

3042.

**Cooper, Kathy**

**From:** RegComments@pa.gov  
**Sent:** Wednesday, January 08, 2014 8:23 PM  
**To:** Environment-Committee@pasenate.com; apankake@pasen.gov; IRRC; RegComments@pa.gov; eregop@pahousegop.com; environmentalcommittee@pahouse.net  
**Cc:** ra-epmsdevelopment@pa.gov  
**Subject:** Proposed Rulemaking - Environmental Protection Performance Standards at Oil and Gas Well Sites



**Re: Proposed Rulemaking - Environmental Protection Performance Standards at Oil and Gas Well Sites**

**The Environmental Quality Board (EQB) has received the following comments regarding the above-referenced proposed rulemaking.**

Commentor Information:

Sherwood Johnson  
 (sherwood@zoominternet.net)  
 549 Macleod Drive  
 Gibsonia, PA 15044 US

RECEIVED  
 IRRC  
 2014 JAN -9 AM 9:09

Comments entered:

No text comments were provided as part of this comment submittal. Please refer to attachments below.

These links provide access to the attachments provided as part of this comment. You are advised to save the attachments to your local computer or a network share when prompted by your browser.

- One-page Summary: [PEQ regulations summary.doc](#)
- Comments Attachment: [PEQ regulations comments.doc](#)

Please contact me if you have any questions.

Sincerely,  
 Hayley Book

Hayley Book  
 Director, Office of Policy  
 PA Department of Environmental Protection  
 Rachel Carson State Office Building  
 P.O. Box 2063

Harrisburg, PA 17105-2063  
Office: 717-783-8727  
Fax: 717-783-8926  
[RegComments@pa.gov](mailto:RegComments@pa.gov)

Dear Pennsylvania Environmental Quality Board,

January 8, 2014

Thank you the opportunity to submit my comments on new regulations for oil and gas development. While I believe this development can be done to the benefit of all parties involved with regard to the economy, domestic energy security, and concerns regarding climate change – all while minimizing damage to the environment and access to clean water - this currently is not the case.

At issue when crafting such regulations are the protection of streams and waterways from drilling operations; storage or freshwater and other fluids related to fracking; and the proper collection, analysis and disposal of waste materials at well sites, among many other concerns.

Listed below is a summary of concerns I have with the proposed regulations, as follows:

- 1) All fluids related to oil and gas development should be contained in engineered facilities, not "natural depressions." (Section 78.1, definition of "freshwater impoundment" and "pit," Section 78.56)
- 2) The definition of "seasonal high groundwater table" should be retained in the proposed regulations, because the term continues to play a key role in regulating oil and gas activities. (Section 78.1)
- 3) The permit applicant, not the Department of Environmental Protection (DEP), should bear the burden of determining whether proposed oil and gas operations would affect threatened or endangered species. (Section 78.15(d))
- 4) The DEP should respond to comments received about permits that may affect an important public resource. (Section 78.15(d))
- 5) The DEP should not compromise its legal obligation to protect the environment by balancing the citizens' constitutionally guaranteed right against private interests in oil and gas. (Section 78.15(g))
- 6) The DEP's duty to investigate water pollution should extend to all oil and gas activities. (Section 78.51(c)).
- 7) The prohibition on construction of fluid storage areas within 100 feet of certain water bodies should be extended to all water bodies. (Section 78.59c)
- 8) The DEP should stop promoting the disposal of residual waste at well sites. (Section 78.62)
- 9) The DEP should not allow natural springs to take the place of engineered monitoring wells used to measure the effects of fluid storage areas. (Section 78.59c(g)(2))
- 10) The DEP should strengthen its regulatory mechanisms for ensuring that pits and impoundments are constructed in a structurally sound manner and according to regulation. (Section 78.59c(m))
- 11) Any disposal of waste materials at well sites should require that representative samples of the material be taken and analyzed and submitted to the agency to demonstrate that, for example, the drill cuttings are not contaminated, or that residual waste meets the regulatory standards. (Sections 78.61 and 78.62)
- 12) The collection and analysis of chemical samples of waste that the operator intends to dispose on site should not be discretionary; the regulations should be clear that this is a mandatory obligation. This is particularly of concern where the disposal site does not need to be inspected by the agency prior to closure, and there is no long-term groundwater monitoring. (Section 78.63(19))
- 13) The DEP's proposed regulations for the road-spreading of brine pose unacceptable threats to the Commonwealth's water resources – and is unlawful. (Section 78.70a)
- 14) The DEP's revisions to Chapter 78 should contain meaningful standards for the final restoration of well sites and impoundment sites as well as for interim, "post-drilling" restoration period. (Sections 78.65, 78.59b, and 78.59c)
- 15) The DEP's proposed regulations regarding bonding are inadequate, because they fail to ensure that well sites and impoundment sites will be finally restored before they are released from operators' bonds. (Subchapter G)

These shortcomings of the new regulations for oil and gas development are common sense. The absence of such regulations constitutes neglect and – in many cases – complete dereliction of the DEP's legal obligations. To be effective, regulations need to be both comprehensive and enforceable, and the proposed regulations do not accomplish this. I hope the DEP will take these comments into consideration when revising these regulations.

