MEETING MINUTES
OIL AND GAS TECHNICAL ADVISORY BOARD (TAB)
October 27, 2015

TAB MEMBERS PRESENT

Voting Members: Bryan McConnell (Chair), Robert Hendricks, Casey Saunders, Fred Baldassare, David Yoxtheimer

Non-voting Advisors: John Walliser, Barbara Kutchko, Emily Krafjack (via Webex)

DEP STAFF PRESENT

Scott Perry, Kurt Klapkowski, Elizabeth Nolan, Joe Adams, Seth Pelepko, Myron Suchodolski, Todd Wallace, Jessica Shirley, Paul Howard, Lucas Swanger, Katie Hetherington-Cunfer, Joe Kelly, Ann Mathew, Jennifer Zarefoss, Tara DeVore

CALL TO ORDER

A regular meeting of the Oil and Gas Technical Advisory Board (TAB) was held in Room 105 of the Rachel Carson State Office Building, Harrisburg, Pennsylvania on October 27, 2015. Bryan McConnell (Chair) called the meeting to order at 10:05 am.

APPROVAL OF MINUTES

After a general discussion of the September 2, 2015 meeting minutes, Bryan McConnell made a motion to accept the September 2, 2015 meeting minutes as amended. The specific amendments to the meeting minutes are as follows:

1. Bryan McConnell (chair) called the September 2, 2015 meeting to order;
2. Tom Yarnick requested that the following sentence be added to the definition of centralized impoundment: "This term does not include a well development impoundment";
3. Tom Yarnick requested that the last sentence of Section 78a.57(a), as opposed to 78a.58(a), be revised to read: "…no wastes may be stored at a well site unless the wastes are generated at or will be beneficially USED at that well site."

Motion was moved by Casey Saunders and seconded by Bob Hendricks. Motion carried to accept the minutes as amended.

PRESENTATION/DISCUSSION CHAPTER 78a, SUBCHAPTER C

Kurt Klapkowski summarized the regulatory history and process related to the promulgation of the Chapter 78, Subchapter C and Chapter 78a, Subchapter C draft final rulemaking.

Klapkowski stated that at the conclusion of this board meeting the Department will request the board to make a motion to support the advancement of this final form rulemaking to Environmental Quality Board (EQB) for its review and consideration.

McConnell asked if Pennsylvania Rail-to-Trail recreational areas are considered a "playground" as defined in the draft final rulemaking. Klapkowski responded that a Rail-to-Trail is akin to a park; therefore, it would likely meet the regulatory definition of a playground. Klapkowski explained that DEP will develop guidance to help clarify what types of recreational areas are considered a playground as part of the regulation.

Hendricks stated that he had concerns with the section of the final draft regulation that pertains to "critical communities." In particular, he expressed general concern that there might be a lack of control on the part of DEP in the process of altering the listings related to what constitutes a critical community. Perry responded that the draft final regulation simply codifies the existing process that has been in place since passage of the Oil and Gas Act of 1984. The Commonwealth's resource agencies currently maintain listings of plants and animals that are considered critical communities and they adhere to an established process for amending these lists as necessary.

Hendricks stated that a policy approach rather than a regulatory approach might provide more flexibility in addressing the matter of critical communities. Klapkowski responded that the draft final regulation places the burden on DEP to make a final permit determination within 45 days.

John Walliser asked if DEP has ever denied a permit based on impacts or potential impacts to critical communities. Perry responded that the Oil and Gas Act of 2012 does not provide direct authority for DEP to deny permits, but it does allow for DEP to condition permits. That said, the Department must consider an operator's ability to legally access the natural gas resource when making such permit determinations.

Hendricks commented that he does not believe that DEP has control over what resource agencies can add (or not add) to the lists of species of special concern. Klapkowski suggested that perhaps DEP should invite the resource agencies to meet with TAB at a future date to provide an overview of the process to TAB members.

Hendricks stated that the language in Section 78a.17(b) that pertains to drilling with due diligence is the same for both conventional and unconventional operators and he does not believe that 16 months is adequate time, in all cases, for unconventional operators to drill a well to total depth. Hendricks suggested that an alternate approach could be to provide unconventional operators two years to drill a well to total depth with no opportunity for a permit extension. Perry responded that the language of the law is somewhat vague on this point in that it only states that an operator must "proceed drilling with due diligence". The 16-month concept that is contained in the draft final regulations is mainly a product of the failure of unconventional operators to drill in an expeditious manner. The effect of initiating, but not completing the construction of a well in a timely manner is a concern of the Department. DEP believes that the draft final rulemaking provides a reasonable

framework for unconventional operators to drill a well to total depth while allowing for extensions when warranted. Perry explained the importance of operators maintaining good communications with DEP inspectors in terms of the operator's plans and time frames for drilling a well to total depth. Perry stated that drilling to total depth has not been as problematic an issue with conventional operators as with unconventional operators.

