



SNYDER BROTHERS, INC. 3042

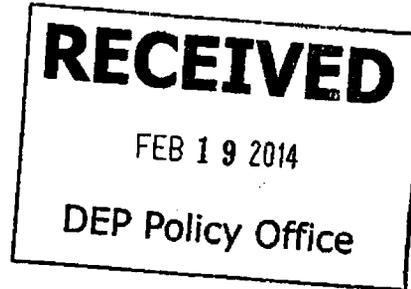
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February 5, 2014

Environmental Quality Board
P.O. Box 8477
Harrisburg, PA 17105-8477



RE: Comments on the Department of Environmental Protection's proposed revisions to 25 *Pennsylvania Code Chapter 78, Subchapter C, Environmental Protection Standards*, dated December 14, 2013.

Dear EQB Members:

Snyder Brothers respectfully submits the following comments on the Pennsylvania Department of Environmental Protection's proposed revisions to 25 *Pennsylvania Code Chapter 78, Subchapter C, Environmental Protection Standards*, dated December 14, 2013.

Snyder Brothers is a local, family owned independent producer of oil and natural gas and has operated in Pennsylvania for more than 30 years. While Snyder Brothers recognizes that the Department must make a continued effort to adjust the regulations as our industry evolves, we continue to become concerned that the scope of these proposed rulemakings are overly broad and go beyond what is necessitated by Act or actual environmental impacts. The oil and gas industry has had a long, successful history in Pennsylvania under the current regulatory framework from federal, state, and local programs and does provide substantial environmental protection at every stage of development. It should especially be noted that the Department keep in mind the impact to conventional operators that have conducted business here in the state without issue for over 150 years.

Snyder Brothers appreciated the opportunity to provide comments on the proposed changes and looks forward to further discussions regarding these proposed regulatory changes.

Sincerely,

SNYDER BROTHERS, INC.

Todd Kunselman
Manager of Drilling & Completions



Comments on the Department of Environmental Protection's proposed revisions to 25 *Pennsylvania Code Chapter 78, Subchapter C, Environmental Protection Standards*, dated December 14, 2013.

Section 78.1 Definitions

Gathering Pipeline – A gathering pipeline should be defined as a pipeline that transports oil, liquid hydrocarbons or natural gas from individual wells to the point of transfer of custody.

Mine Influenced Water – Mine influenced water does not always have to be a pollutant or a threat of pollution to waters of the Commonwealth. An example is a limestone mine pool that contains water that meets or exceeds drinking water standards.

Water Source – (i)(D) contradicts (ii)(A). Flowback or production water has and typically can be a beneficial use in the drilling or completion of another well.

Section 78.15 Application requirements

78.15(f)(1)(i) – This should be restated as “within a publicly owned park, forest, game land or wildlife area. As proposed, this is the potential taking of private property owners rights and their ability to develop their property if the owner so chooses to.

78.15(f)(1)(iv) – This should be removed all together as there is generally limited evidence or insufficient data to determine a special concern species and should not fall upon the operator to determine this.

78.15(f)(1)(vi) – This should be removed all together as this notification is already required under Act 13.

78.15(f)(3) – Identify and prepare the forms prior to the establishment of this section for review.

78.15(f)(3)(ii) – The operator should not be responsible for the determination and functions of public resources.

78.15(g) – Who determines the probable harmful impact to a public resource, the Department or the public resource agency?

Section 78.51 Protection of water supplies

78.51(b) – What is the definition of “operating activities”?

78.51(c) - This should read ‘diminution was caused by the well site construction, well drilling, alteration, etc. to remain consistent with revisions in 78.51(b).

78.51(d)(2) – Clarification needs to be made that if an affected water supply did not meet Pennsylvania Drinking Water Act standards as determined by a pre-drill sample, the replaced water supply must only meet the pre-drill water quality and nothing more stringent.

Section 78.52 Predrilling or prealteration survey

78.52(e)(1) - This also needs to include a person representing surface landowner/water supply owner, such as a tenant or caretaker.

A general question is why can't a valid water survey/sample be used/taken to preserve an operator's defense up until the point of the beginning of operations? There is no scientific basis for a time frame to be put on the validity of water sample results and should be based on when the sample was taken, not when results have been received (We are aware the 10 day standard has been set in Act 13). A suggestion would be to require the test results to be sent to the Department and landowner within 10 business days but should still be allowed to preserve an operator's defense based on sample date.

