MEETING MINUTES Conventional Oil and Gas Advisory Committee January 13, 2016

COGAC MEMBERS PRESENT

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

Non-voting Members: Douglas D'Amore, Jim Seyler (via WebEx)

DEP STAFF PRESENT

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

CALL TO ORDER

A regular meeting of the Conventional Oil and Gas Advisory Committee (COGAC) was held in Room 105 of the Rachel Carson State Office Building, Harrisburg, Pennsylvania on January 13, 2016. David Ochs (Chair) called the meeting to order at 10:03 am.

OPENING REMARKS

David Ochs (Ochs) opened the meeting and invited introductions of members of COGAC and DEP meeting participants. Ochs stated that the meeting was being conducted via WebEx and announced that a public comment period would be made available immediately following the lunch break.

APPROVAL OF MINUTES

Ochs asked members of COGAC if they had an opportunity to review the October 29, 2015 meeting minutes and invited comments.

Burt Waite (Waite) made a motion to accept the minutes as drafted. Mark Cline (Cline) seconded. The motion was approved unanimously.

Waite inquired if the amended version of the minutes from August 27, 2015 have been posted to the DEP website. Todd Wallace (Wallace) responded that the final version of the amended minutes from August 27, 2015 will be posted to the DEP website.

SUMMARY/OVERVIEW AND DISCUSSION OF FORMS REQUIRED TO IMPLEMENT THE FINAL RULEMAKING AMENDING CHAPTER 78

Kurt Klapkowski (Klapkowski), Director Bureau of Oil and Gas Planning and Program Management, stated that the final form Chapter 78/78a Subchapter C rulemaking was submitted to the Environmental Quality Board (EQB) on January 6, 2016 and EQB will

consider this rulemaking at its next regularly scheduled meeting on February 3, 2016. Klapkowski explained that any form-related issues will be addressed prior to the publication of the Chapter 78/78a Subchapter C rulemaking as final in the Pennsylvania Bulletin.

Joe Adams (Adams) provided a verbal overview of the forms that are currently under development by staff within the Division of Well Development and Surface Activities. Adams explained that the forms related to this rulemaking fall into three categories. First there are new forms that do not currently exist and are under development; second, there are existing forms that require minor modifications; and third, there are existing forms that require more extensive modifications. Adams stated that ten new forms are under development and 8 existing forms require extensive modifications.

Adams explained that DEP intends to share draft versions of all forms with the members of COGAC in advance of the next regularly scheduled meeting. Klapkowski suggested that perhaps a workgroup of COGAC could be formed to work with DEP in advance of the next COGAC meeting.

Waite requested that DEP provide a list of all of the forms that are under development. Specifically, Waite requested that the list include the name of the form and the statutory citation that identifies the need for the form. Adams agreed to share this list with the COGAC members prior to the next meeting.

Seth Pelepko (Pelepko) provided a verbal overview of the forms that are currently under development by staff within the Division of Well Plugging and Subsurface Activities. Pelepko explained that his staff is developing 4 forms that are related to this rulemaking. The specific forms include: 1) Area of Review Summary Report; 2) Area of Review Incident Report Form; 3) Landowner Survey Form and 4) Well Adoption Permit.

The first two forms are intended to be electronic forms and the remaining two forms are intended to be available in hard-copy only.

Ochs asked when the forms described by Pelepko will be available for review. Pelepko responded that these forms will be shared with members of COGAC in advance of the March 30, 2016 COGAC meeting. Klapkowski explained that it is the intent of the Department to develop a single set of forms to be used by conventional and unconventional operators. DEP welcomes input from COGAC if it believes that there are unique issues that pertain to conventional operators that should be contemplated in the development of the forms. Klapkowski also welcomed any volunteers from COGAC who would be willing to participate on a workgroup that will review the draft forms when they are available.

Waite asked if DEP intends to add an abandoned well to the abandoned well database when such a well is discovered during the area of review process; but where no actual communication occurs during the hydraulic fracturing process. Pelepko responded that DEP would likely add such a well to the abandoned well database after searching for a

viable owner of the well. If the drilling operator has knowledge of the well ownership, DEP would appreciate any insight in this regard.