Thank you for your time and consideration in this matter.

Sincerely, Sherwood Johnson - Gibsonia, PA

92 :6 AM 6- JAN 9 2014

IRRC  
RECEIVED

January 8, 2014

Dear Pennsylvania Environmental Quality Board,

Thank you for providing the opportunity to submit my comments on new regulations for oil and gas development.

While I believe that this development can be done to the benefit of all parties involved with regard to the economy, domestic energy security, and concerns regarding climate change – all while minimizing damage to the environment and access to clean water - this currently is not the case.

At issue when crafting such regulations are the protection of streams and waterways from drilling operations; storage of freshwater and other fluids related to fracking; and the proper collection, analysis and disposal of waste materials at well sites, among many other concerns.

Listed below are a series of concerns I have with the proposed regulations, as follows:

**1) All fluids related to oil and gas development should be contained in engineered facilities, not "natural depressions." (Section 78.1, definition of "freshwater impoundment" and "pit," Section 78.56)**

Our streams and groundwater should be secure from pollution caused by the storage of wastes and fluids associated with oil and gas production operations. The definitions of "pit" and "freshwater impoundment" raise questions about that objective because they continue to incorporate the concept of "natural topographic depressions" within the definitions. The mere suggestion that Pennsylvania will allow fluids related to oil and gas operations to be managed in "natural depressions" invites an environmental disaster. All facilities used to hold fluids that may contain potential water pollutants must be specifically engineered for the task and approved as adequate through an inspection process.

**2) The definition of "seasonal high groundwater table" should be retained in the proposed regulations, because the term continues to play a key role in regulating oil and gas activities. (Section 78.1)**

Proposed section 78.1 deletes the definition of "seasonal high groundwater table" even though that term is still used throughout the regulations, including in sections 78.56(a)(11), 78.59b(e). This definition should be maintained to ensure clarity and consistent enforcement.

**3) The permit applicant, not the Department of Environmental Protection (DEP), should bear the burden of determining whether proposed oil and gas operations would affect threatened or endangered species. (Section 78.15(d))**

Protecting the habitat and physical safety of vulnerable species is a critical part of ensuring biodiversity and the quality of our environment. The federal Endangered Species Act was designed to achieve these goals by making it unlawful for any person to harass or take a listed species, including adversely affecting the habitat of a listed species in a manner that effects a take. Similarly, state law currently imposes the obligation on operators to ensure that their activities will not adversely affect listed species or their habitat.

The proposed regulations change that obligation by only requiring gas operators to mitigate the impact of their operations on threatened or endangered species if the DEP determines that the well site location will adversely impact species or "critical habitat."

Because an operator proposing an oil or gas project stands to gain financially from the project, and is in the best position to understand the scope and potential impact of its proposal, the operator (and not the DEP) should have the burden of determining whether its project would affect listed species and their habitat.

**4) The DEP should respond to comments received about permits that may affect an important public resource. (Section 78.15(d))**

JAN 09 11:09 AM '14

RECEIVED  
IRRC

The proposed regulations allow for a public resource agency to receive notice of, and submit comments about, a proposed well permit that would affect its resources. The regulations, however, do not require the DEP to respond to those comments. To ensure that comments are adequately considered and that public resources are fully protected, the regulations should require the DEP to respond to comments submitted by public resource agencies.

**5) The DEP should not compromise its legal obligation to protect the environment by balancing the citizens' constitutionally guaranteed right against private interests in oil and gas. (Section 78.15(g))**

The DEP is required by the Pennsylvania Constitution to protect the public's right to a clean environment. The proposed regulations provide that, even though the DEP determines that a proposed well will have a probable adverse impact on a public resource, the DEP cannot impose conditions that will prevent or mitigate that harm without first considering the impact of the condition on the individual mineral right owner's ability to "optimally" develop his or her oil and gas rights. This regulation inappropriately places the DEP, whose defined mission is to protect and conserve Pennsylvania's environment, in the position of balancing protection of important public resources against individual property rights. Furthermore, it inappropriately, and potentially illegally, elevates the "optimal" development of oil and gas over the protection of important public resources against likely adverse impacts. These draft regulations do not give proper weight to the DEP's constitutional obligation to protect the environment. So long as the DEP's actions do not affect a taking of private property, the DEP should be obligated to take whatever actions are necessary to condition permits in a manner that protects important public resources.

