MEETING MINUTES

Oil and Gas Technical Advisory Board and Conventional Oil and Gas Advisory Committee June 23, 2016

TAB MEMBERS PRESENT

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

Non-voting Advisors: John Walliser, Esq., W. Michael Griffin, Ph.D.

COGAC MEMBERS PRESENT

Voting Members: David Ochs (Chair), Mark Cline, Bruce Grindle, Burt Waite

Non-voting Members: Jim Seyler, Doug D'Amore

DEP STAFF PRESENT

Todd Wallace, Seth Pelepko, Joe Kelly, Steve Brokenshire, Myron Suchodolski, Elizabeth Davis, Susan Ghoweri, Ann Mathew, Abbey Cadden

CALL TO ORDER

A joint meeting of the Oil and Gas Technical Advisory Board (TAB) and Conventional Oil and Gas Advisory Committee (COGAC) was held in DEP's Moshannon District Office, 186 Enterprise Drive, Philipsburg, Pennsylvania on June 23, 2016. This meeting was open to the public. McConnell (Chair, TAB) called the meeting to order at approximately 10:03 am.

OPENING REMARKS

Wallace welcomed the members of TAB, COGAC and the public to the joint meeting of the board and committee. Wallace explained that, along with the other agenda topics, the goal of the meeting is to allow members of TAB and COGAC to ask questions and present any comments or concerns regarding the draft forms and technical guidance that are currently under development. The purpose of the joint meeting is to facilitate an effective and timely dialogue between TAB, COGAC and DEP.

Wallace explained that this meeting is open to the public; however, it will not be conducted via a Webinar format due to technical limitations of the facility. Members of TAB, COGAC and the public were reminded to sign the meeting log so there is a record of those in attendance.

Wallace announced that Deputy Secretary Perry was unable to participate in the meeting due to a medical appointment and Kurt Klapkowski was unable to participate due to a personal conflict associated with scheduled vacation.

Wallace announced that Joe Adams recently accepted a promotion and has already assumed the duties as the Director of the Southcentral Region. During the interim, Joe Kelly has assumed the duties of the Chief of the Surface Activities Division in DEP's Bureau of Oil and Gas Planning and Program Management.

Wallace reported that Joyce Epps, Director of the Bureau of Air Quality recently retired and Krishnan Ramamurthy is now serving as the Acting Director.

Ochs reported that Brad Cole was appointed to serve as a voting member of COGAC. This is the seat that was formerly held by David Yingling. Cole brings particular expertise in the area of mining. Ochs reported that Cole will be a valuable addition to the Coal and Gas Workgroup. Although a prior commitment prevented Cole from participating in this meeting, he intends to participate regularly in future COGAC meetings.

Ochs presented two questions to DEP. First, what are the implications for COGAC as it relates to the draft surface activities rulemaking that is under development; and, secondly, what is the fate of COGAC should Senate Bill (SB) 279 be signed into law.

Wallace responded that DEP is prepared to advance the draft surface activities rulemaking that pertains specifically to unconventional operations. There is currently some level of uncertainty as to how the overall rulemaking process will play out until final action is taken on SB 279 and further decisions are reached as to the best path forward. Despite what results from the passage of SB 279, there will likely be ongoing statutory obligations (i.e., Act 13 of 2012) that must be considered.

As for the fate of COGAC, the future also remains unclear at this time. It is conceivable there could be some overlap between the functions of COGAC and the proposed Pennsylvania Grade Crude Development Advisory Council as directed by SB 279. However, until such time that the new council is established, it is uncertain what the future holds for COGAC.

Wallace explained that public comment is typically accepted at some point during TAB and COGAC meetings. Wallace asked the meeting chairs, McConnell and Ochs, if there was a preferred time to accept public comment. Both chairs agreed that public comment would be received prior to the lunch period.

APPROVAL OF MINUTES - COGAC

Ochs requested a motion from a COGAC member to approve the March 30, 2016 draft meeting minutes.

MOTION: Waite moved to accept the March 30, 2016 draft meeting minutes. The motion was seconded by Grindle. Motion carried unanimously.

APPROVAL OF MINUTES - TAB

McConnell requested that the meeting minutes of March 31, 2016 be amended to include a record of the discussion that pertained to cultural resource reviews associated with Water Management Plan approvals. Wallace agreed to capture this discussion topic in the final version of the meeting minutes.

McConnell requested a motion from a TAB member to approve the March 31, 2016 draft meeting minutes, as amended.

MOTION: Hendricks moved to accept the March 31, 2016 draft meeting minutes, as amended. The motion was seconded by Yoxtheimer. Motion carried unanimously.