Section 78.52a Abandoned and orphaned well identification

Simplify this section to the following for all wells: Prior to drilling the well, the operator shall make a good faith effort to identify the location of all operating, inactive, orphaned or abandoned wells within 500 feet of the wellbore in accordance with subsection (b). This would cover the general consensus that frac propagation does not exceed 500 feet from the wellbore. The key word is wellbore so by this definition, a standard Upper Devonian conventional well with a total depth of 3500 feet would not have to be identified for a horizontal Marcellus Shale well at a true vertical depth of 6000 feet or more.

It would be more beneficial and practical for the operator to identify these types of wells prior to drilling and during the permitting process. The identified wells could be included on the well location plat and will be more cost effective to collect the locations of said wells while the surveyors are already in the field. The identification of these wells is just a crucial during the drilling phase in the event of a blow out and the associated risk of over pressuring a well that penetrates the same open formation while drilling.

Will the review of the Department's orphaned and abandoned well database require an operator to gain access to the Well Information System (WIS)? I believe this is only accessed through a PAIRIS account. Is the Department willing to give free access to this PAIRIS for this well review?

The identification or potential identification of these types of wells has an effect on other aspects of well permitting. For the operator that must deal with coal vs. non-coal determinations, this will affect the outcome of those determinations. With the identification of these abandoned or orphaned wells in a coal area, unless the operator can prove that the well was abandoned prior to November 30, 1955; the operator will have to respect that location for coal spacing. The question that comes into play is that if it's based on the location of the well from an old map, how does the accuracy affect that outcome? Caution must be taken when showing these well

locations as some well locations on older maps was simply that, just a proposed location and was never drilled.

The Department needs to provide the forms for review prior to the establishment of this section. What will the Department do if a landowner denies the operator access or fails to respond? What if the operator identifies a well but does not know or cannot find any information about the well such as depth, casing design, etc? A definition of "precise location" needs to be given for clarity.

Section 78.55 Control and disposal planning; emergency response for unconventional well sites

78.55(a) - Are site specific plans just for new or altered wells that will generate waste, or for all wells on operators bond? Is it retroactive?

78.55(f) - Upon what authority does the PAFBC or the landowner have the right to review a PPC plan? The Department should have the only authority to request and review a PPC plan.

Section 78.56 Temporary storage

78.56(a)(2) - What is the protocol for Department approval? A time frame needs to be set upon which the Department must make an approval or denial decision. Who at the Department is qualified to approve modular storage structures?

78.56(a)(5) - Why are unconventional wells singled out to require fencing around pits. If it's ok for a conventional drill pit, why not a pit on an unconventional well site?

78.56(a)(6) - Consideration must be given to locking access lids to tanks. During normal well production, the well is blown to the tank and pressure must be released through the access lids on some wells. If this is shut and locked, the tank can explode due to the increased pressure.

78.56(a)(9)(ii) - Pit liners at conventional wells are currently only required to be 20 mils thick and an exemption should be made for that under this section.

78.56(a)(9)(iv) - What comprises an integrity test of liner sections?

78.56(a)(11) - This section, as written is appropriate. The determination of the seasonal high water table can be difficult and includes many variables such as the time of year the determination is made as well as recent precipitation. An example that has been experienced is a geologist or soil scientist with education and qualifications in hydrogeology and hydric soils has made a scientific determination of the seasonal high water table at a drill pit on day 1. On day 2, the Department Water Quality Specialist makes a site inspection prior to the pit liner being installed and due to the precipitation during day 2 the Water Quality Specialist makes the determination that the operator has intercepted the seasonal high groundwater table based on visual standing water in the base of the pit without any scientific reasoning. The scientific determination should be the deciding factor.

A suggestion is the re-writing of the definition of *seasonal high groundwater table* in section 78.1 for clarification and to make a clear separation of groundwater and precipitation accumulated in a pit prior to the liner being installed. A further suggestion is to use the term *seasonal high saturation* instead of *seasonal high groundwater table* as the inclusion of the term *groundwater table* can be confusing.

78.56(a)(16) – The form showing the statement from the engineer or geologist should be produced and reviewed prior to establishment of this section.

Section 78.57 Control, storage and disposal of production fluids

78.57(c)(1) – This form needs to be produced and reviewed prior to establishment of this section.

78.57(c)(2)(vii) – Why should a liner under this section be required to satisfy EPA Method 9090 whereas as liner under section 78.56(a)(9)(iii) must meet ASTM Method D5747?

78.57(c)? – This section is rather confusing. Is the section regarding secondary containment for any tanks or above ground structures that contain brine? It seems as though the secondary containment section needs to be a separate clause from 78.57(c). Section (c) should only be for pits and not tanks or above ground structures per the succeeding sections. Also, there should be construction guidelines for diking/secondary containment. Is a liner required, etc?