**6) The DEP's duty to investigate water pollution should extend to all oil and gas activities. (Section 78.51(c)).**

The Chapter 78 regulations require the DEP to investigate instances of water pollution that occur near oil and gas wells. As part of its investigation, the DEP may determine that water pollution was caused by the "well site construction, drilling, alteration or operation activities." This set of activities is much more limited than the list of activities defined as "oil and gas activities" in Act 13. To ensure maximum protection of water resources, the DEP's investigation should extend to all oil and gas activities.

**7) The prohibition on construction of fluid storage areas within 100 feet of certain water bodies should be extended to all water bodies. (Section 78.59c)**

The current draft regulations prohibit well operators from building "centralized impoundments" for wastewaters within 100 feet of any "solid blue line stream" identified by the United States Geological Survey. Solid blue line streams flow consistently year round. This 100 foot buffer is important, but it should be extended to other streams that do not flow continuously. Although I recognize that Act 13 unwisely referred to "solid blue line streams," intermittent and ephemeral streams need to be protected as well. Some of our most vulnerable waters are vernal pools or intermittent portions of high quality streams. Those waters would not be adequately protected by these regulations. Furthermore, the DEP has an obligation to protect intermittent streams under the Clean Streams Law. Rather than attempt to make that decision on a case by case analysis, the DEP should extend this buffer to all Pennsylvania streams.

**8) The DEP should stop promoting the disposal of residual waste at well sites. (Section 78.62)**

The draft regulations would allow well operators to dispose of residual waste in pits on well sites as long as they comply with certain minimal requirements. Because waste generated at oil and gas sites is exempt from the hazardous waste regulations, the result is that hazardous waste can be managed as residual waste and disposed at well sites with a single synthetic liner and no long-term groundwater monitoring. These minimal protections are inadequate.

As the DEP knows, many well-site disposal pits have leaked in recent years, contaminating surface and groundwater and dotting the Pennsylvania countryside with brownfield sites. Given the high risks of these mini-landfills, and the fact that their one and only advantage is fewer truck trips to landfills (and reduced cost for operators), the DEP should prohibit well site disposal of residual waste entirely. To the extent that the DEP continues to allow this method of waste disposal it should, at a minimum, require long-term groundwater monitoring and public notice of existing and future disposal sites.

**9) The DEP should not allow natural springs to take the place of engineered monitoring wells used to measure the effects of fluid storage areas. (Section 78.59c(g)(2))**

Monitoring wells near "centralized impoundments" are essential tools for determining whether the stored fluids are polluting groundwater in the surrounding area. The draft regulations wisely require three monitoring wells, but give the DEP the discretion to allow the operator to substitute natural springs for monitoring wells. This is inappropriate. Natural springs are not engineered to provide reliable and repeatable data on groundwater conditions because, among other things, they are susceptible to variability based on precipitation events and subject to contamination from surface flow. Monitoring of natural springs down gradient of centralized impoundments is appropriate, but that monitoring should be required in addition to, not instead of, construction and maintenance of monitoring wells.

**10) The DEP should strengthen its regulatory mechanisms for ensuring that pits and impoundments are constructed in a structurally sound manner and according to regulation. (Section 78.59c(m))**

The rulemaking proposes to allow engineer certifications that pits and impoundments have been correctly constructed in lieu of DEP inspections. If the DEP is not itself capable of ensuring proper construction of facilities such as centralized impoundments, these certifications should be submitted under penalty of law for unsworn falsification to authorities (18 P.S. § 4904) so that any intentional falsification can be prosecuted criminally. The DEP should also mandate better self-monitoring by requiring that photographs or video be taken of the finished construction so that there is evidence of the site construction that can be reviewed after the fact.

**11) Any disposal of waste materials at well sites should require that representative samples of the material be taken and analyzed and submitted to the agency to demonstrate that, for example, the drill cuttings are not contaminated, or that residual waste meets the regulatory standards. (Sections 78.61 and 78.62)**

If waste is disposed at well sites, a sample of the material should be taken and analyzed. This sample should be sent to the agency to demonstrate that drill cuttings are not contaminated, and that any residual waste does not exceed legal limits. The regulations do not currently require that the operator use any scientific methodology to demonstrate compliance.