Hendricks asked when DEP plans to develop technical guidance related to the issue of water supply replacement. Klapkowski responded that despite collective Departmental experience with addressing water supply issues across various program issues, the oil and gas program must consider unique circumstances such as the presence of naturally occurring pollutants. Therefore, the issue that the Office of Oil and Gas Management must consider relates more to establishing acceptable end points (i.e., what constitutes adequate water supply replacement) rather than establishing a process for replacing an affected water supply.

Hendricks expressed some concerns about whether the oil and gas industry would be responsible to install treatment technologies to address pre-existing groundwater contamination that is naturally occurring and not a result of oil and gas operations or activities. Perry responded that guidance is currently under development and that the Department is committed to sharing a copy of this draft guidance for discussion with the board at the upcoming TAB meeting scheduled for March 2016. Conceptually, Perry stated that the Department's view is that operators are not expected to "fix what they do not break." Water treatment systems must address the purpose of the water use. Perry offered the following example: if a selected remedy is to provide public water (that is disinfected using chlorine) to replace an impacted private water supply (that does not contain chlorine), the operator is not responsible to remove the chlorine levels provided they meet acceptable drinking water standards. Perry further emphasized that it is likely in the operator's best interest to conduct a pre-drill survey in advance of spudding a well.

Baldassare inquired if DEP is developing new predrilling or prealteration survey reporting forms as referenced in Chapter 78a.52(d) and requested that if such forms are under development that they be shared with the members of TAB for their review when completed. Klapkowski responded that these forms will be developed by DEP and shared with the TAB members before this rulemaking is finalized.

Casey Saunders asked how an operator should report a bottom well hole location of a vertical well if the operator does not enter the well and no deviation survey is available. Saunders asked if the operator should simply report the well as if it was drilled straight in a vertical direction. Seth Pelepko responded in the affirmative. David Yoxtheimer commented that aerial photographs are another good historical source of information in determining well locations.

Klapkowski directed the TAB members to Section 78a.73 [related to general provisions for well construction and operation] since this section also pertains to the issue related to the area of review.

Hendricks commended Seth Pelepko and his efforts in leading a workgroup to assist DEP in the development of guidance related to the issue of area of review. Hendricks asked Pelepko if he believes that Section 78a.73 will generally constrain operators. As an example, Hendricks referenced the requirement for operators to perform "visual monitoring" during stimulation activities. Pelepko responded that he is personally comfortable with the language as it is written. Pelepko commented that guidance from the Department will be able to address implementation issues that arise in the future.

McConnell asked if Subsection 78a.57(e) [related to the processing of cuttings] should be referenced in 78a.57(f) [related to the processing of residual waste] to help clarify that a residual waste processing permit is not required when cuttings are processed on the well site. Klapkowski agreed that this is a good suggestion.

If an operator receives approval per Section 78a.58(a) to process fluids on a well site, McConnell asked if a subsequent notification to process fluids per Section 78a.58(g) is required if there is a significant gap in time between drilling two wells on the same well pad. Joe Adams responded that a separate notification would be expected if an operator moves its activities to another well site and returns at a later date to the original well site for the purpose of drilling a separate well on that site. Adams stated that a separate notice is not required if there is a small gap in time (such as a weekend) between drilling operations on the same well site.

McConnell inquired about how the draft final regulations pertain to the closure of an impoundment in situations where the impoundment could serve as an ongoing benefit to the local community (i.e., fresh water impoundments used for fire-fighting purposes). Klapkowski responded that DEP will review these unique circumstances on a case-by-case basis as requested by an operator. Klapkowski also pointed out that the regulation includes landowner consent provision that must be considered.

PUBLIC COMMENT:

At 12:20 pm, Chairman McConnell extended an opportunity for members of the public to provide public comment to the board.

Mr. Jeff Zimmerman, on behalf of Damascus Citizens for Sustainability, NYH2O and Citizens for Water provided a written copy of his comments to TAB and the Department. Mr. Zimmerman read the comments in full. In short, Mr. Zimmerman stated that the Treated Mine Water Act that was signed into law on October 8, 2015 "does not identify any process for assuring that the required treatment [of mine influenced water] has, indeed, been performed." The written testimony supplied by Mr. Zimmerman included several examples of suggested regulatory amendments.

