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Department of Environmental Protection Policy Office
400 Market Street
P.O. Box 2063
Harrisburg, PA 17105-2063

Submitted via email to RegComments@pa.gov and hand carry

Re: Comments on Advance Notice of Final Rulemaking, 25 Pa. Code Chapter 78a, Environmental Protection Performance Standards at Unconventional Oil and Gas Wells; 45 Pa. B. 1615 (Apr. 4, 2015)

Dear Sir/Madam:

Associated Petroleum Industries of PA (API-PA) is pleased to offer comments on the Advance Notice of Final Rulemaking (ANFR) on 25 Pa. Code Chapter 78a that was announced in the Pennsylvania Bulletin on Saturday, April 4, 2015.

API-PA is a division of the American Petroleum Institute (API), a national trade association that represents all segments of America's technology-driven oil and natural gas industry. Its more than 625 members – including large integrated companies, exploration and production, refining, marketing, pipeline, and marine businesses, and service and supply firms – provide most of the nation's energy and are backed by a growing grassroots movement of over 25 million Americans. The industry also supports 9.8 million U.S. jobs and 8 percent of the U.S. economy, and, since 2000, has invested over $3 trillion in U.S. capital projects to advance all forms of energy, including alternatives. Many of our members, who own and operate unconventional wells in Pennsylvania, have a direct interest in this ANFR.

API is also a standard setting organization. For 90 years, API has led the development of petroleum and petrochemical equipment and operating standards. These standards represent the industry's collective wisdom on everything from drill bits to environmental protection and embrace proven, sound, engineering and operating practices and safe, interchangeable equipment and materials for delivery of this important resource to our nation. API maintains more than 650 standards and recommended practices. Many of these are incorporated into state, federal, and international regulations. API encourages and participates in the development of state regulations that are protective of the public, the environment and the industry workforce. In this context, API offers the following comments and looks forward to continuing to work with DEP in the development of these Chapter 78a regulations.

All aspects of the oil and natural gas industry have been and continue to be highly regulated. Since the outset of increased activity in PA, DEP and other regulatory agencies have put into place additional regulatory requirements that reflect the technological changes that have taken place in the industry. Over the last several years, DEP has put into place more stringent regulations relating to well construction and casing. Act 9 of 2012, and the corresponding regulations already incorporated into Chapter 78, require emergency response safety measures at unconventional drill sites. Act 13 of 2012 provided for enhanced water protections, well setbacks and casing standards. Other regulatory measures include enhanced general permits for air and more stringent exemption criteria, discharge changes prohibiting municipal wastewater treatment plants from accepting oil and gas waste fluids, and increased recycling of produced water.

API-PA supports strong environmental safeguards and stewardship, and commends DEP on their regulatory oversight program; however we do have concerns with several provisions contained in the draft final rulemaking.

General Comments

Due to the wide-ranging impact these revisions will have on oil and gas operations it is important for industry to know if these new provisions will apply to existing wells and associated facilities and to previously approved water management plans or sources. It is suggested that language be added to clarify the effective date for the new requirements and that wells and associated facilities constructed prior to that date are grandfathered in for purposes of the new requirements.

There are a number of definitions and sections of text that refer the reader to other statutes or regulations. This causes the reader to search elsewhere to find that other statute or regulation and look it up before being able to understand what Chapter 78a requires. This is not user friendly and does not facilitate regulatory understanding and compliance. For example, with regard to definitions, it would be better to provide the intended definition in §78a.1 or to state, "As defined in 25 Pa. Code § XXX.X," rather than refer to a statutory citation that requires more effort to locate. This should be done for the definitions of, process or processing, and regulated substance. It should also be done for §78a.13, §78a.51(d)(2), § 78a.60 (a), and numerous other sections where citations to other statutes or regulations are given.

A number of sections are very detailed and prescriptive. It is suggested that these sections be given some flexibility to allow for the use of alternate methods as approved by the Department. These sections include § 78a.57a, Centralized tank storage, § 78a.59a. Impoundments embankments, § 78a.59b. Freshwater impoundments, and § 78a.68. Oil and gas gathering lines. There may be additional sections where it would be advantageous to both the Department and the operator to apply the same concept.

