

CHESAPEAKE BAY FOUNDATION Saving a National Treasure



Environmental Quality Board P.O. Box 8477 Harrisburg, PA 17105-8477 Via e-mail: <u>RegComments@pa.gov</u>

# RE: Comments regarding Pennsylvania DEP's Proposed Rulemaking for Environmental Protection Performance Standards at Oil and Gas Well Sites, 25 Pa. Code Chapter 78.

Dear Environmental Quality Board:

The Chesapeake Bay Foundation ("CBF"), and its more than 200,000 members, thanks the Environmental Quality Board ("EQB") for this opportunity to comment on Pennsylvania's Department of Environmental Protection's ("DEP" or "the Department") proposed rulemaking for the Environmental Performance Standards at Oil and Gas Well Sites, 25 Pa. Code Chapter 78.

We commend DEP for undertaking the important task of updating the Chapter 78 regulations to address the new challenges created by the expansion of unconventional natural gas drilling and its associated activities. With the passage of Act 13 (58 Pa.C.S. §§ 2310-3514.) over two years ago, it was anticipated that changes to the Oil and Gas regulations would occur in a timely fashion. As such, we encourage the Department to expeditiously move forward in making the needed changes to the regulations. While the decision of the Pennsylvania Supreme Court in *Robinson Township, et al v. Commonwealth of Pennsylvania* has invalidated and enjoined select provisions of the controlling statute, the CBF believes that it is imperative that the Department proceed with the Proposed Rulemaking.

The CBF submits the following comments on the Proposed Regulations for consideration. In the absence of any comments by the CBF on any of the provisions or sections of the Proposed Rulemaking, we would like to join with the comments submitted by the Pennsylvania Environmental Council ("PEC"), the Environmental Defense Fund ("EDF") and The Nature Conservancy ("TNC").

#### Definitions

Consistency and clarification of terminology used in the Proposed Rulemaking should be addressed. Any terms used in the Proposed Rulemaking should reference another Chapter or Code which defines the term, unless there is a specific need to define the term differently. For example, the term "residual waste" should be defined in the regulation to provide greater clarification. The regulation should also clarify what is meant by using the terms "water," "freshwater," and "waste." These terms are used interchangeably throughout the document without being defined in the Proposed Rulemaking and thus left to interpretation.

Similarly, the definition for "Water source" uses the phrase "Water of this Commonwealth" which is undefined. An already defined term that should be used in its stead is "Waters of the Commonwealth," as defined in section one (1) of The Clean Streams Law. 35 P.S. § 691.1. In addition, the definition for "Body of water" does reference the definition in Chapter 105, but it is unclear why that term is limited to "a natural or artificial lake, pond reservoir, swamp, marsh or wetland," and does not include all "Waters of the Commonwealth" as defined in The Clean Streams Law. See. 25 Pa. Code § 105.1 and 35 P.S. § 691.1.

The Department should also define the term "additive" to mean "any substance or combination of substances found in a hydraulic fracturing fluid, including a proppant, that is added to a base fluid in the context of hydraulic fracturing treatment, whether or not the function of any such substance or combination of substances is to create fractures in the formation."

The term "Regulated substances" should be defined by the Department. "Regulated substances" should, at a minimum, include brines, drill cuttings, drilling muds, oils, stimulation fluids, well treatment and servicing fluid, as well as plugging and drilling fluid as provided in Section 78.56(a).

#### **Application Requirements**

The CBF commends the Department for ensuring that the Proposed Regulations requires corporate disclosure information on parent and subsidiary entities in the permit application requirements in Section 78.15 (c). However, we believe this requirement should also extend to partnership and joint venture interests.

Section 78.15 (f) (1) of the Proposed Rulemaking lists Public Resources that would trigger an applicant proposing to drill to notify the applicable public resource and provide information to the Department in the well permit application. The list of Public Resources should be expanded to include, at a minimum, High Quality or Exceptional Value Waters, Exceptional Value Wetlands, and Wild and Wilderness Trout Streams.

The 200 foot setback in Section 78.15 (f) (1) of the Proposed Regulations is a carry-over from existing regulations and does not envision the magnitude of unconventional natural gas well operations and activities. The CBF recommends an expansion of this distance to appropriately account for current technologies and operations at unconventional natural gas well sites.

Section 78.15 (f) (4) of the Proposed Regulations uses the phrase "discrete area" to describe the information required in a well permit application regarding Public Resources "...that may be affected by the well, well site and access road." <u>See.</u> Proposed Regulations 25 Pa. Code § 78.15(f) (4). The phrase "discrete area" is an undefined term which should be further explained and quantified. Determination of the "discrete area" must rest with either the Department or a designated resource protection agency and not the applicant. Similarly, in Section 78.15 (g) of the Proposed Regulations, the language should clearly indicate that the Department has sole authority to condition or deny a permit if it determines that there will be "probable harmful impact" to a public resource.

