

MEETING MINUTES
Oil and Gas Technical Advisory Board
March 31, 2016

TAB MEMBERS PRESENT

Voting Members: Bryan McConnell, P.G. (Chair), Robert Hendricks, P.G., Casey Saunders, P.E., David Yoxtheimer, P.G.

Non-voting Advisors: John Walliser, Esq. (participated via WebEx), W. Michael Griffin, Ph.D.

DEP STAFF PRESENT

Scott Perry, Kurt Klapkowski, Elizabeth Nolan, Joe Adams, Seth Pelepko, Myron Suchodolski, Susan Ghoweri, Todd Wallace, Jessica Shirley, Joe Kelly, Ann Mathew

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 March 31, 2016. This meeting was open to the public. Bryan McConnell (Chair) called the meeting to order at 10:02 am.

OPENING REMARKS

Scott Perry reported that Emily Kraffack resigned as a non-voting advisor to TAB due to personal reasons. Perry stated that DEP appreciated Kraffack's service as an advisor to TAB.

McConnell asked Perry if he would like to add any other comments. Perry requested that TAB consider coordinating future meetings with the Conventional Oil and Gas Advisory Committee (COGAC) when there are potential meeting topics that would benefit both TAB and COGAC members by discussing the issues jointly. Perry asked if Chairman McConnell would consider contacting Chairman David Ochs to discuss the possibility of collaborating in such future meetings. McConnell responded that he and Ochs have been in recent discussion and agree that this approach makes good sense.

Perry suggested that the next TAB and COGAC meeting might be a good candidate for a joint meeting. A proposed meeting location would be the DEP Moshannon District Office located in Philipsburg. Perry believes that such a meeting would not only result in an opportunity for collaboration, but it could also result in overall cost savings.

APPROVAL OF MINUTES

Bryan McConnell requested a motion from a board member to approve the December 22, 2015 and January 14, 2016 draft meeting minutes.

MOTION: Robert Hendricks moved to accept the December 22, 2015 draft meeting minutes. The motion was seconded by Casey Saunders (Saunders). Motion carried unanimously.

MOTION: Hendricks moved to accept the January 14, 2016 draft meeting minutes. The motion was seconded by David Yoxtheimer. Saunders suggested that the meeting minutes be modified to better reflect a statement that he made during the January 14 meeting. Specifically, Saunders requested that the third sentence on page 7 (Coal and Gas Coordination Issues section) be revised to read "One potential improvement could be to better identify gas well locations with respect to workable coal seams by surveying well surface locations before and after drilling." The members of TAB voted unanimously to approved the minutes as amended by Saunders.

UPDATE ON STATUS OF CHAPTER 78/78a RULEMAKING AND OPPORTUNITIES FOR TRAINING

For the benefit of TAB members and the public, Kurt Klapkowski provided a verbal summary of the remaining review and approval steps related to the promulgation of the final-form Surface Activities Rulemaking.

Klapkowski stated that DEP is committed to conducting internal training for DEP oil and gas staff and will also provide external training to the regulated community and public. DEP plans to offer training sessions throughout the state prior to publication of the final rulemaking.

TRANSITION FROM EXISTING SURFACE ACTIVITIES REGULATIONS TO NEW REGULATIONS

Hendricks stated that his intent for requesting this topic to be placed on the agenda was to receive feedback from DEP as to whether certain aspects contained in the final form surface activities rulemaking will be grandfathered. Hendricks asked DEP if it would consider developing a "transition document" that outlines how specific aspects of the current rules will be implemented after the final form rulemaking goes into effect. The issue of water supply restoration and spill remediation were two examples provided by Hendricks. Perry responded that if an alternative spill remediation process is initiated prior to the final rule going into effect, then the alternative process will be allowed to proceed even after the effective date of the rule. Klapkowski explained that DEP intends to address specific transition issues during of the training that will be offered to the regulated community. Hendricks responded that there are other issues that are not necessarily clear as to how they will be handled when transitioning from the existing regulations to the revised regulations. Perry responded that permits received prior to the

effective date of the new regulations will only need to meet the provisions of the regulations that were in effect at that time. Permit applications that are received after the final-form rulemaking goes into effect must meet the provisions of the final regulations. Perry invited the regulated community to approach DEP with questions about specific examples and DEP would provide additional direction as requested.

