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May 18, 2015

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

Re: Comments on Proposed Amendments to 25 Pa. Code Chapters 78 and 78a, Environmental Protection Performance Standards at Oil and Gas Well Sites [45 Pa.B. 1615 & 1951]

To Whom It May Concern:

Southwestern Energy, an exploration and production operator actively working in northeastern and southwestern Pennsylvania, appreciates the opportunity to comment on the Proposed Amendments to "25 Pa. Code Chapter 78 and 78a, Environmental Protection Performance Standards at Oil and Gas Well Sites".

For more than 80 years, Southwestern Energy Company (SWN) has thrived because of a deep commitment to providing the energy that powers our world and developing practices to operate in an environmentally sensitive and responsible manner. Our success continues to be dependent upon the dedication of our employees to the company and to the communities in which we operate. Currently the fourth largest producer of natural gas in the US Lower 48, Southwestern Energy Company is a growing independent energy company primarily engaged in natural gas and crude oil exploration, development and production.

SWN fully supports responsible environmental regulations to protect Pennsylvania's vast natural resources and commends the DEP for addressing improvements regarding protection of water resources, public health, landowner concerns and transparency. The purpose of this letter is to provide comments on how proposed regulation changes and additions may create a dramatic negative impact on our ability to operate and potentially create unintended adverse consequences. Our comments are offered solely in the spirit of improving the Rule from an operational perspective. Below is a short discussion of some of the critical proposed regulatory amendments we wish to call additional attention to. These comments are direct, specific impacts to SWN's operations and are in addition to the Marcellus Shale Coalition's comments of which SWN is in full support. Thank you for your review time and consideration of our provided comments. We appreciate all opportunities to collaborate with the DEP to continue to protect the environment and the communities in which we operate.

**78a.41 a) Prior to preparation and construction of the well site or access road, the operator shall prepare and implement a site specific noise mitigation plan to minimize noise during drilling, stimulation, and servicing activities.**

***SWN Comment:***

The proposed regulation does not consider the occupancy level and establishment of occupancy zones, time frames, and decibel (db) level for compliance. SWN recommends developing occupancy zones, operating time zones, and compliance levels for operations. These levels are recommended below, and are based on existing HUD Regulations and in-place zoning ordinances:

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Occpuancy Zone	Operating Time Frames	
	7:00 am – 7:00 pm	7:00 pm – 7:00 am
Residential	55 db	50 db
Commercial	60 db	55 db
Light Industrial	70 db	65 db
Industrial	80 db	75 db

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

**SWN Comment:**

SWN recommends that the Department’s inclusion of well construction activities for potential impacts to landowner, purveyor, or affected person water supplies should not be included in the proposed regulation, and feels it should only be limited to well drilling, altering, or operating activities. The Department currently regulates all construction activities under the stormwater management section 78a.53.

**78a.57 a)** An operator using a centralized impoundment at the time of the effective date of these regulations shall submit electronically to the Department through its website a closure plan for the centralized impoundment for review and approval no later than (six months from the effective date of this regulation). The operator shall properly close the centralized impoundment in accordance with the approved plan or obtain a permit in accordance with Chapter 3289 (relating to residual waste disposal impoundments) no later than ((3) years from the effective date of this regulation).

**SWN Comment:**

In order to continue to operate efficiently and effectively, SWN recommends that the Department’s proposed mandate to close existing impoundments, forcing the construction of centralized tank farms (CTFs) be reconsidered as this will have significant cost implications and unintended consequences such as increased truck traffic and increase in surface impact. Total costs associated with closing our existing four flowback impoundments, two separate facilities, will range between three and five million dollars. Additionally, the construction of new CTFs will range from between \$4.5 to \$6.5 million dollars, totaling between \$8 and \$13 million dollars for the two (2) facilities in order to replace the existing impoundment’s volumes. Furthermore, operating costs would be between \$600-\$900 thousand dollars a year, per site. These costs include electronic monitoring, 24-hour onsite support personnel for truck unloading and tank mixing operations. In total, each CTF location will increase the SWN’s operating cost by \$1.2-\$1.8 million dollars a year.

Per 78a.68b, underground piping will not be allowed to move reuse water, therefore all reuse will need to be trucked. If all reuse water is transported by truck and existing pipeline infrastructure is shut in, SWN will assume significant increases in cost per well for completion activities, averaging over a million dollars per well. Increased truck traffic will also have adverse impacts on local road infrastructure and adverse safety implications

as well. Other unintentional impacts surrounding the CTF are the surface footprint and visual impacts. SWN's replacement CTFs will be greater than 20 acres in size, exceeding the current 15 acre size for our impoundments. Tank farms will also be highly visible and have greater exposure to strong weather, lightning strikes, vandalism, and other factors outside SWN's control.

Timing is also a concern for SWN regarding any mandated CTF for reuse water. Permit time frames are expected to take at least a year comparing to traditional timelines, and construction will add an additional six months. Should pre-construction groundwater monitoring be required at each location for a full year, this would extend the total permit time to 18 to 36 months. Lastly, there will be an impact on our ability to utilize our reuse water and a potential for a loss of three million barrels of reuse fluid due to the closing of these impoundments. This will create an increased operating cost to haul and dispose of that water to a tune of approximately 45 million dollars, and this does not account for any production delays.

***SWN Recommendations:***

SWN recommends new construction be based on Centralized Waste Treatment facility design criteria, as outlined in 40 CFR 437.2 (c), and grandfathering existing impoundments for seven (7) years to maximize water reuse and minimize additional surface construction impacts. This would also include grandfathering existing permitted water movement pipeline systems, with a requirement for annual pressure testing, which will minimize trucking and road impacts. Additionally, SWN feels DEP Oil & Gas staff should manage all reuse water and permitting facilities, with a benefit being a streamlined permitting for projects that are environmentally favorable.

**78.65 a) Relating to Site Restoration and Reclamation:**

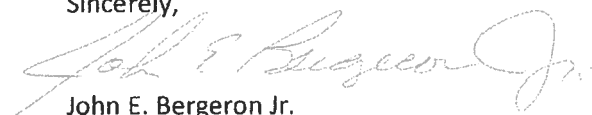
**RESTORATION. The owner or operator shall restore land surface areas disturbed to construct the well site as follows:**

***SWN Comment:***

SWN feels the Department's comments relating to site restoration and reclamation should be stricken for unconventional wells as they pertain more closely to conventional wells. SWN believes our locations are constructed to a reasonable size to ensure safe operations for our producing wells for their life span. SWN believes as long as post construction stormwater controls are adequate to manage rates and volumes, and the site is permanently stabilized, minimizing the site is not warranted for these unconventional well locations and a potential safety concern.

SWN strives to continue to be a steward in the community and environment in which we live and work. We look forward to continuing our excellent working relationship with the Department in regards to these proposed Chapter 78 regulations and updates. If you would care to further discuss any of our recommendations, please contact me at (832) 796-2820 and I will make the appropriate staff available.

Sincerely,



John E. Bergeron Jr.  
Senior Vice President – Appalachia