The proposed regulation does not recognize landowner rights. For example, in § 78a.73(c) and (d) it is presumed that the landowner will grant access to the well operator to monitor orphaned and abandoned wells during stimulation and to plug the orphaned and abandoned well if it is altered by the stimulation. The landowner is not required to grant the operator access, so the operator might not be able to comply through no fault of its own. It is recommended that in these instances, the operator should be allowed to certify the lack of cooperation by the landowner, or upon certification, the operator be relieved of the duty to comply.

There are numerous forms to be developed by DEP for use in implementing the proposed regulatory changes. Numerous of these forms are specified in the regulation and become a regulatory requirement. The forms have not been made available for review and comment, as is required by Sec. 5(a)(5) of the Regulatory Review Act, so these comments should not be considered complete. It is recommended that all such forms be made available for review and comment during the public comment period, and that the comment period be extended until such time as they are made available for review.

Specific Comments

§ 78a.1. Definitions. – "approximate original conditions" - The definition includes restoration that can support "land uses that existed prior to the applicable oil and gas operations ..." Land use is an issue to be resolved between the lessor and the operator during contract negotiations. If an alternate land use is desired there should be a mechanism available to allow a change in land use to be approved by the

Department, such as exists in the PA Coal Mining Program. The exact procedure can be published later in a Technical Guidance Document.

§ 78a.1. Definitions. – "condensate" – the current definition is loose and should be modified to read as follows: "a liquid hydrocarbon phase exhibiting an API-gravity between 45-75 degrees that occurs in association with natural gas."

§ 78.a.1. Definitions. – "mine influenced water" - It is suggested that the second sentence be deleted. The first sentence captures any relevant discharges to surface waters from mining activities. The term "mine influenced water" should not also include the entire surface water body into which those discharges occur, as the second sentence implies.

§78a.1. Definitions.– "other critical communities" – This definition includes many, not clearly specified, plant and animal species that are not listed (or even proposed) as threatened or endangered by a public resource agency (e.g. undefined rare, tentatively undetermined, and candidate species; undefined taxa of conservation concern; undefined special concern plant populations), as well as numerous other undefined geographical areas, geological features, natural features, and natural communities. The complete lack of regulatory definition or criteria applicable to these many terms embedded in this definition would allow the designation as a "critical community" of any species, area, feature, or community by the Pennsylvania Fish and Boat Commission, Pennsylvania Game Commission, water purveyors, municipalities, and school districts, without going through the regulatory review process. It even goes so far as to equate "significant" features or communities to "critical" communities, when in fact the normal usage of those terms would imply a separation, with "critical" being a higher level of importance than "significant." This delegation of power to a wide range of public resource agencies should not be done by DEP regulation, but should require legislative action under the various enabling statutes for those entities. Consequently, it is recommended that this definition be deleted, unless and until legislative action provides the necessary clarity.

§78a.1. Definitions. – "public resource agency" – This definition includes water purveyors, which can include public utilities, community water associations, individuals and other entities that are not considered to be public. This, coupled with the use of the term in §78a.15 (d) and (f), will be discussed under the comments on §78a.15.

In addition, it is important to note that DEP has not been delegated by the legislature any authority to create or empower any governmental agency known as a public resource agency.

§78a.1. Definitions. – "threatened or endangered species" – The definition includes species identified as threatened or endangered under the Fish and Boat Code and the Game and Wildlife Code. Under current practice the Pennsylvania Fish and Boat Commission and the Pennsylvania Game Commission, which develop regulations outside the regulatory review process requirements, could identify species to be included on the list without subjecting the designation to public review and comment.

In addition, the definition includes animal and plant species proposed for listing as endangered and threatened, pursuant to the Endangered Species Act. Since these species have not been listed but are only proposed, the legal protections of the Endangered Species Act should not be extended to them, nor should they be defined as "threatened or endangered species" by PADEP regulation. Consequently, it is recommended that reference to the Wild Resources Conservation Act, the Fish and Boat Code and the Game and Wildlife Code be deleted from this definition, and that only animal and plant species actually listed under the Endangered Species Act (not proposed for listing) be included in the definition.