DISCUSSION OF DRAFT FORMS

Klapkowski explained that during the TAB meeting DEP intends to respond to any questions, comments or concerns related to the draft forms.

McConnell responded that he shared a list of comments developed by the Marcellus Shale Coalition (MSC) about the forms with members of TAB in advance of the meeting. McConnell stated that he would entertain a motion for TAB to accept the comments from MSC for consideration by TAB rather than receiving all comments separately.

MOTION: David Yoxtheimer made a motion for TAB to accept the comments from the MSC for consideration by TAB as it reviews the forms. Casey Saunders seconded. The motion passed unanimously.

Before getting into discussion about the forms, Saunders offered one general comment about when coordinates are referenced on forms issued by DEP. Saunders asked if the coordinates represent global positioning system (GPS) coordinates or other coordinates such as the North American Datum of 1927 (NAD 27) or the North American Datum of 1983 (NAD 83) coordinates. Joe Adams responded that coordinates listed on the forms represent GPS coordinates. Klapkowski added that DEP developed a locational accuracy policy that is followed by all programs within the agency.

Regarding the “Monthly Maintenance Inspection Checklist”, Klapkowski stated that this form does not create specific requirements for operators, rather it serves as a general guide and useful checklist that operators can use if they so desire. McConnell responded that it is possible that operators and the general public might assume that the items on the checklist are required rather than suggested inspection items.

Regarding the next three forms related to landowner consent and landowner waiver, Adams stated that COGAC raised an issue with DEP regarding concerns about requiring notarization of the forms. Perry explained that DEP is considering an alternate approach whereby a “witness” signature might be acceptable.

As it pertains to the “Landowner Consent Form for Storing Drilling Supplies, McConnell asked whether DEP would accept a clearly written lease agreement as evidence of the future land use of a well site. Adams stated that COGAC raised this issue and intends to forward such language to DEP for review and consideration. Perry explained that he plans to discuss this matter with DEP’s legal counsel since it is unclear whether a lease agreement signed by a prior surface landowner can bind future landowners to the original lease agreement. Klapkowski explained that the language in the Oil and Gas Act of 2012

requires that “express written consent” must be documented by the surface landowner and DEP does not want to assume the role of interpreting lease agreements. Klapkowski further suggested that DEP believes if the legislature intended to accept lease agreements as legitimate vehicles to document this matter, the law could have been written to include the use of lease agreements.

On a related matter, McConnell inquired if an operator is required to install fencing around “farm ponds”. Perry responded that if an operator did not construct the farm pond, it is not required to install fencing around the pond.

Regarding the “Landowner Consent Form for Storing Drilling Supplies and Equipment”, Yoxtheimer asked if the word “undertake” in the first sentence of the form should read “completed”. Adams agreed that this sentence should read: “...within 9 months after completion...the owner or operator shall complete post-drilling restoration...”

As it relates to the “Oil and Gas Operations Well Development Impoundment Registration Form”, Adams reported that during the COGAC meeting it was agreed that the section of this form (in section B) that requests American Petroleum Institute (API) identifier numbers to be listed, is not necessary since this information is already collected by DEP via the receipt of Well Completion Reports from operators. This issue also applies to the table on the “Oil and Gas Operations Well Development Impoundment Transfer Form”.

As it relates to the “Request for Approval of Mine Influenced Water (MIW) Storage in a Well Development Impoundment” form, Robert Hendricks inquired about how DEP considers that a “determination” as described in Section D(A)(1) of the form has been done adequately. Adams explained that if MIW meets the chemical thresholds listed in Appendix A of DEP’s MIW White Paper then it would be considered to meet the demonstration. The instructions of the form will be adjusted to better explain how operators are to proceed if the MIW does not meet these thresholds.

As it relates to the “Request for Approval of Alternative Waste Management Practices” form, Perry stated that the only substantive issue raised by COGAC was that they want the form to clarify when the practice of solidification does not constitute an alternate waste management practice. Perry stated that DEP does not currently electronically track alternative waste management practices, so he invited the operators to submit documentation of approved alternative waste management practices to DEP so they can be placed on the DEP website.

Saunders asked if DEP prefers to receive maps in an electronic or paper format. Adams responded that maps should be submitted electronically in a format such as pdf or autoCAD.