Scott Perry took the opportunity to provide a verbal response to these comments on behalf of the Department. Perry stated that regardless of whether treated or untreated mine influenced water is used in hydraulic fracturing operations, either

source must be evaluated for water quality purposes in addition to potential withdrawal impacts to the water source. If the water source is deemed not suitable, then the mine influenced water must meet the provision of Chapter 105.

Hendricks asked if an operator should contact the Department to determine if it may continue to use an existing well development impoundment when it is uncertain as to whether mine influenced water to be placed in the impoundment meets the water quality criteria identified in Appendix A of the Mine Influenced Water White Paper (White Paper: Utilization of Mine Influenced Water for Natural Gas Extraction Activities). Perry responded that it would be a good idea for an operator to contact DEP with any questions.

Yoxtheimer asked if the monitoring and testing [of water in well development impoundments] in relation to the storage of mine influenced water should be consistent with DEP's Mine Influenced Water White Paper. Adams responded in the affirmative and stated that each water source would be reviewed on a quarterly basis to ensure the water quality continues to meet the levels as outlined in Appendix A of the White Paper.

Yoxtheimer asked if it is acceptable to mix mine influenced water with fresh water to achieve acceptable water quality limits. Adams responded that DEP does not favorably view the practice of diluting mine influenced water with fresh water to meet a water quality limit.

[LUNCH BREAK - The meeting formally reconvened at 1:18 pm.]

Hendricks asked the Department to provide an example of what constitutes an "area not restored" as referenced in Section 78a.65(d) of the draft final regulations. Specifically, these areas are "disturbed areas associated with well sites that are not included in a restoration plan…and must comply with the requirements of Chapter 102." Adams provided several examples including roads, staging areas and parking lots that are constructed on well sites.

Hendricks asked what types of comments DEP considered in reaching its decision to remove the alternative method for spill cleanups that was contained in the draft proposed rulemaking. Klapkowski responded that DEP considered the "notice and review" provisions contained in Act 2 of 1995. Under Act 2, an entity responsible for a spill must provide notice to the municipality in which the spill occurred. Klapkowski pointed out that, likewise, under Act 2 notice to the municipality is not required when a spill is cleaned up to background or statewide health standards and a cleanup report is submitted to DEP within 90 days of the occurrence of the spill.

Hendricks stated that a spill of 42 gallons seems like a relatively small threshold for triggering the Act 2 cleanup processes. Klapkowski reiterated that if an operator cleans up a spill within 90 days of the occurrence, the burdens are minimal and the responsible operator is not required to comply with the notice and review process as previously described.

Baldassare asked how the Department responds to comments from an uninformed public as it relates to the notice and review provisions for spill cleanups. Klapkowski responded that it is the Department's intent to provide the notice and review process to ensure to the public that DEP is operating in the most open and transparent manner as possible. It is important to DEP that the public understand that it considers all public comments.

Yoxtheimer asked if the draft final rulemaking contains requirements for notification to surface landowners as it relates to spill cleanups. Klapkowski responded that DEP chose to follow the Act 2 notification process whereby only municipal notice is required. There are no specific notification requirements to surface landowners; however, water supply owners would be notified if the water supply is sampled as part of the remediation process.

Yoxtheimer asked if it is acceptable for an operator, that has obtained an appropriate residual waste permit and provided landowner notice, to leave drill cuttings from below the casing seat on the well site when a lease agreement contains language that prohibits this practice. Perry responded that in this case a private agreement controls, however, it is a landowner's responsibility to enforce their contractual rights.

Klapkowski explained the provisions of Section 78a.68b [related to Well Development pipelines for oil and gas operations] and responded to several questions from Hendricks about the types of pipelines that must be constructed above ground versus those that may be constructed underground.

Section 78a.121 of the draft final rulemaking requires operators to submit a monthly production report to DEP within 45 days of the close of each monthly reporting period. McConnell noted that sometimes operators do not receive report data from waste receiving facilities in a timely manner so he asked if DEP would consider allowing operators the opportunity to submit production reporting data to DEP 45 days after a receiving facility provides notice of receipt of such material to the operator. Klapkowski responded that operators have had to address this same issue even with the current 6-month reporting requirement and DEP has worked with operators in these situations. Perry stated that the matter proposed by McConnell would result in an unpredictable process since reporting deadlines would be subject to individual billing and reporting protocols that are established between waste receiving facilities and individual operators. Klapkowski suggested that the likely alternative to the monthly production reporting would be a "load-by-load" tracking system that would result in a more granular process than monthly production reporting.

Hendricks asked if DEP would accept any other types of data to meet the "standard log" submittal requirements referenced in Section 78a.123 when confidential information is involved. Klapkowski responded that DEP is not necessarily interested in collecting "confidential" log data. Elizabeth Nolan further clarified that the Right-to-Know Act includes provisions for DEP to maintain the confidentiality of log data that it receives.