DISCUSSION OF DRAFT FORMS

Wallace reported that DEP has made revisions to some of the forms since the March TAB and COGAC meetings. The most recent versions of the forms are available to the public on the TAB and COGAC pages of the DEP website.

Kelly reported that DEP is currently conducting internal training regarding the proposed surface activities rulemaking and is also accepting feedback from DEP staff concerning the various forms that are under development. Kelly stated that the forms are still under development and feedback from DEP field staff will be useful in making further refinements to the forms.

Hendricks asked if the comments from the Marcellus Shale Coalition (MSC) have been considered by DEP as it has been making edits to the forms. Kelly reported that DEP has considered all of the comments that were received by the MSC.

Hendricks stated that it seems that there are a number of forms that are required by the proposed surface activities rulemaking that do not appear on the list of forms that are currently under development by DEP. Kelly requested that Hendricks provide a list of forms that he believes are not reflected in the current list of forms that are under development. Brokenshire noted that the updated OG-71 form will address some of these issues.

Waite asked what the anticipated timeline is to finalize the forms related to unconventional oil and gas activities. Wallace responded that DEP is committed to finalizing all forms prior to the publication of the final surface activities rulemaking. Wallace explained that it is also DEP's intent to provide training opportunities to the regulated community as it relates to the new and revised forms.

Hendricks stated that the next regularly scheduled meetings of TAB and COGAC will not occur until November. Hendricks suggested that it would be helpful to schedule an additional meeting sometime in late August to allow an opportunity for further discussion of the draft forms.

Hendricks stated that there are some transition issues related to the implementation of the final surface activities rulemaking and it is unclear as to how the final rulemaking will affect the regulated community. Hendricks asked DEP if it will consider adding a meeting to the current 2016 schedule, perhaps sometime in August, to allow for further discussion of the final draft forms and transition issues. Wallace responded that the forms related to unconventional oil and gas operations are unlikely to change significantly, but he would take this request back to DEP for consideration.

Grindle asked what the timeline is for presenting the proposed surface activities rulemaking to the Attorney General's office for review and approval. Davis responded that the rulemaking has not yet been transmitted to the Attorney General, but it is likely to be transmitted in the near future.

Wallace mentioned that one additional form called "Well Site Restoration Extension Request Form" has been added to the list of forms for discussion at today's meeting.

Ochs mentioned that within the quarterly tank inspection form it should be clarified that this is a voluntary document and not necessarily required. He also mentioned that the citation should be 78.57(i) not 78.57(h).

McConnell suggested that it might be helpful if DEP provided some guidance or instructions as it relates to the applicability of radiation management plans considered in the OG-71 (Alternative Methods) form.

At this point, McConnell suggested that the members of TAB and COGAC proceed with providing further comments and asking questions about the list of forms as in the order presented on the meeting agenda.

Staff from DEP responded to questions and comments from TAB and COGAC members. Several comments of particular interest to board and committee members include the following:

Monthly Maintenance Inspection Checklist: McConnell inquired as to how an optional format versus that format developed by the department can be accommodated. Wallace responded that this matter will be clarified in the instructions of the form.

Landowner Request to Waive Impoundment Restoration Requirements: McConnell raised the issue of relying on a witness instead of the need to have the form notarized. Wallace stated that this concept remains under consideration by the Department.

Landowner Consent Form for Storing Drilling Supplies and Equipment: McConnell suggested that landowner consent should not be necessary if there is specific language in the lease agreement related to the storage of supplies and equipment. Wallace acknowledged the comment, but explained that the Department does not want to make it a practice of interpreting third-party lease agreements. Davis pointed out that the oil and gas act indicates that such storage is acceptable only with "express written consent" of the landowner.

Well Development Impoundment Registration Form and Well Development Impoundment Transfer Form: Kelly reported that GPS coordinates have been added to these forms and the format has been slightly reorganized. DEP is currently continuing to review these forms to ensure they are consistent.

Request for Approval of Alternative Waste Management Practices: McConnell stated that on some occasions DEP contacts the consultants hired by the operator rather than the operator directly regarding issues or problems associated with this form. McConnell explained that this can cause confusion and takes direct control away from the operator. Wallace thanked McConnell for this feedback and stated that DEP will take this into further consideration. Wallace mentioned that DEP ordinarily anticipates that consultants working on behalf of an operator should keep their client apprised of communications with DEP.

Saunders asked if DEP prefers whether decimal degree (DD) units or degrees, minutes, and seconds (DMS) units are used to identify the latitude and longitude of a project. Suchodolski responded that both could be acceptable and asked if either unit is preferable to TAB and COGAC. McConnell responded that Act 9 requires the use of DD units. Suchodolski explained that DEP will request units to be provided in DD units for the sake of consistency.