§78a.15(f) and (g). Application requirements/limit of disturbance – This subsection requires the operator proposing to construct a well in a location that may impact a public resource to notify the public resource agency and DEP. The term "public resource" is undefined in §78a.1, but the operator is referred to a number of instances, including a limit of disturbance that will impact other critical communities, a location within 200 feet of common areas on a school's property or a playground (both terms undefined and not previously proposed; new in this ANFR), and within an area designated as a wellhead protection area as part of an approved wellhead protection plan (also undefined and not previously proposed; new in this ANFR). The operator is to notify the public resource agency of the limit of disturbance, provide identification of the public resource, come up with a description of the functions and uses of the public resource, and a description of measures to be taken to avoid or mitigate impacts.

In subsection (f)(1) a series of public resources and proposed distances on limits of disturbance of the well site are listed. This list is not consistent with §3215(c) of Act 13. Habitats of rare and endangered flora and fauna are not included. And, (f)(1)(vii) and (viii) relating to common areas on a school's property or a playground, and area designated as a wellhead protection area as part of an approved wellhead protection plan are not included under §3215(c). This creep of authority is problematic in that the terms "common areas on a school's property," "playground," and "wellhead protection area" are not defined, and therefore the potential impact of these provisions cannot be adequately assessed, nor has DEP provided any Regulatory Impact Analysis to describe and assess the impacts of including these newly proposed provisions. Also a wellhead protection plan consists of zones where certain protections are to be provided, which is not acknowledged. It is recommended that the list of public resources in §78.15(f) be limited to, and consistent with, those provided in §3215(c) of Act 13.

§78a.15(f)(1) proposes distances for limits of disturbance of the well site from specified public resources. This is inconsistent with §3215(c) of Act 13 that lists distances for wells, and not well sites. It is recommended that this section be changed to be consistent with the statute.

As noted above in the comment on the definition of "public resource agency", the definition includes parties that are not public entities (such as some non-public entity water purveyors and playground owners). Notification requirements and standing to file comments are being provided to them without justification. It is recommended that these provisions should only be provided to truly public agencies with defined legal jurisdictions.

Given the significant uncertainties in how public resources are described and how other critical communities are defined, impacts to locations considered to be other critical communities may be unknown to the operator. It seems unreasonable to a have the operator identify the public resource, describe its uses and functions to the public resource agency, and develop avoidance or mitigation measures when the public resource agency is the entity that knows about the public resource. This requirement can put the operator in a difficult position. If, for example, the resource agency declares a species to be part of another critical community, that species could be placed in PNDI without the opportunity for peer review or public input. That could trigger a series of unnecessary events that could be costly to the operator in terms of time and money, when in fact the protection may not be necessary or appropriate. And if the DEP conditions the permit based on the operator's description and the public resource agency's comments, the DEP may have to defend an appeal of the permit condition when a third party who might not be a public entity has information necessary to defend the appeal.

If despite the comments above, a definition of "other critical communities" is retained, it is recommended that it be limited to locations that have been identified and listed by truly public entities through a process that includes public comment, and that a "public resource agency" be required to follow procedures under the regulatory review process when listing a species or other resource for protection. This would

minimize the frequency of permit conditions leading to appeals, and would help to assure that "other critical communities" that truly deserve protection are properly identified and protected in a legal manner.

§78a.15(f) discusses impacts to public resources and a process for avoiding or minimizing those impacts. §78a.15(g) indicates that DEP will consider probable harmful impacts of the well, well site or access roads to public resources and consider conditions to the well permit to avoid or mitigate those impacts. Conditioning the well permit to address potential impacts of other activities at the well site and access road is not appropriate. There are other regulatory avenues under other statutes and regulations to avoid or mitigate those impacts. It is recommended that this section be revised accordingly.

§3215(e) of Act 13 requires the development by regulation of criteria for the department to use for conditioning a well permit based on its impact to the public resources identified in subsection (c) and for ensuring optimal development of oil and gas resources and respecting property rights of oil and gas owners. The process proposed in §78a.15(f)(2) does not provide criteria as required by statute. The statements in §78a.15(g) indicating that DEP will consider impacts to the public resource functions and use, without providing any criteria for use by DEP or the operator, is not consistent with the legislative intent. Without criteria, it is questionable whether or not DEP is authorized to condition a well permit for activities related to public resource protection. It is strongly recommended that DEP develop such criteria and promulgate those criteria in regulation as required by Act 13.

