to pollute waters of the Commonwealth

| 8 | 691.402WPP - Site conditions present a potential for pollution to waters of the Commonwealth.

| 1 | 78.11 - well drilled or operated without a permit or registration from DEP.

| 12 | 78.12 - Oil or gas well drilled, altered or operated not in accordance with a permit or the regulations.

| 48 | 78.122 - Drillers Log not on site

| 2 | 78.124 - Failure to submit plugging certificate 30 days after well plugged

| 1 | 78.51(A) - Failure to restore or replace an impacted water supply.

| 1 | 78.51(H) - Failure to report receipt of notice from a landowner, water purveyor or affected person that a water supply has been affected by pollution or diminution, to the Department within 24 hours of receiving the notice.

| 25 | 78.53 - Failure to implement and maintain BMPs in accordance with Chapter 102.

| 279 | 78.54 - Failure to properly control or dispose of industrial or residual waste to prevent pollution of the waters of the Commonwealth.

| 26 | 78.55 - No Control and Disposal/PPC plan or failure to implement PPC plan

| 234 | 78.56(1) - Pit and tanks not constructed with sufficient capacity to contain polluttional substances.

| 38 | 78.56(2) - Failure to maintain 2' of freeboard in an impoundment.

| 53 | 78.56(3) - Impoundment not structurally sound, impermeable, 3rd party protected.

| 168 | 78.56FRBRD - Failure to maintain 2' freeboard in an impoundment

| 97 | 78.56LINER - Improperly lined pit

| 118 | 78.56PITCNST - Impoundment not structurally sound, impermeable, 3rd party protected, greater than 20 of seasonal high ground water table

| 71 | 78.57 - Failure to post pit approval number

| 24 | 78.57C2 - Failure to construct properly plug, frac, brine pits

- | 1 | 78.57PITAPPR - Failure to obtain pit approval/permit
- | 2 | 78.6 - Tophole water discharge does not meet standards
- | 14 | 78.60B - Tophole water discharged improperly
- | 3 | 78.61A - Improper pit disposal of drill cuttings from above the casing seat
- | 18 | 78.62 - Improper encapsulation of waste
- | 2 | 78.64 - Inadequate containment of oil tank
- | 32 | 78.65(1) - Rat hole not filled
- | 14 | 78.65(2) - Failure to restore site within 30 days of permit expiration when well not drilled
- | 8 | 78.65(3) - Failure to submit or submitting an inadequate well site restoration report within 60 days of restoration of the well site
- | 15 | 78.66A - Failure to report release of substance threatening or causing pollution
- | 8 | 78.66BRINE - Failure to report a reportable release of brine to DEP within 2 hours.
- | 20 | 78.73A - Operator shall prevent gas and other fluids from lower formations from entering fresh groundwater.
- | 7 | 78.73B - Excessive casing seat pressure
- | 7 | 78.74 - Hazardous well venting
- | 1 | 78.81D1 - Failure to maintain control of anticipated gas storage reservoir pressures while drilling through reservoir or protective area
- | 14 | 78.81D2 - Failure to case and cement properly through storage reservoir or storage horizon
- | 4 | 78.83A - Diameter of bore hole not 1 inch greater than casing/casing collar diameter
- | 13 | 78.83COALCSG - Improper coal protective casing and cementing procedures
- | 57 | 78.83GRNDWTR - Improper casing to protect fresh groundwater
- | 1 | 78.84 - Insufficient casing strength, thickness, and installation equipment
- | 27 | 78.85 - Inadequate, insufficient, and/or improperly installed cement

| 175 | 78.86 - Failure to report defective, insufficient, or improperly cemented casing w/in 24 hrs or submit plan to correct w/in 30 days

| 3 | 79.11 - Conservation well located less than 330' from lease or unit line without waiver.

| 1 | 79.12CW - Insufficient casing, BOP, cement or wait on cement to prevent waste from conservation well.

| 114 | 91.33A - Failure to notify DEP of pollution incident. No phone call made forthwith

| 5 | 91.33B - Failure to take measures to mitigate spill impact and/or clean up w/in 15 days

| 7 | 91.33POLLINC - Pollution incident was not reported to DEP.

| 64 | 91.34A - Failure to take all necessary measures to prevent spill. Inadequate diking, potential pollution

| 3 | 91.35IMPOUND - Adequate impoundment freeboard was not maintained.

| 1 | 92.3 - Discharge of pollutants from a point source into surface waters without NPDES permit.

| 1 | ACT214GEN - Coal & Gas Resources Coordination Act 214 - General

| 6 | ACT359GEN - Oil & Gas Conservation Law - General

| 3 | CSL201BYPASS - Untreated or inadequately treated sewage was discharged

| 1 | CSL301BYPASS - Industrial waste was discharged without a permit

| 8 | CSL401CAUSPL - Polluting substance(s) allowed to discharge into waters of the Commonwealth

| 30 | CSL402POTPOL - There is a potential for polluting substance(s) reaching Waters of the Commonwealth and may require a permit

| 6 | OGA 3211(F2) - Failure to notify DEP 24 hours prior to cementing casing strings, pressure testing of production casing, stimulation of well or plugging of an unconventional well.

| 1 | OGA 3211(H) - Failure to install, in a permanent manner, the permit number on a completed well.

| 3 | OGA 3216(C) - Failure to fill all pits used to contain produced fluids or industrial wastes and remove unnecessary drilling supplies/equipment not needed for production within 9 months from completion of drilling of well.

| 1 | OGA 3218.3 - Failure to properly maintain transportation/disposal records for unconventional well wastewater. Failure to make such records available upon request.

| 5 | OGA 3220(A) - Failure to plug the well upon abandoning it.

| 2 | OGA 3220(C) - Failure to notify DEP, the coal operator, lessee and owner prior to plugging a well and submit a plat.