Post Drilling Well Site Restoration Report: Ochs stated that several waste codes listed in Section C of the form need to be updated to reflect the actual waste codes that were in existence prior to January 1, 2016 versus after January 1, 2016. Kelly agreed to revisit the waste codes and make necessary adjustments. Kelly further explained that DEP intends to add another check box to enable operators to indicate whether waste data has been submitted to DEP via the Oil and Gas Reporting Electronic (OGRE) system.

Baldassare explained that the term "seasonal high groundwater table" is used in this document and questioned whether this is a defined term. Davis explained that this term is defined in the oil and gas regulations. Ochs requested that DEP list several specific examples of "other" methods of disposal or reuse as requested in Section C of the form. Kelly agreed to consider this issue and include specific examples that apply to the category called "other".

Post Plugging Well Site Restoration Report: Ochs pointed out that the second bullet in Section C of the form should read "All backfilling and grading necessary to return the well site to approximate original conditions has been completed." The current version of

the form includes the word "contours" instead of "conditions". Wallace agreed that DEP will make this edit.

Request for Road Spreading of Brine Plan Approval: Wallace explained that this form might need to be further adjusted based on the outcome of Senate Bill 279. Ochs stated that he could see the possible need for two separate forms to address this matter.

Borrow Pit Registration Form: Kelly explained that this form will likely need to be updated to address borrow pits that have been in existence for a long period of time. Kelly stated that this form will probably be a living document. Ochs asked if some of this information can be added to the Well Record. Suchodolski explained that DEP will consider this approach.

Well Site Restoration Extension Request Form: This is a new form that has been developed by DEP since the March TAB and COGAC meetings. Kelly provided a general overview of the form to members of TAB and COGAC.

Area of Review Landowner Survey for Gas Wells and Horizontal Oil Wells: McConnell expressed a concern of the possibility that landowners could provide false information via the form. The form does include an attestation signed by the landowner that certifies that the information contained on the form is true and correct to the best of the landowners' knowledge.

Area of Review Landowner Survey for Vertical Oil Wells Form: The form currently states the operator must send this questionnaire to surrounding landowners within 1,000 feet of the proposed well. This distance referenced on the form is a typographical error and should be changed to "within 500 feet of the proposed well."

Area of Review Landowner Survey Development Plan Option: Ochs pointed out that the instructions should be adjusted to address the matter of the issuance of the API number. In some cases, it may not yet have been assigned by the Department. Pelepko agreed that the form and instructions would be revised to address this matter.

Area of Review Hydraulic Fracturing Communication Incident Report: Pelepko discussed the application of this form. McConnell asked how DEP intends to address information that is submitted to DEP that might be considered proprietary and confidential. Pelepko responded that operators are not expected to provide raw seismic data as part of the incident report, but should provide interpretations of such data if they were collected and analyzed. Davis further pointed out that a process currently exists for submitting information to DEP that an operator claims to be proprietary and confidential.

Area of Review Hydraulic Fracturing Communication Incident Report Instructions for Conventional Operators: Ochs suggested that the word "and" in the fifth sentence in the General Information Section should be changed to "before". This sentence should read "In certain cases, operators may be required to complete additional activities to resolve the communication incident before recommencing....".

Waite asked if an additional form and guidance should be developed for use by operators in cases where an operator chooses to plug a well under the Good Samaritan Act. Pelepko responded that DEP intends to develop such a form and accompanying instructions. Waite stated that this would be helpful to operators to have this additional guidance.

PUBLIC COMMENT

McConnell invited any individuals participating in the meeting to provide public comment. The following individuals provided public comment:

Tom Yarnick, XTO Energy, Inc. – Yarnick's comments related to the forms titled "Landowner Request to Waive Impoundment Restoration Requirements" and "Landowner Consent Form (Well Site Restoration)". Both forms include a sentence in the "Landowner Consent" section of the form that states that the landowner understands by signing the consent that he or she may be liable for violations that exist on their property. Yarnick stated that the oil and gas regulations do not require the landowner to be notified that he or she may be liable for such violations and that this seems to be more of a separate legal matter. Yarnick stated that this language might be an impediment to landowners agreeing to sign the form.

Teresa McCurdy, T.D. Connections, Inc. – McCurdy inquired about adjustments to the form called "Request for Approval of Alternative Waste Management Practices". Suchodolski responded that DEP's Bureau of Waste Management revised the waste codes effective January 1, 2016 and he reported that the disposal facility codes are also in the process of being updated.

Laura Frano, Range Resources, Inc. – Frano asked if DEP would accept a written letter from a landowner in lieu of the form. Wallace responded that DEP would consider this comment.

[LUNCH BREAK - The meeting reconvened at about 1:00 pm.]