78a.17. Permit expiration and renewal – Subsection (a) defines "due diligence" as drilling a well to total depth within 16 months of issuance of the well permit. Since unconventional drilling operations typically involves multiple rigs drilling multiple wells on a single pad, a more reasonable timeframe is "within 24 months of issuance of the well permit."

§78a.41. Noise mitigation –In light of the Department's stated commitment to retaining recently developed noise mitigation requirements, we offer the following recommendations. First, the Department should develop, with the input of stakeholders, a manual of best management practices (BMPs) for noise mitigation and example descriptions of situations under which they could be applied. API is in the process of finalizing general guidance on noise mitigation as a part of new Recommended Practice. Once finalized, this guidance could serve as the starting point for discussions within the stakeholder group recommended above. Second, as these provisions were not included in the rulemaking process prior to March 2015, the proposed regulation and all associated guidance (technical or otherwise) should be developed and vetted through the appropriate rulemaking process and include opportunity for public comment. Third, the Department should develop and implement an educational outreach program to assist DEP field staff and operators to recognize situations where the BMPs should be applied. Lastly, only after the program is shown to be necessary and effective should it be included in the regulations.

§78a.51. Protection of Water Supplies – The current interpretation by DEP of paragraph (d)(2) regarding water quality is that the post incident/post treatment water quality must meet the complete Safe Drinking Water Act list of parameters. This list includes a large number of constituents that are unrelated to oil and gas activities. Similar to other industries and environmental programs, PADEP should develop a specific subset of parameters from the SDWA list that must be met to deem the replacement/restoration of the water supply adequate.

In addition, this paragraph also indicates that if the water quality is of higher quality prior to the incident then the restoration/replacement of the water supply must meet "pre-pollution" quality. The data from a water source can be highly variable and collecting one or two samples from a water source does not necessarily establish "pre-pollution" water quality for a number of reasons including:

- Lack of water well construction requirements/standards creates the potential contamination due to surface water infiltration and increases in turbidity and common ions such as iron and manganese due to caving of the uncased wellbore.
- Natural variability due to seasonality, variability of water use prior to sampling and variable yield from multiple and different water bearing zones
- Inherent variability in sampling and analytical methods
- Other man-made influences such as the use of salt from road treatment during winter months

Strict interpretation of the word "meet" would not allow for the flexibility of natural variability in a number of key constituents such as chloride, iron, manganese and methane which has been well documented through the pre-drill survey. Furthermore, trace constituent often detected at low parts per billion concentrations and well below their respective drinking water standards can vary slightly for any of the reasons noted above and therefore could result in unrealistic treatment requirements with no added protective benefit to the public. For the above reasons, it is strongly recommended that the word "meet" be changed to "is comparable to" in the last sentence of this paragraph to provide the latitude for scientific interpretation by PADEP, home owner and operator when meeting "pre-pollution" water quality conditions.

Based on the complexity of this regulation, it is also strongly recommended that a technical subcommittee be established to develop technical guidance. This subcommittee should include a cross section of technical experts from DEP, public water supplies and oil and gas industry.

§78a.52. Predrilling or prealteration survey – A new sentence has been added to this subsection that states that "survey" means all of the pre-drill water supply samples associated with a single well. This would include samples taken by any other person as indicated in subsection (b). §3218(b) of Act 13 provides for landowners and water purveyors suffering pollution or diminution of a water supply to notify the department to request an investigation. The sample results of the operator's predrilling survey and the department's investigation are to be used in making a determination of whether or not pollution or diminution has occurred. Act 13 does not provide standing to "all of the pre-drill waste samples" since they could have been conducted at a different time, under different conditions, by persons not trained or certified in water supply sampling or analysis, or otherwise not related to the operator's activity. It is recommended that this new sentence be revised to make it clear that it is referring only to the samples collected by the operator.