78.57(d) – This requirement is too vague and leaves too many specific requirements up to interpretation.

78.57(e) – This section states that an operator must remove underground or partially buried tanks within 3 years of the effective date of the subsection and go on to say you must schedule the removal within 6 months of the effective date. The time frames are conflicting. Underground tanks are allowed at gas stations and other industry facilities so why should tanks at well sites not be allowed?

Section 78.58 Onsite processing

78.58(c) – What is meant by “process drill cuttings”? Does that mean adding solidification material such as sawdust or wood pellets? Solidification material should be permitted to be used without Department approval. The form for this process should be produced and reviewed prior to establishment of this section.

Section 78.59a Impoundment embankments

78.59a(4) – The inside slope should be allowed to be 2:1 to try and cut down on the overall earth disturbance.

78.59a(5) – The rate of soil sampling of one sample per 1,000 cubic yards is unreasonable and cost prohibitive to the operator. A single composite sample from the embankment material should suffice.

Section 78.59b Freshwater impoundments

78.59b(b) - The form for this process should be produced and reviewed prior to establishment of this section.

78.59b(e) - The determination of the seasonal high water table can be difficult and includes many variables such as the time of year the determination is made as well as recent precipitation. An example that has been experienced is a geologist or soil scientist with education and qualifications in hydrogeology and hydric soils has made a scientific determination of the seasonal high water table at a drill pit on day 1. On day 2, the Department Water Quality Specialist makes a site inspection prior to the pit liner being installed and due to the precipitation during day 2 the Water Quality Specialist makes the determination that the operator has intercepted the seasonal high groundwater table based on visual standing water in the base of the pit without any scientific reasoning. The scientific determination should be the deciding factor.

A suggestion is the re-writing of the definition of *seasonal high groundwater table* in section 78.1 for clarification and to make a clear separation of groundwater and precipitation accumulated in a pit prior to the liner being installed. A further suggestion is to use the term *seasonal high saturation* instead of *seasonal high groundwater table* as the inclusion of the term *groundwater table* can be confusing.

78.59b(g) - Mine influenced water does not always have to be a pollutant or a threat of pollution to waters of the Commonwealth. An example is a limestone mine pool that contains water that meets or exceeds drinking water standards.

78.59b(g)(1) - The form for this process should be produced and reviewed prior to establishment of this section.

Section 78.59c Centralized impoundments

The overall review of this section and its associated requirements makes it impractical, if not impossible, to construct a central impoundment. The up-front costs and site evaluation places the operator in a high risk position with no guarantee of permit issuance for central impoundment construction. Given the potential time frame of up to one year lead time for such an evaluation, the operator will likely seek other options for fluid management.

78.59c(d) - The determination of the seasonal high water table can be difficult and includes many variables such as the time of year the determination is made as well as recent precipitation. An example that has been experienced is a geologist or soil scientist with education and qualifications in hydrogeology and hydric soils has made a scientific determination of the seasonal high water table at a drill pit on day 1. On day 2, the Department Water Quality

Specialist makes a site inspection prior to the pit liner being installed and due to the precipitation during day 2 the Water Quality Specialist makes the determination that the operator has intercepted the seasonal high groundwater table based on visual standing water in the base of the pit without any scientific reasoning. The scientific determination should be the deciding factor.

A suggestion is the re-writing of the definition of *seasonal high groundwater table* in section 78.1 for clarification and to make a clear separation of groundwater and precipitation accumulated in a pit prior to the liner being installed. A further suggestion is to use the term *seasonal high saturation* instead of *seasonal high groundwater table* as the inclusion of the term *groundwater table* can be confusing.

78.59c(e)(1)(vi) – Can the material on site be used as a sub-base? What is the definition of a natural clay material? Can material on location be screened to meet this requirement?

78.59c(e)(3)(xii) – Under normal construction standards, a drain system installation would require the use of carbonate stone to allow for permeability. Why prohibit the use of this type of material? What is the alternative?

78.59c(e)(4)(x) – Have the necessary electronic reporting setup in GreenPort prior to the implementation of this section.

78.59c(f) – They hydrogeologic investigation should be eliminated in its entirety. The time frame set forth for the investigation and up-front costs for an evaluation makes this section impractical for the operator. As strict as the construction requirements are with a series of liners and a leak detection system, there should be no effect of the hydrologic system at any depth below the central impoundment.

78.59c(f)(1) – This is the first mention of a permit application associated with constructing a central impoundment.