SUMMARY/OVERVIEW AND DISCUSSION OF DRAFT TECHNICAL GUIDANCE DOCUMENTS IMPREMENTING CHAPTER 78 (AREA OF REVIEW AND WATER SUPPLY REPLACEMENT)

Area of Review (AOR) Draft Technical Guidance Document

Pelepko explained that DEP assembled a workgroup in October 2015 to assist with the development of this draft Technical Guidance Document (TGD). This workgroup has already met three times to discuss the provisions of this guidance. A working timeline has been established to ensure that the components of this TGD are completed in a timely manner. After this draft guidance document is finalized DEP intends to make it available for public comment via DEP's policy on the development of technical guidance documents.

Klapkowski reminded the members of COGAC that it is not DEP's common practice to develop draft guidance and solicit public comment on such guidance in advance of promulgating a final form regulation. DEP's Office of Oil and Gas Management is taking an extraordinary approach in developing draft guidance at this point in the process; however, it believes it is in the interest of all affected parties to proactively draft such guidance prior to finalization of the Chapter 78 rulemaking.

Cline stated that he is a member of the AOR Technical Guidance Review Workgroup and commended Pelepko for his efforts in leading this workgroup. That said, Cline expressed a number of concerns about the working draft of this technical guidance document. First, Cline estimates that only 0.54 percent of all conventional oil wells that have been hydraulically fractured have resulted in any communication events. Based on this, Cline does not necessarily agree that there is a sufficient basis for conventional operators to be subject to this TGD. Next, Cline believes that the TGD requires too many data sources to be referenced in making a determination of orphaned or abandoned wells in the area of review. Cline suggests that a physical site inspection in addition to 2 or 3 data sources should be sufficient to determine the presence of possible orphaned or abandoned wells. Cline believes that submittal of the AOR Report as outlined in the draft TGD should be accomplished via electronic submittal or in hard copy, but not both. Also, Cline stated that the requirement in the TGD for a well plat to be prepared by a competent surveyor or competent engineer is not supported by the regulatory language in Chapter 78.52a of the oil and gas regulations. Finally, Cline referenced a section of the draft TGD that references American Petroleum Institute Recommended Practice 90 (API RP 90), which suggests that well conditions should be reviewed over the life of the well. He stated that there is no regulatory basis for this provision to be included in the TGD.

Pelepko explained that the AOR Technical Guidance Document is intended to provide comprehensive guidance to both unconventional and conventional operators. Pelepko acknowledged the distinctions between the conventional and unconventional industry practices and believes the TGD is designed to accommodate both industries. Pelepko

agreed with Cline that physical site inspections are an excellent means by which to survey for the presence of orphaned or abandoned wells. Although a comprehensive list of sources is included in the TGD, it is not DEP's expectation that every source be reviewed for every well; however, there are likely a subset of sources that should be used depending on the individual site circumstances. Pelepko explained that the requirement for a competent surveyor or competent engineer to prepare the plat that is submitted as part of the AOR is a statutory requirement contained in the 2012 Oil and Gas Act rather than a regulatory requirement.

Scott Perry (Perry) expressed his appreciation to Cline for sharing his comments and concerns about this TGD. Perry stated that this sort of dialogue helps to facilitate the development of a workable guidance document.

Cline stated that he believes that the draft TGD could apply to both the unconventional and conventional operators, but requested that DEP clearly summarize what aspects of the guidance are applicable to unconventional vs. conventional operators.

Pelepko discussed the relevance of the API RP 90 and how it can serve as a valuable tool in responding to situations where communication occurs with an active or abandoned/orphaned well. Pelepko explained that operators of conventional wells should examine the baseline conditions of a well (e.g., well pressures) and consider such conditions should they deviate from this baseline level in the future as a result of a communication event.

Bruce Grindle (Grindle) asked Pelepko if DEP anticipates completing this TGD prior to the finalization of the rulemaking given the remaining work to finish the draft TGD and the need for a 30-day public comment period. Pelepko believes that there is sufficient time to complete this TGD prior to the finalization of the rulemaking.