Also, paragraph (d) has been revised to require the submission of the survey results within 10 business days of "assignment of the API number by the department for the gas well." The timing for assignment of the API number is associated with the permit application process, and has nothing to do with the timing of the pre-drill survey activities, nor does the operator necessarily even know what day the department assigns the number. For the initial well on a pad, the pre-drill sampling will often occur long after an API number is assigned as part of the permit application process, in which case, it would be impossible to comply with the proposed submission of results within 10 days of the API number being assigned. For subsequent wells on the pad, if the same pre-drill data is to be used, then the 10 business days following assignment of the API number may be acceptable, if there is an associated requirement for DEP to notify the operator when the API is assigned. At a minimum, this paragraph needs to be revised to allow for submission "within 10 business days of receipt of all the sample results taken as part of the survey" as previously proposed, in situations where the data is not available at the time of API number assignment.

§ 78a.52a. Area of review – Under paragraph (a) the operator is to identify the surface and bottom hole locations of active, inactive, orphaned and abandoned wells having well bore paths 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. Identification of wells in some proximity from the vertical well bore is easy to understand; however the need for identification of all wells along the horizontal well bore is unclear. As has been discussed with DEP, the Oil and Gas Technical Advisory Board (TAB), and various public interest groups in various forums including the TAB workgroups in 2013, other wells that do not penetrate formations within 1,500 feet of the horizontal well bore are not affected by drilling or stimulation of the well, and communication between wells does not occur. The time and resources needed to identify these wells with no associated resulting environmental benefit is not justified. Identification of wells along the horizontal well bore that do not penetrate formations within 1,500 feet of the horizontal well bore does not contribute to environmental protection from the proposed drilling or stimulation activities. Consequently, it is recommended that the requirement for identification of wells along the horizontal well bore be revised to limit that identification to wells that penetrate to within 1,500 feet of the horizontal well bore.

§ 78.55. Control and disposal planning; emergency response for unconventional wells – §78a.55(f) requires the well operator to provide the PPC plan to, in addition to the Department, the Pennsylvania Fish and Boat Commission or the landowner upon request. We repeat the comment previously submitted that this is unreasonable. The Fish and Boat Commission and the landowner have no jurisdiction to access PPC plans. The Department should not by regulation give them authority they do not have otherwise, or be placed in a situation by those parties that would require the Department to take enforcement action for violations of this section. It is strongly recommended that the proposal to provide copies of the PPC plan to the Fish and Boat Commission and the landowner be deleted.

§78a.55 (i)(5)(i)(H) requires, as part of the operator's emergency response plan, the location of and monitoring plan for any emergency shutoff valves located along temporary pipelines in accordance with §78a.68b. It is clear that §78a.68b(f) requires flagging at regular intervals, not greater than 75 feet, along the entire length of these pipelines. It is not clear that there is any relationship between these two sections. It is also unclear and questionable why DEP would require the operator to locate and monitor emergency shutoff valves along **temporary** pipelines as part of an emergency response plan for a well. These temporary pipelines usually carry freshwater and are temporary in nature. The environmental benefit compared to the cost is questionable. It is recommended that §78a.55(i)(5)(i)(H) be deleted.

§78a.56(a)(3). Temporary storage – This section requires the operator to obtain siting approval for site-specific installation of modular aboveground storage structures for each well site where its use is proposed. No siting criteria are proposed. It is highly recommended that the required criteria be developed and adopted as part of this proposal.

§78a.57. Control, storage and disposal of production fluids – Subsection (i) would require operators to report any deficiencies to DEP within 3 days of the inspection and remedy prior to continued use of the tank. Does this mean that tanks will need to be taken out of service for any deficiency or only those that could result in a leak? DEP needs to clarify "deficiency" in this subsection.

§78a.57a. Centralized tank storage – In subparagraph (a) the last sentence states that the permit shall be submitted electronically… It is recommended that this be changed to read the permit <u>application</u> be submitted …

The first sentence in subparagraph (b) indicates that "the Department may deny the issuance of a permit if it finds that the applicant has failed **or** continues to fail to comply …" It is recommended that this be changed to "… the applicant has failed **<u>and</u>** continues to fail to comply…" Historic violation that have been or are being satisfactorily resolved or administrative notices of violation should not cause denial of a permit.