[MEETING BREAK]

PRESENTATION/DISCUSSION CHAPTER 78, SUBCHAPTER C

Hendricks asked Klapkowski if Section 78.65(b) applies to well pads less than 5 acres in size. Klapkowski responded that this section pertains to all well pads since the intent of this section is to codify Section 3216 statutory requirements contained in the Oil and Gas Act of 2012. Hendricks further asked DEP to clarify the applicability of Section 78.65(b)(5) as it relates to well pads less than 5 acres in size. Adams responded that Section 78.65(b)(5) applies only to well pads greater than 5 acres in size since only those types of well pads are required to install post construction stormwater management (PCSM) best management practices (BMPs). Klapkowski stated that the Department would consider revising the regulatory language at Section 78.65(b)(5) to read "Any required PCSM BMPs REQUIRED UNDER CHAPTER 102 remaining in place….". Hendricks responded that he believes this is something that members of COGAC will want to discuss with DEP during its upcoming committee meeting.

PUBLIC COMMENT:

At 3:38 pm, Klapkowski extended an opportunity for members of the public to provide public comment to the TAB members.

Ms. Jean Mosites (citizen) provided public comment; however, no written comment was submitted. Mosites commented that the words "regulated substances" appear in the last sentence in Section 78a.57(a) [related to control, storage and disposal of production fluids] but do not appear in Section 78.57(a). She questioned whether this language should appear in both sections of the regulations. Klapkowski acknowledged that this appears to be a transposition error and the language in both sections of the regulations should be the same.

McConnell questioned the definition of the term "stormwater" in Section 78.1 [related to definitions]. Perry responded that this definition is consistent with this term as it is defined in Chapter 102.1 [related to definitions].

Perry requested that TAB make a motion to recommend that this draft final rulemaking be submitted to the Environmental Quality Board (EQB) for consideration as a final form rulemaking. McConnell responded that the voting members of TAB prepared a written Resolution for consideration of adoption by TAB. McConnell read the Resolution in full. McConnell summarized the Resolution to mean that COGAC would be afforded an opportunity to submit comments to TAB for inclusion in TAB's report that is submitted to the EQB. A motion was made to adopt the Resolution as read by McConnell. The motion was moved by Hendricks and seconded by Yoxtheimer.

Walliser stated for the record that the non-voting advisors of TAB were not consulted nor participated in the development of the Resolution as presented to the board. Walliser requested that if the board intends to accept comments from COGAC as part of this

Resolution that the non-voting advisors of TAB be extended the same opportunity. No further discussion occurred.

Motion was moved by the voting members unanimously.

McConnell stated that he is unsure whether TAB can make a recommendation for this draft final rulemaking to be advanced to EQB given that COGAC is scheduled to meet following this meeting on October 29, 2015. Perry responded that by virtue of the motion that was just approved by the members of TAB, as related to the Resolution, that it is his understanding that TAB has, in fact, provided its blessing for DEP to submit the final form rulemaking to EQB. McConnell responded in the affirmative.

NEW BUSINESS

2016 Meeting Dates

Klapkowski directed TAB members to a list of suggested meeting dates for calendar year 2016 as included in the meeting packet. Todd Wallace stated that, as previously requested by the board chairs, the proposed TAB meeting dates for 2016 would be scheduled the day following the COGAC meetings to allow the members of TAB to consider any future input or recommendations received from COGAC; and will better facilitate travel arrangements for individuals who wish to attend both meetings. Wallace stated that meeting dates for 2016 will be provided to DEP's Office of Policy for publication in the *PA Bulletin*.

The suggested TAB meeting dates for calendar year 2016 are as follows:

January 14, March 31, May 19, August 25, November 3

McConnell stated on behalf of the board that these dates are acceptable.

Workgroup – Coal and Gas Coordination Issues

Saunders proposed that a workgroup be formed to evaluate and suggest improvements related to coal and gas coordination issues such as gas well surveys and pipeline surveys. Klapkowski agreed that this is a good suggestion and committed to identifying a group of individuals from within DEP's oil and gas program to participate on this workgroup. Perry stated that representatives from the coal and gas industries should also be identified for inclusion on this workgroup.

Clean Power Plan Update

Wallace reminded the board that DEP plans to provide a presentation regarding the Clean Power Plan to members of TAB and COGAC at some point in the future. More information will be provided when the logistics of this presentation are available.

Adjournment

McConnell made a motion to adjourn the meeting. Motion was moved by Saunders and seconded by Yoxtheimer. Motion was moved and meeting was adjourned.