78.59c(f)(2) – Is the time frame of the permit issuance consistent with the Permit Decision Guarantee Program?

78.59c(f)(4) - The determination of the seasonal high water table can be difficult and includes many variables such as the time of year the determination is made as well as recent precipitation. An example that has been experienced is a geologist or soil scientist with education and qualifications in hydrogeology and hydric soils has made a scientific determination of the seasonal high water table at a drill pit on day 1. On day 2, the Department Water Quality Specialist makes a site inspection prior to the pit liner being installed and due to the precipitation during day 2 the Water Quality Specialist makes the determination that the operator has intercepted the seasonal high groundwater table based on visual standing water in the base of the pit without any scientific reasoning. The scientific determination should be the deciding factor.

A suggestion is the re-writing of the definition of *seasonal high groundwater table* in section 78.1 for clarification and to make a clear separation of groundwater and precipitation accumulated in a pit prior to the liner being installed. A further suggestion is to use the term

seasonal high saturation instead of *seasonal high groundwater table* as the inclusion of the term *groundwater table* can be confusing.

The requirements of 25 PA Code 289.121-123 are extremely stringent requiring a minimum of a year of water quality and quantity testing as well as the requirements of boring and cores. The time frame set forth for the investigation and up-front costs for an evaluation makes this section impractical for the operator. As strict as the construction requirements are with a series of liners and a leak detection system, there should be no effect of the hydrologic system at any depth below the central impoundment.

78.59c(g) – While you propose the installation of monitoring wells, nothing is noted about the long term management or responsibility of the monitoring wells. Once the central impoundment is reclaimed, the existing monitoring wells pose a risk of contamination entry. Permanent monitoring wells will not fit back into the prior land use, especially agriculture. Will the department require the operator to plug these wells? As strict as the construction requirements are with a series of liners and a leak detection system, there should be no effect of the hydrologic system at any depth below the central impoundment that should require monitoring well installation.

78.59c(h)(2) - What is the definition of ‘routine operations’?

78.59c(m)(8) – Indication that there is considerable risk to be shouldered by the operator if the central impoundment is already built, monitoring wells installed, etc and the Department then denies the use of the impoundment. Who at the Department is qualified to review and evaluate such plans? If there is a requirement for the operator to utilize licensed professionals to oversee and evaluate the site, then a licensed professional from the Department should be required to review the report. Does the department employ licensed professionals?

Section 78.61 Disposal of drill cuttings

78.61(d) – The approved list of solidifiers should be posted to the Department’s website prior to the establishment of this section.

78.61(f) – Have the necessary electronic reporting setup in GreenPort prior to the implementation of this section.

Section 78.62 Disposal of residual waste – pits

78.62(a)(1) – The operator should be allowed to dispose of unconventional solid waste at the well site. What is the scientific basis for not allowing the disposal of this material? Why prohibit on-site disposal from unconventional wells without data and tests to support the prohibition? The costs associated with disposing this material at a landfill (which would be the only option if this section is implemented) would make it uneconomic to develop the resource with our company’s business plan.

78.62(a)(5) - Have the necessary electronic reporting setup in GreenPort prior to the implementation of this section. The end of this statement should read "the operator shall re-notify the Department of the new proposed date of disposal.

78.62(a)(9) - The determination of the seasonal high water table can be difficult and includes many variables such as the time of year the determination is made as well as recent precipitation. An example that has been experienced is a geologist or soil scientist with education and qualifications in hydrogeology and hydric soils has made a scientific determination of the seasonal high water table at a drill pit on day 1. On day 2, the Department Water Quality Specialist makes a site inspection prior to the pit liner being installed and due to the precipitation during day 2 the Water Quality Specialist makes the determination that the operator has intercepted the seasonal high groundwater table based on visual standing water in the base of the pit without any scientific reasoning. The scientific determination should be the deciding factor.

A suggestion is the re-writing of the definition of *seasonal high groundwater table* in section 78.1 for clarification and to make a clear separation of groundwater and precipitation accumulated in a pit prior to the liner being installed. A further suggestion is to use the term *seasonal high saturation* instead of *seasonal high groundwater table* as the inclusion of the term *groundwater table* can be confusing.

Section 78.63 Disposal of residual waste – land application

78.63(a)(1) – The operator should be allowed to dispose of unconventional solid waste at the well site. What is the scientific basis for not allowing the disposal of this material? Why prohibit on-site disposal from unconventional wells without data and tests to support the prohibition?

78.63(a)(5) - Have the necessary electronic reporting setup in GreenPort prior to the implementation of this section.