§78a.57a is over 7 pages long and contains an excessive amount of detail for the type of temporary water storage facilities this section is intended to address. The requirements are more stringent than those of the residual waste and storage tank programs, and approaches the level of detail for a superfund site. The section indicates that these facilities must be designed and constructed in accordance with an appropriate current code of practice developed by nationally recognized associations such as Underwriters Laboratory, American Concrete Institute, American Petroleum Institute, American Society of Mechanical Engineers, American Society for Testing and Materials or the National Association of Corrosion Engineers. Then it proceeds to describe, in excessive detail, how the facility is to be designed and constructed. It is recommended that this unnecessary excessive detail be deleted and the section require the facilities to be designed and constructed in a manner that is in accordance with appropriate current national codes of practice or existing unconventional well pad design and construction standards (for situations where an existing well pad will be used to for temporary storage of water originating from or destined for use at other nearby pads).

Subparagraphs (i)(8)-(15) introduce significant confusion and uncertainty in the way the terms "containment," "secondary containment," and "emergency containment" are used. It's unclear what the difference between those terms is intended to be (since the only related defined term in §78a.1 is "containment system"), as well as potential inconsistencies with §78a.64a which is incorporated by referenced in subparagraph (i)(8), but only the terms "containment" and "secondary containment" are used in §78a.64a, and not "emergency containment."

DEP has established a new permeability requirement for secondary containment ($1X10^{-10}$ cm/sec) that differs from the existing permeability requirements ($1X10^{-6}$ cm/sec) used by the Oil and Gas Program and, more importantly, standards set forth under the various Waste Management regulations. There needs to be consistency in these requirements, and the current standard should remain.

In subparagraph (i)(15), the requirement to remove stormwater from emergency containment areas "as soon as possible" is more stringent than is necessary. The wording "as soon as possible" should be deleted, which would still require the stormwater to be removed "when the water is in contact with the tank or piping and prior to the capacity of containment being reduced by 10% or more."

Subparagraph (j) requires a fence "to prevent unauthorized acts of third parties and damage caused by wildlife," however no fence can absolutely ensure "prevention" of unauthorized acts of third parties or damage caused by wildlife. The word "prevent" should be replaced with "discourage."

Subsection (n)(2) would require restoration within 9 months of completion of drilling the last well serviced by the centralized tank storage site. This is an unreasonable time frame given the onerous closure requirements. A more reasonable time frame is "within 2 years of the completion of stimulation of the last well serviced by the centralized tank storage site."

The last sentence of subparagraph (n)(2) that requires Quarterly reporting of wells serviced by the centralized tank storage facility and the amounts of fluids sent to those wells should be moved to a different subparagraph, such as (i) dealing with Operations or (l) dealing with Reports. Subparagraph (n) deals with Restoration once the facility is no longer in use, so the Quarterly reporting requirement during the life of the facility should appear elsewhere.

§78a.58. Onsite processing – Subsection (d) would require operators to notify DEP prior to conducting activities that would be exempt from obtaining DEP approval. These activities typically take place during multiple phases (drilling, completions, flowback) of well development and would be a burden on

the operators and DEP to notify each time one of these activities are commenced. DEP should consider removing this notification requirement or allow operators to submit one notification to cover all phases of well development.

§78a59a, like §78a.59b, includes provisions that apply to freshwater impoundments – e.g., embankments. Rather than have two (2) sections that speak to the same or similar facilities, it is recommended that these sections be combined to facilitate a more seamless regulation.

§78a.59b. Freshwater impoundments – The first sentence of subsection (g) has unnecessary wording that should be removed so that the meaning is clear. It is recommended that the words "that the impoundment is registered to" be deleted so that it is clear that the restoration, and not the registration, is to be within 9 months of completion of drilling.