As it relates to the “Post Drilling Well Site Restoration Report”, Adams stated that COGAC pointed out that the waste code number 805 listed in Section C is an error and should be waste code number 804. DEP agreed to make this correction. Adams also

noted that this form is intended to apply to both conventional and unconventional operators.

As it relates to the “Post – Plugging Well Site Restoration Report”, Adams stated that COGAC questioned whether the form applies to the plugging operation or the life of the well. Adams stated that this form applies to the plugging operation. Adams also reported that COGAC questioned whether the word “contours” in the second check box of Section C should be “conditions”. Adams agreed to revisit the final proposed regulations to ensure that the proper wording is used.

As it relates to the “Water Management Plan for Unconventional Gas Well Development” form, Adams reported that the form was revised to better distinguish between the elements of the form versus the instructions. Hendricks asked if the form should include a box at the bottom of page 1 that says “no” (to accompany the box titled “yes”). Adams agreed. Hendricks also inquired about whether it is possible that questions C.6 and C.7 (related to PNDI and PHMC) may not apply to a project. McConnell was also concerned about the possibility of being expected to revisit such issues on multiple occasions with the same resource agency. Adams agreed that it is possible that these questions might not apply to the actual project if there is no impact to a resource. Adams agreed to revisit the instructions page and clarify these issues. Hendricks pointed out that these similar issues carry through Sections D, E and F of the form. McConnell expressed concerns about Section C.7 of the form that relates to attaching proof of consultation with the PA Historic and Museum Commission (PHMC). Specifically, McConnell stated that the PHMC does not have authority over the protection of structures or artifacts possessing historical and cultural significance that are located on privately owned lands. McConnell explained that a property owner is merely required to document the presence of such structures or artifacts but is not subject to any constraints as it relates to the development of private lands. He stated that this also pertains to government-owned lands. McConnell explained that consultation with the PHMC can delay property development particularly if the PHMC does not have authority to require mitigation or protection of structures or artifacts on said privately owned lands. Adams responded that Section 78a.69 of the Chapter 78a rulemaking requires an applicant to consult with PHMC when private lands are disturbed, but understood the point McConnell presented. Hendricks noted that there appears to be some inconsistencies with the section headers of the form as compared to the sections within the instructions. Adams agreed to make these edits to ensure they are aligned. Yoxthimer stated that no units are included under the header called “Maximum Rate of Withdrawal” in Section A. Adams explained that this column is not necessary and will be deleted from the final version of the form.

As it relates to the “Request for Road-Spreading of Brine Approval Plan” and the “Monthly Brine Road-Spreading Report”, Klappowski reported on the discussion that occurred with COGAC. Specifically, COGAC asked if taking a representative sample, rather than individual samples, for chemical analysis of brine is acceptable for the purposes of completing these forms. Klappowski explained that DEP is mainly concerned that brine used for de-icing purposes must meet adequate salinity percentages

so that the inadvertent re-icing of roads is avoided. Klapkowski mentioned that COGAC also inquired about whether the “Request for Road-Spreading of Brine Approval Plan” should be replaced with two separate forms (i.e., one for deicing and a separate one for dust suppression). Klapkowski reported that DEP intends to consider breaking this form into two separate forms. Finally, Klapkowski reported that COGAC asked if an operator is required to submit this report if no road spreading activities occurred in the prior month as indicated in the instructions. Klapkowski explained that the report must only be submitted to DEP for the months in which road spreading activity occurred.

As it relates to the “Oil and Gas Operations Underground or Partially Buried Tank Registration Form”, McConnell asked if specific performance standards are applicable. Adams responded that only the corrosion control requirements that are currently in effect for new or refurbished tanks apply.

As it relates to the “Oil and Gas Operations Borrow Pit Registration Form”, Adams reported that COGAC inquired about what happens when two or more operators use the same borrow pit. Adams explained that one of the operators must accept responsibility for the borrow pit, otherwise the non-coal requirements will apply. Hendricks noticed a typographical error in the instructions and Adams agreed to correct it.

As it relates to the “Consideration of Public Resources Form”, McConnell asked if the functions and uses of a natural resource as listed in Section C is inherent as it is described in Section B of the form. Adams responded that in some cases, such as a large state park or state forest, there are many potential functions and uses that could apply depending on the what portion of the park or forest is affected.