**12) The collection and analysis of chemical samples of waste that the operator intends to dispose on site should not be discretionary; the regulations should be clear that this is a mandatory obligation. This is particularly of concern where the disposal site does not need to be inspected by the agency prior to closure, and there is no long-term groundwater monitoring. (Section 78.63(19))**

Collection and analysis of chemical waste samples that are intended to be disposed of onsite needs to be a mandatory requirement. The draft regulations leave this to the discretion of the operator (!), which should not be permitted. This is particularly important where a disposal site does not need to be inspected by the agency prior to closure, and there is no provision for long term monitoring of ground water.

**13) The DEP's proposed regulations for the road-spreading of brine pose unacceptable threats to the Commonwealth's water resources – and is unlawful. (Section 78.70a)**

Section 78.70 of the DEP's proposed oil and gas regulations would authorize the road-spreading of brine from conventional wells for dust control on dirt and gravel roads. Proposed section 78.70a would authorize the road-spreading of brine for de-icing purposes. Both sections would deem any operator that spreads brine on roads to have a "permit-by-rule" for the beneficial use of residual waste as long as the operator complies with the proposed Chapter 78 regulatory scheme.

DEP's approach is troublesome for two reasons. First, because the proposed regulations do not ensure compliance with the DEP's anti-degradation program or contain adequate chain-of-custody requirements, the risks of spreading brine on roads outweigh the benefits, which are largely confined to disposal-cost savings for the industry.

The second problem with sections 78.70 and 78.70a is a legal one. All wastewaters from oil and gas operations, including brine, are residual waste under the Pennsylvania Solid Waste Management Act

("SWMA"). It follows that any beneficial use of brine, including dust suppression and de-icing, is subject to regulation under the DEP's SWMA regulations at 25 Pa. Code Chapter 287. These regulations do not currently allow permits-by-rule for road-spreading or any other beneficial use of brine. Beneficial uses of brine may be approved only under the general permit scheme set forth in Subchapter H of Chapter 287. Thus, the permit-by-rule scheme proposed in sections 78.70 and 78.70a is not only imprudent; it would also be illegal.

**14) The DEP's revisions to Chapter 78 should contain meaningful standards for the final restoration of well sites and impoundment sites as well as for interim, "post-drilling" restoration period. (Sections 78.65, 78.59b, and 78.59c)**

Act 13 requires two stages of restoration for well sites. On the one hand, section 3216(c) requires partial restoration after the conclusion of drilling and fracturing operations. On the other hand, section 3216(d) requires final restoration after the last well on the site has been plugged. The DEP is proposing to implement these sections in proposed regulation 78.65, which provides that a well site will be considered restored if it is returned to its "approximate original conditions, including preconstruction contours," and if it "can support the original land uses to the extent practicable." Similar language appears in the DEP's proposed regulations for freshwater impoundments (78.59b) and centralized wastewater impoundments (78.59c), which also contain restoration requirements.

A return to original conditions, contours, and uses is a laudable goal for the restoration of well sites (both post-drilling and post-plugging) and impoundment sites. Currently, though, the DEP's general restoration standards are practically unenforceable because the DEP's regulations (i) fail to require environmental baseline site assessments, (ii) fail to require site-specific standards and criteria for restoration, (iii) fail to require environmental professionals to sign off on site restorations, and (iv) establish no process whereby the DEP can finally approve or disapprove restoration. The DEP should require site-specific baseline assessments and restoration plans for all well sites and impoundment sites, require professional certification that restoration goals have been met, and require DEP approval before a site can be considered to be restored.

**15) The DEP's proposed regulations regarding bonding are inadequate, because they fail to ensure that well sites and impoundment sites will be finally restored before they are released from operators' bonds. (Subchapter G)**

Under Act 13, an operator can obtain one blanket bond in the amount of \$600,000 that covers all of an operator's well sites in the Commonwealth. Despite the extremely low amount of this bonding requirement (and of all of Act 13's bonding requirements), the bond is supposed to secure all of the operator's legal duties regarding water supply replacement, restoration and well-plugging.

The DEP may not have the power to require higher amounts for bonds than the Act 13 amounts, but it can and should establish a process to ensure that operators are not released from liability for particular well sites until those sites are properly restored. The DEP's proposed revised bonding regulations (set forth in Subchapter G of Chapter 78) fail to do this. They condition release from liability only on the filing of a certificate of plugging. Release from liability should also be conditioned on the adequate final restoration of the well site after the last well on the site has been plugged.

These shortcomings of the new regulations for oil and gas development are common sense. The absence of such regulations constitutes neglect and – in many cases – complete dereliction of the DEP's legal obligations. To be effective, regulations need to be both comprehensive and enforceable, and the proposed regulations do not accomplish this. I hope the DEP will take these comments into consideration when revising these regulations.

Thank you for your time and consideration in this matter.

Sincerely,  
Sherwood Johnson  
Gibsonia, PA