The same sentence of Subsection (g) requires that the freshwater impoundment be restored within nine months of completion of drilling of the last well serviced by the impoundment. This does not provide a suitable amount of time since wells are not always hydraulically fractured and completed immediately upon the conclusion of drilling. It is recommended that the wording be changed from "… within nine months of drilling…" to "… within nine months of completion of the last well …"

Subsection (g)(1)(i) includes the requirement that the operator demonstrate that the impoundment will prevent air pollution. It is suggested again, as in prior comments, that since air pollution control falls within the jurisdiction of another program, the reference to air pollution be deleted from this subsection.

Subsection (e) requires a fence "to prevent unauthorized acts of third parties and damage caused by wildlife," however no fence can absolutely ensure "prevention" of unauthorized acts of third parties or damage caused by wildlife. The word "prevent" should be replaced with "discourage."

§ 78a.65. Site Restoration – In subsection (a)(3), the requirement that a well site on which a well is not drilled be restored within "30 calendar days" after the expiration of the well permit should be changed to within "9 months" after expiration of the well permit, consistent with the reclamation time frames in (a)(1) and (a)(2). Once a well site is constructed, restoration of that site will require essentially the same amount of time regardless of whether a well had been drilled on the site or not.

§ 78a.67. Borrow pits. – Subsection (a) requires the operator of a borrow pit to operate, maintain and reclaim the site in compliance with the environmental performance standards of non-coal mining regulations and with the erosion and sediment control regulations and "other applicable laws." It is recommended that either these "other applicable laws" be identified or that this all-encompassing reference be deleted.

§ 78a.68b. Well development pipelines for oil and gas operations – This section requires all pipelines used for well development to meet the same standards for siting, installing, use and removal. While the proposed criteria may be appropriate for pipelines transporting materials that pose a risk to the environment, they represent overkill for pipelines used to transport fresh water. It is recommended that this section be changed to apply standards only to the level necessary to address the risk posed by the fluids to be transported.

Subsection 78a.68b(j) does not recognize the somewhat intermittent nature of certain operations. Consequently, the following addition is recommended: "…pipelines not in use for more than 7 CONSECUTIVE calendar days shall be emptied [and] or depressurized."

§ 78a.73. General provision for well construction and operation – The newly proposed requirement in the ANFR that all wells with an unknown true vertical depth be presumed to penetrate within 1,500 feet vertically of the formation to be stimulated is unreasonable and should be deleted. In most cases historical knowledge of drilling in an area will be sufficient to conclude that wells were either shallow or may likely extend to within 1,500 feet of the target formation, even when the actual depth of an individual well isn't precisely known.

In addition, the newly proposed requirement in the ANFR that any treatment pressure changes indicative of abnormal fracture propagation at the well being stimulated be reported to DEP immediately should also be deleted. The terminology "abnormal fracture propagation" is far too subjective to be a proper basis for triggering an immediate notification to DEP, and would generally be indicative of situations having no probable relevance to impacting another well. For example, if a stimulation plan calls for horizontal fracture propagation to approximately 300 ft., and treatment pressure indicates that fractures may only be laterally extending 100 ft., or may be laterally extending to 500 ft., both of those situations could be considered "abnormal" by the operator but would have no relevance to impacting a well that may be 1000 ft. away.

§ 78a.121. Production Reporting – The frequency for reporting waste information should remain twice per year, and not be changed to monthly, as newly proposed in the ANFR. There was no legislative intent in Act 173 or 2014 (HB 2278) to have waste data included in the monthly production reports, nor has DEP demonstrated, or even articulated, the need to have oil and gas waste reported more frequently than any other waste from any other industry, which is on an annual basis for all other industries. Oil & gas waste from unconventional well sites is currently reported to DEP in the production reports twice per year (already double the frequency of any other industry), and for typical operator may take approximately 20-30 hours per reporting period, regardless of the frequency of reporting, This waste data is available to DEP inspectors throughout the year if a need arises for DEP to review it, but there is simply no demonstrated need for operators to incur the administrative burden and expense to report it on a monthly basis.

Thank you for the opportunity to offer comments on Draft Final Chapter 78a, Environmental Protection Performance Standards at Unconventional Oil and Gas Wells. If you have any questions or if additional information is needed regarding our comments, please let me know.

Sincerely,

Stephanie Catarino Wissman

Stephanie Catarino Wissman
Executive Director

Cc: Scott Perry
Kurt Klapkowski