[LUNCH BREAK - The meeting reconvened at 12:45 pm.]

Seth Pelepko transitioned to a discussion of the seven subsurface activities forms related to Area of Review (AOR). Pelepko referenced the applicable sections of the AOR Technical Guidance document, but stated that a more through discussion of the AOR Technical Guidance document would follow the discussion of the forms.

As it relates to the “Area of Review Summary Table Report Instructions”, Pelepko stated that DEP intends to enhance the current language of the form to better describe what the plat should look like and what information it should contain.

As it relates to the “Area of Review Landowner Survey for Gas Wells and Horizontal Oil Wells”, Pelepko recapped several issues that were raised by members of COGAC. McConnell inquired about situations that involve severed mineral estates. For example, sometimes a prior property owner keeps the oil and gas (mineral) rights and sells the land surface rights. In this case, McConnell suggested it might be preferable to submit the landowner survey form to the mineral rights owner since they might have more knowledge about the property. McConnell also suggested that a local historical society might be a good source of information in terms of responding to the questionnaire/survey. Klapkowski responded that these sources of information can certainly be considered, but

that from a compliance standpoint it is sometimes difficult, or not possible, for DEP to determine who the mineral rights owner is versus the land owner who is listed on the property deed. DEP is open to an operator communicating with mineral rights owners in these situations, but the survey form should be directed to the surface landowner at a minimum.

DISCUSSION OF DRAFT TECHNICAL GUIDANCE DOCUMENTS

Discussion of draft “Guidelines for Implementing Area of Review Regulatory Requirement” (Area of Review policy):

Klapkowski reminded TAB that this technical guidance document will be subject to public review according to DEP’s Technical Guidance Policy. It is DEP’s intent to complete this guidance at the same time or before the final-form surface activities rulemaking is finalized.

Hendricks asked if COGAC raised any significant issues regarding the guidance. Pelepko summarized the discussion that occurred during the COGAC meeting. COGAC pointed out a number of typographical errors and inconsistencies that DEP agreed to correct.

McConnell asked if any protections are available to operators in cases when an orphan or abandoned well is discovered after an operator conducts due diligence in locating such wells, and where the landowner then wants such wells to be plugged. Pelepko responded that this issue was discussed during prior meetings of the Area of Review Workgroup. Various scenarios were discussed such as when a landowner might refuse access to an operator to plug an orphan or abandoned well. Pelepko responded that multiple options exist for operators including: remote monitoring, an evaluation of subsurface geology, skipping discrete stages of hydraulic fracturing and enhanced communications with the surface landowner. Pelepko also suggested that there is an opportunity for operators to limit liability by plugging wells via the Good Samaritan Law.

Discussion of draft “Policy for the Replacement or Restoration of Private Water Supplies”:

Klapkowski reported that the Water Supply Restoration Workgroup met on March 15 and March 22, 2016 to discuss and work on this policy. Following the workgroup meetings, 10 members who participated on this workgroup developed a discussion/concept document dated March 28, 2016 that includes 35 comments that were intended to be submitted to TAB and COGAC for consideration. In the interest of time, Adams summarized the most significant categories of comments that were raised by the workgroup members.

McConnell encouraged the Water Supply Restoration Workgroup to consider elements of the water supply replacement guidance that was developed by DEP’s mining program. Adams responded that the workgroup considered the mining document as well as other

existing related documents in the development of the oil and gas water supply replacement policy. Adams invited any specific comments from TAB where there might be additional suggested adjustments to the policy.

MOTION: Saunders made a motion for TAB to accept the list of comments prepared by the members of the Water Supply Restoration Workgroup as part of TAB's comments to DEP. Hendricks seconded the motion and the motion passed unanimously.

Hendricks asked DEP for some insight as to the anticipated schedule and next steps for accepting additional comments and further review by the workgroup. Adams explained that DEP is committed to meeting with the workgroup another time to discuss this policy, but it is uncertain whether the timing of the meeting will occur before or after the public comment period closes. Klapkowski reminded TAB that the standards that apply to water supply replacement have been in place since April 2012 when the 2012 Oil and Gas Act went into effect. Hendricks explained that there are aspects of the policy that will be helpful to operators in that the policy will ultimately provide more through guidance as to how to implement the provisions of the law.