78.64a Containment systems and practices at unconventional well sites

78.64a – There should be a clear definition of what the term "stored" means for clarification of Act 13. It had been discussed during Department training for Act 13 implementation webinars that individual fuel tanks on equipment were not considered "stored"; however, the way this section is worded, individual fuel tanks would need to be contained.

78.64a(c) – This subsection should only apply to regulated substances and solid wastes in equipment or vehicles used directly for the phases of drilling, casing, cementing, hydraulic fracturing, or flowback. The operator should not have to contain individual fuel or hydraulic oil tanks on individual equipment or vehicles (in order to operate) regardless of whether they are refueled or not. An example is an individual pump truck should not need to be contained but an acid transport truck would since the acid is used in the actual hydraulic fracturing process.

78.64a(f) – The requirement of secondary containment is confusing. If an additive is already in a tote, is that considered containment and a liner system under the tote is secondary containment? This is going beyond the scope of Act 13 which merely requires a single containment system.

78.64a(g)(1) - What constitutes an integrity test? Is the integrity test protocol provided by the manufacturer?

78.65 Site restoration

78.65(d)(3) - The form for this process should be produced and reviewed prior to establishment of this section.

78.65(d)(4) - The form for this process should be produced and reviewed prior to establishment of this section.

78.65(g) – Why does the landowner need a copy of the restoration report? This should not be a requirement.

78.66 Reporting and remediating releases

Will this section confirm exactly with the current spill policy?

When there is no statewide standard set for certain substances, such as chlorides in soils, to what standard does the operator have to have to meet to conform with full remediation?

78.67 Borrow pits

78.67(b) – Operators should not have to register borrow pits whether they currently exist or planned. Where does the pit have to be registered, Greenport? Borrow pits normally are not put to use until test pits are dug for the presence of adequate material. This makes registering the borrow pit prior to construction impossible. What is the reasoning of this requirement?

78.67(c)(1) – Borrow pits should be allowed continued use for more than a single well pad to limit earth disturbance of several borrow pits in one geographic area.

78.68a Horizontal directional drilling for oil and gas pipelines

78.68a(k) - In this section regarding horizontal directional drilling, the Department is requiring the operator to treat drill cuttings and drill mud (bentonite and water) as residual waste. It's good the Department is finally addressing what to do with the "drill mud", but now the material will have to be hauled to a land fill at a significant expense. This adds thousands of dollars in disposal and trucking costs. In most instances it is unnecessary and often times the retrieval of the mud is more harmful to the environment than incorporating them in the pipeline right of way.

78.69 Water management plans

78.69(b) – Exact details of the SRBC requirements should be specified. What type of sign and what does it need to say? This section is too vague. The Department should not rely on an outside entity to establish regulations. What if the SRBC disbands and is no longer a local regulatory agency?

78.70 Road-spreading of brine for dust control and road stabilization

78.70(a) – Why prohibit brine spreading of unconventional well produced fluid without data and tests to support the prohibition? This determination should only be made after analysis of the brine is conducted per 78.70(c)(8). Analysis has shown that unconventional production fluid can have the same quality as conventional production fluid. What is the scientific basis for not allowing the spreading of other fluids?

78.70(c)(7) – This is a logistical issue for us as an operator as we approximately have 3200 gas wells on our bond. Listing each well and all producing formations which produce brine should not be necessary. It is impossible to know in advance what wells we will spread brine from over the course of a year. Perhaps a general statement in the application indicating the range of formations which we have/had produced in all owned wells is more appropriate.

78.70(c)(8) – The list of parameters needs to be determined and listed in this section prior to implementation. What constitutes a representative sample?

78.70(k) – Have the necessary electronic reporting setup in GreenPort prior to the implementation of this section.

78.70(l) - This information should be able to be submitted electronically through GreenPort.

78.70a Pre-wetting, anti-icing, and de-icing

78.70a(a) – Why prohibit brine spreading of unconventional well produced fluid without data and tests to support the prohibition? This determination should only be made after analysis of the brine is conducted per 78.70(c)(8). Analysis has shown that unconventional production fluid can have the same quality as conventional production fluid. What is the scientific basis for not allowing the spreading of other fluids?

78.70a(b) – The term “paved” should be further defined. Does this cover “tar and chip” sections of township roads or only true pavement?

78.70a(c)(7) – This is a logistical issue for us as an operator as we approximately have 3200 gas wells on our bond. Listing each well and all producing formations which produce brine should not be necessary. It is impossible to know in advance what wells we will spread brine from over the course of a year. Perhaps a general statement in the application indicating the range of formations which we have/had produced in all owned wells is more appropriate.