1000 Town Center Way, Suite 130  
Canonsburg, PA 15317-5838  
Phone: 724-873-3400  
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April 18, 2011

Mr. Ryan Klemish  
Pennsylvania Department of Environmental Protection  
Northcentral Region-Scranton District Office  
101 Penn Avenue  
Room 400  
Scranton, PA 18503-2025

**RECEIVED**

APR 25 2011

**OIL & GAS  
SCRANTON OFFICE**

RE: Depue 2H Well, Permit No. 115-20418  
Franklin Township, Susquehanna County  
Notice of Violation Response

Dear Mr. Klemish,

This letter is in response to the Notice of Violation Williams Production Appalachia LLC ("Williams") received on April 11, 2011, concerning alleged violations at the above-referenced site. An inspection of the site by the Pennsylvania Department of Environmental Protection (Department) was conducted on March 11, 2011. The alleged violations and Williams' responses are set forth below:

**Department Allegations:**

1. **Erosion and Sediment Control Requirements.**

My inspection revealed that you failed to maintain erosion and sediment control BMPs during earthmoving activity. Areas of unstabilized soil were found throughout the site. BMPs throughout the site were found to be installed improperly or have degraded due to lack of maintenance, this is a violation of 25 Pa. Code §102.4(b)(1) which provides:

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

Williams' Response: This well pad and access road were installed during December of 2010 and January of 2011. This was not a favorable time to mulch and seed disturbed areas. Silt socks, erosion and sediment ("E&S") control matting, silt fence and many other E&S controls were in place at this time. Since the inspection and more temperate weather, all areas in question have been either seeded or mulched or Erosion Control Matting has been installed. Also, all disturbed areas have had maintenance to confirm E&S controls are in place and functioning properly.

2. Unpermitted Discharge of Polluting Substances

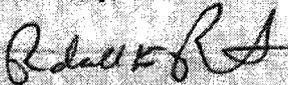
My investigation revealed that an unpermitted discharge of a polluting substance was occurring at this site. Sediment laden runoff from the site was determined to be entering an unnamed tributary to Silver Creek. Silver Creek is an Exceptional Value watershed. This is a violation of Section 401 of the Clean Streams Law, 35 P.S.W. §691.401, which provides:

"It shall be unlawful for any person or municipality to put or place into any of the waters of the Commonwealth, or allow or permit to be discharged from property owned or occupied by such person into any waters of the Commonwealth, any substance of any kind of character resulting in pollution as herein defined."

Williams' Response: Prior to the inspection on March 11, 2011, a large amount of snow (approximately 16.5 inches) and additional rainfall (approximately 3.82 inches) had fallen in the area since March 1, 2011. Approximately 3.79 inches of rain had fallen from March 6 to March 11, 2011 (1.73 inches on March 6, 0.42 inches on March 7, 1.23 inches on March 10 and 0.41 inches on March 11 - data reviewed from Avoca weather station near Scranton, PA). Warmer weather caused the snow to melt rapidly, and with the addition of the rainfall, large amounts of precipitation runoff were noted not only in the area of the access road and Depue pad, but throughout Susquehanna County. While existing controls and BMPs were in place, these extreme weather conditions, "Acts of God" created unexpected and atypical conditions. Since that time, William's contractors have conducted maintenance on all ditches, roadways and disturbed areas at and adjacent to the site. It is also noted that numerous roads are located in the area that the owner of the property utilizes as "tractor trails" and roads to conduct his farming operations. These "tractor trails" and roads appear to have also contributed to the sediment runoff from this snow melt and rain event and are not within Williams' control. It should also be noted that Silver Creek was not designated as an Exceptional Value watershed at the time the APD for this pad was approved, and we were unaware of this new designation. APD's received from the Department for the Depue pad, as recently as April 1, 2011, did not indicate the area was designated an EV Watershed. We will continue to take measures to protect the environment and this EV watershed. Routine inspections and maintenance have been and will continue to be conducted at the Depue well pad and access road.

If you have any comments or questions, please do not hesitate to contact me. Additional information requested by the Department, mainly inspection reports/maintenance records and the most current E&S Control Plan Map, will be forwarded to you in a separate report.

Sincerely,



Randall E. Reimold P.G.  
Environmental Specialist  
Williams

cc: Michael O'Donnell, DEP Water Quality Specialist Supervisor  
Elizabeth Joyner, Williams  
Dean Tinsley, Williams  
David Freudenrich, Williams  
Roxanne Roberts, Williams