## **Protection of Water Supplies**

Section 78.51 (d) (2) should explicitly state that the replacement of water supplies shall meet the greater of the two applicable standards.

## Control and Disposal Planning; Emergency Response for Unconventional Wells

The Proposed Regulations require a well operator to provide a copy of its Preparedness, Prevention and Contingency Plan ("PPC Plan) to the Department upon request. <u>See.</u> Proposed Regulations 25 Pa. Code § 79.55 (d.2). Pursuant to the Department's emergency response authority, the PPC plan should be automatically submitted to the Department to ensure that all relevant safety information is immediately in hand.

## **Control, Storage and Disposal of Production Fluids**

In Section 78.57 of the Proposed Regulations, the Department uses the terms "operation" and "operation, service and plugging" indiscriminately. The language used throughout the Proposed Rulemaking should be consistent and thus be captured by using the defined term provided in Section 78.1 under "Oil and Gas Operations." <u>See.</u> Proposed Regulations 25 Pa. Code § 78.1. The Department should also impose a specific time limit for the on-site storage of fluids.

## **Freshwater Impoundments**

The freshwater impoundment requirements are not sufficient for the storage of "mine influenced water." <u>See.</u> Proposed Regulations 25 Pa. Code § 78.59b (g). Absent explicit requirements for pre-treatment of the mine influenced water, the standards for the storage of freshwater would be wholly inadequate for the storage of mine influenced water. The CBF recommends that standards for the storage of mine influenced water should meet those for wastewater and that requirements should be similar to those for leachate at municipal waste landfills. <u>See.</u> 25 Pa Code § 273.161-273.163.

Although the Proposed Regulations do require testing of the mine influenced water prior to storage in the impoundment, this does not provide enough protection from potential breaches of the impoundment system. <u>See.</u> Proposed Regulations 25 Pa. Code § 78.59b (g) (1) (ii). Breakdown of a mine influenced water containment system has potential impacts that far exceed those for a breach of containment of freshwater. As such, pre-treatment standards for mine influenced water must be developed to allow the use of freshwater impoundment systems for storage, or more stringent containment standards must be required for the storage of mine influenced water which are equivalent to wastewater containment systems.

Again, pursuant to the Department's emergency response authority, the records of mine influenced water should be automatically submitted to the Department to ensure that all relevant safety information is immediately in hand.

## **Centralized Impoundments**

To remain consistent with Section 3227 of Act 13, the Department should require air monitoring and reporting requirements for any centralized impoundments used for the storage of produced, flowback, or wastewater. <u>See.</u> 58 Pa.C.S. § 3227. The Department should also

consider pre-treatment, or other control standards, of stored wastewater to minimize or eliminate air emissions from centralized impoundments.

Section 78.59c (e) (3) (viii) (B) improperly allows a "[d]ischarge from the sump pump [to] be directed back into the impoundment...." <u>See.</u> Proposed Regulations 25 Pa. Code § 78.59c (e) (3) (viii) (B). A discharge that occurs should not be redirected back into a failing containment system.

#### **Site Restoration**

The site restoration section of the Proposed Regulations begins by stating that "[t]he owner or operator shall restore the land surface within the area disturbed..." pursuant to The Oil and Gas Act (58 Pa. C. S. § 3216) and the Chapter 102 regulations (25. Pa Code. Chapter 102). Land surface restoration activities should also be required to meet the requirements of The Clean Streams Law (35 P.S. §§ 691.1 et seq.) and Chapter 93 regulations related to water quality standards (25 Pa. Code Chapter 93).

Section 78.65 (d) (1) (ii) denotes that an area is restored if "[r]emaining impervious areas are minimized." Greater clarification must be given as to what the word "minimized" means in this section. Impervious surface areas should be reduced to the greatest extent practicable. To ensure that this reduction occurs, the Department should establish procedures for decompaction of surface areas no longer needed to be impervious. Oil and Gas Operations and the associated activities results in soil compaction which is not conducive to well site restoration and without proper instruction may be overlooked by operators. Further clarification of the term "impervious" is needed, this will prevent situations where areas are restored but still functioning as hydrologically impervious.