COAL/GAS WORKGROUP UPDATE

Saunders briefed TAB on the progress of the Coal/Gas Workgroup kick-off meeting. First, Saunders thanked DEP and TAB for establishing this workgroup to discuss matters that affect both the coal and gas industries. Saunders reported that the workgroup identified about 10 issues for discussion; however, due to time constraints the workgroup decided to focus on what it considered to be the two most important issues. The two issues included the topics of temporary well plugging and alternate casing methods that should be employed when oil and gas wells intersect in areas where longwall mining is being conducted.

Saunders explained that the three overarching priorities include: 1) the personal safety of miners, 2) protection of the environment, and 3) the ability to re-enter a plugged well to continue the oil and gas extraction process.

Saunders reported that the written summary of comments of the members of the workgroup is under development and will be shared with DEP when completed. Pelepko stated that DEP is, likewise, preparing a written summary of its feedback for consideration by the workgroup. Pelepko stated that the workgroup plans to meet on a monthly basis to continue working through these two issues and will then turn its attention to other relevant matters.

Pelepko reported that David Yingling recently resigned from COGAC and he was also an active participant in the Coal/Gas Workgroup. Pelepko suggested that TAB consider identifying another suitable candidate with similar perspectives and experience as Mr. Yingling to participate on this workgroup.

PROPOSED METHANE REDUCTION STANDARDS AND IMPACT TO OIL AND GAS INDUSTRY

Mr. Krishnan Ramamurthy was unexpectedly detained and unable to participate in the TAB meeting. This topic was tabled until the next regularly scheduled meeting of TAB.

PUBLIC COMMENT

Perry inquired if any individuals participating in the meeting via WebEx expressed an interest in providing public comment. No individuals on the WebEx expressed an interest in providing public comment.

McConnell asked if any individuals attending the meeting in person wanted to provide public comment. Teresa McCurdy (TD Connections, Inc.) raised several issues including the following:

- Suggested that DEP consider notifying oil and gas operators via the DEP website about future training sessions regarding the new waste codes related to oil and gas waste.
- Inquired whether mine influenced waters that are listed on the 303d list and meet drinking water standards, but do not meet the MIW Appendix A standards, can be stored in fresh water impoundments. Perry responded that DEP must consider each water source on a case-by-case basis.
- As it relates to the “Post Drilling Well Site Restoration Report”, suggested adding the digit “8” before the “04” and “05” disposal code. Also suggested adding another category on this form that pertains to filter socks.
- Inquired whether waters generated as a result of treatment under waste management general permit number WMGR-123 must be reported on the “Water Management Plan for Unconventional Gas Well Development” form. Adams responded that he does not believe these waters must be reported on this form, but agreed to look into the matter further.

NEW BUSINESS

Post-Construction Stormwater Management Controls

Perry reported that DEP has determined that future Erosion and Sediment Control General Permits (ESCGP-2) must include post-construction storm water controls for well pads from the time the pad is constructed until the time the pad is restored. DEP intends to revise the current Policy for Erosion and Sediment Control and Stormwater Management for Earth Disturbance Associated with Oil and Gas to reflect this determination; however, in the interim this matter will be addressed on a permit-by-permit basis.

Spill Policy and Remediation Workgroup

McConnell inquired about current efforts that are underway to harmonize the spill policy and the final-form surface activities rulemaking. Jessica Shirley of DEP's Policy Office reported that the Cleanup Standards Scientific Advisory Board (CSSAB) recently expressed an interest in reviewing the spill policy and the final-form surface activities rulemaking to ensure there are no inconsistencies between the two. COGAC expressed a similar interest at its most recent committee meeting and intends to contact the CSSAB to determine if they can partner in this effort. McConnell suggested that TAB could pass a resolution or make a motion to contact CSSAB and COGAC about also participating in this effort.

MOTION: Saunders made a motion that TAB should contact CSSAB and COGAC about requesting an opportunity to participate in discussions related to the consistency of the spill policy and the final-form surface activities rulemaking. The motion was seconded by Yoxtheimer. The motion passed unanimously.

Adjournment

MOTION: Yoxtheimer made a motion to adjourn the meeting. The motion was seconded by Saunders. Motion passed unanimously and meeting adjourned at 2:09 pm.