DISCUSSION OF DRAFT TECHNICAL GUIDANCE DOCUMENTS

Brokenshire provided an update on the status of the development of the Water Supply Replacement Technical Guidance. Waite asked if there would be additional opportunity for comment to this guidance document. Wallace requested that if TAB and/or COGAC have any additional comments to please provide them to DEP.

Hendricks stated that the development of the Water Supply Replacement Technical Guidance has come a long way, but one additional workgroup meeting would be useful to provide final comments to DEP before this guidance is published for public comment. Hendricks stated that about half of the comments provided to DEP have been addressed by DEP in the most recent draft of the guidance, but it is unclear as to the status of the remaining suggestions. Waite echoed that one additional workgroup meeting would be

helpful before the guidance document is published for public comment. Wallace agreed to consider the possibility of convening one final workgroup meeting.

Waite asked if the Area of Review and Water Supply Replacement Technical Guidance Documents apply to all operators. Pelepko responded that the Area of Review Technical Guidance will likely be affected by the passage of SB 279 and might not apply to all operators. Brokenshire stated that the basis for the Water Supply Replacement guidance is grounded in the 2012 Oil and Gas Act.

Pelepko transitioned to a discussion of the current status of the Area of Review Technical Guidance document. Pelepko discussed changes that have been made to the guidance document since the March TAB and COGAC meetings. Ochs stated that the flowchart that accompanies this guidance document is a helpful tool. Hendricks concurred.

PROPOSED METHANE REDUCTION STANDARDS AND IMPACTS TO THE OIL AND GAS INDUSTRY

This meeting topic was tabled until the November TAB and COGAC meetings.

<u>DISCUSSION AND CONSIDERATION OF MODIFICATIONS TO THE OIL</u> AND GAS COMPLIANCE REPORT VIEWER

Wallace reported that this topic was tabled during the March 30, 2016 COGAC meeting; therefore, it was placed on today's agenda. Wallace invited Ochs to open the discussion. Ochs stated that Waite had raised some of the initial comments related to the topic. Waite asked if it is possible to query conventional wells versus unconventional wells in the oil and gas compliance report viewer. Suchodolski responded that it is possible to distinguish between conventional and unconventional well sites in the current report viewer tool.

Waite asked DEP if it is possible to distinguish between the types of violations in the oil and gas compliance report viewer. Specifically, Waite asked if a distinction could be made between administrative-type violations versus environmental-type violations. Suchodolski responded that DEP can update the compliance report viewer to reflect these categories of violations. Wallace explained that the Office of Oil and Gas Management will submit a request to DEP's Bureau of Information Technology to make the physical modification to the viewer tool. Wallace explained that this modification will need to be added to the active list of change orders being managed by DEP's Bureau of Information Technology so it is not known when the update will occur.

McConnell inquired about the status of DEP making operator comments to violations available on the DEP website. Suchodolski responded that DEP has updated the oil and gas mapping application to display operator comments that are submitted to DEP. DEP has started linking operator comments to the oil and gas mapping application; however, comments received prior to this will not appear in the updated mapping application.

UPDATE ON CHAPTER 78, SUBCHAPTER D PROPOSED RULEMAKING

McConnell asked if the current status of the Chapter 78/78a, Subchapter C rulemaking will impact the schedule for proceeding with the Chapter 78, Subchapter D proposed rulemaking process. Pelepko responded that it is likely that the Subchapter D proposed rulemaking process will be affected in some manner, but it is unclear at this time what impact it will have. At this point, DEP plans to continue advancing the Chapter 78/78a final rulemaking and will address the Subchapter D proposed rulemaking at some future date.

NEW BUSINESS

Legacy Oil and Gas Well Study

Pelepko provided an overview of the legacy oil and gas well study. Staff from DEP's Oil and Gas and Air Quality programs kicked off a study to evaluate the integrity of plugged, abandoned, and orphan oil and gas wells across Pennsylvania, as well as provide insight into potential greenhouse gas implications associated with methane emissions from these wells. A total of 208 wells were randomly selected for the study. Staff employed digital manometers to measure gas flow rates, portable methane detection meters, and Forward Looking Infrared (FLIR) cameras for visual detection of methane leaks. DEP anticipates the field data collection phase will wrap up by November, 2016. It is anticipated that this effort will result in one of the most comprehensive studies of its kind to be initiated by a state agency. The study is expected to be completed and published by March 2017.

Coal & Gas Workgroup Update

Saunders provided a general update regarding the efforts of the Coal and Gas Workgroup. The workgroup meetings have resulted in good discussion related to coal and gas issues. Workgroup meetings are scheduled about every five weeks through the end of calendar year 2016.

Adjournment

MOTION: McConnell made a motion to adjourn the meeting. The motion was seconded by Ochs. Motion passed unanimously and meeting adjourned at about 3:15 pm.