The Proposed Regulations requires that "[a]II areas of the site not needed to safely operate the well are restored to approximate original conditions, including preconstruction contours, and can support the land uses that existed prior to oil and gas activities to the extent practicable." Proposed Regulations 25 Pa. Code § 78.65 (d) (1) (iii). The word "approximate" is an undefined term that is not quantifiable and therefore too subjective in this context. Similarly, the term "condition" does not adequately provide a standard and should be specified as to the pre-construction soils, vegetative states, hydrology and other more specific descriptions of the unique character of the site.

To ensure that restoration of the site can "support the land use that existed prior to oil and gas activities," the Department must develop restoration standards. <u>See.</u> Proposed Regulations 25 Pa. Code § 78.65 (d) (1) (iii). Best Management Practices ("BMPs") must be established to ensure that such things as loss of forest cover, reduction of the amount of land returned to its original state, and/or other significant changes to the landscape are addressed through proper implementation of BMPs. For example, if it is not feasible to return a site to its original condition after oil and gas activities have occurred, the Department should require that the percentage of land which cannot be restored onsite be recreated in another, functionally equivalent location within the 12-digit hydrological code.

Section 78.65 (d) (1) (iii) (D) creates a "safety buffer" to protect the facilities; however, there is no maximum area given nor is there criteria to determine what would be considered an appropriate "safety buffer" for various activities at the well site. Standards should be

developed to ensure that the permitted "safety buffer' allows for seamless production while also restoring the site to its original state to the best extent practicable.

The extension period for restoration activities in Section 78.65 (d) (2) states that additional time may be granted, "...not to exceed two years...." <u>See.</u> Proposed Regulations 25 Pa. Code § 78.65 (d) (2). It is unclear why two years is the number deemed appropriate. The CBF suggests that the time period be shortened to the vegetative growing season, such as nine (9) months, absent justification for the two (2) year timeframe.

The term "interim" as used in Section 78.65 (d) (3) (i) (C) is confusing and must be defined. It is unclear whether "interim" means "temporary" in this instance. By definition, post construction stormwater management occurs after construction is complete and are permanent fixtures designed to manage and treat post construction stormwater; and thus they should not be "interim" or "temporary." The Department should also create a specific time limit for post-construction stormwater management practices to be completed and fully functional after active construction. The Clean Water Act limits the length of NPDES permits to five (5) years and thus it seems reasonable to limit the timeframe for post-construction activities to be completed to at least a five (5) year timeframe. <u>See.</u> 33 U.S.C. § 1342.

The Department should clarify the use of "or" in Section 78.65 (d) (3) (i) (A-D). As it currently reads, site restoration should consist of the timely removal or fill of all pits used to contain produced fluids or residual wastes; the removal of all drilling supplies and equipment not needed for production, including containment systems, the stabilization of the well site that shall include post construction stormwater management BMPs in compliance with Chapter 102; or other measures to be employed to minimize accelerated erosion and sedimentation in accordance with the Clean Stream Law. (emphasis added). <u>See.</u> Proposed Regulations 25 Pa. Code § 78.65 (d) (3) (i) (A-D). The use of "or" in this context suggests that not all of the subsections must be complied with for the site restoration plan.

Clarification is also required to ensure that the site restoration plan includes requirements for permanent long-term post construction stormwater management in accordance with the Clean Streams Law, Chapter 102 regulations and Chapter 93 for water quality standards. Sections 78.65 (d) (3) (i) (C) and (D) provide for short-term management of stormwater and erosion and sedimentation, both of which are associated with an active site. Site restoration, on the other hand, would occur once a site is "restored to approximate original condition" and requires a site restoration plan which appropriately addresses stormwater post-construction.

#### Water Management Plans

To ensure that Water Management Plans meet the requirements of Act 13 (58. Pa.C.S. § 3211 (m)) and Section 78.69 (i) (2-4) of the Proposed Regulations, the Department must provide detail on the criteria it will use, such as monitoring and reporting, to assure that compliance is demonstrated. It is also imperative that the Department require compliance with the Susquehanna River Basin Commission's Low Flow Protection Policy as a condition to the approval of any Water Management Plan under Section 78.69, even in the Ohio River Basin. <u>See.</u> Proposed Regulations 25 Pa. Code §78.69. Water Management Plans in the Susquehanna River Basin should require prior approval from Susquehanna River Basin Commission approval from Susquehanna River Basin Sould require prior approval from Susquehanna River Basin Commission before the Department issues a permit.

#### Conclusion

Once again, the CBF thanks the EQB for the opportunity to comment on Pennsylvania DEP's Proposed Rulemaking for Environmental Protection Performance Standards at Oil and Gas Well Sites, 25 Pa. Code Chapter 78. If you have any questions or would like to discuss these comments further, please feel free to contact us.

Sincerely,

/s/ Lee Ann H. Murray

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