Ochs asked if DEP will provide a copy of the draft TGD to the members of COGAC before its next meeting. Klapkowski agreed to share the draft TGD with the members by mid-March.

Water Supply Replacement Technical Guidance Document

Adams explained that staff from the Division of Well Development and Surface Activities have been working on the development of this TGD since last summer. DEP has conducted an extensive review of existing technical guidance and has coordinated internally with DEP's District oil and gas staff. Adams stated that it is the intent of DEP to share the draft TGD with members of COGAC in advance of the March meeting.

Klapkowski stated that a discussion draft TGD would be made available to industry representatives prior to the March meeting for feedback and invited any COGAC members to participate on this workgroup. COGAC agreed to provide a list of names of industry representatives to Adams within a week following the January 13, 2016 COGAC meeting.

Cline asked whether in the review of other Departmental guidance documents any industries (other than the oil and gas industry) are required to restore impacted water supplies to better than drinking water standards when pre-drill conditions so indicate. Klapkowski responded that the underground storage tank industry must achieve this same standard; however, this is not the case for the mining industry.

SEISMIC MONITORING NETWORK UPDATE

Seth Pelepko provided a verbal updated on the status of the seismic monitoring network.

Between February 2013 and December 2014, the Pennsylvania State University (PSU) conducted a study to assess seismic activity throughout Pennsylvania. This seismic study recorded and analyzed 1,355 seismic events.

Eleven (11) out of 1,355 events were determined to be "tectonic" events that resulted from subsurface geologic shifts. These were all classified as microseismic events. The other events were predominately attributed to surface and subsurface mining activities. No events could be attributed to oil and gas activities or associated underground injection well operations.

The Department of Conservation and Natural Resources (DCNR) previously entered into a contract with PSU to maintain a number of seismometers and seismographs (aka – seismic monitoring network). DCNR approached DEP about partnering in an effort to expand the current seismic monitoring network infrastructure in Pennsylvania.

The current seismic network in Pennsylvania consists of 20 stationary seismic monitoring stations (10 operated by PSU and 10 operated by other organizations). The expanded seismic network will add 22 seismic monitors for a total of 42 permanent stationary monitoring stations. Also, 5 portable seismic stations will be purchased as part of the partnership and positioned at strategic locations as appropriate. (Note: *There are 17 additional permanent seismic monitors located in adjacent states, but in close proximity to Pennsylvania's border*).

The data obtained from seismic monitoring network administered by PSU will be archived in the PSU Data Management Center and made openly available using web tools. This expanded seismic network is intended to provide a better understanding of seismic events that occur throughout Pennsylvania on an annual basis.

Cline asked if DEP will provide the members of COGAC a copy of the PSU study. DEP agreed to share a copy of this study.

CLEAN POWER PLAN PRESENTATION

Jessica Shirley of DEP's Policy Office provided a presentation to the members of COGAC regarding EPA's Clean Power Plan. A copy of the PowerPoint presentation is available on the COGAC web page.

[LUNCH BREAK]

PUBLIC COMMENT:

Chairman Ochs extended an opportunity for members of the public to provide public comment to the board.

Mr. Shane Kreibel provided verbal comment to COGAC. Mr. Kreibel discussed the current economic status of the conventional oil and gas industry and expressed concern that the Chapter 78 Subchapter C rulemaking will continue to negatively impact the conventional oil and gas industry in Pennsylvania.

No other individuals in attendance (either in person or on the WebEx) asked to present public comment to the members of COGAC.

PRESENTATION/DISCUSSION REGARDING PENNSYLVANIA CONSERVATION EXPLORER AND PNDI PROJECT SCREENI NG

The following individuals provided a PowerPoint presentation about the PA Conservation Explorer and PNDI project screening tool and responded to questions from COGAC:

Ellen Shultzabarger, Department of Conservation and Natural Resources Gregory Podniesinski, Department of Conservation and Natural Resources Mark Hartle, PA Fish and Boat Commission Heather Smiles, PA Fish and Boat Commission Douglas Gross, PA Game Commission Michael DiMatteo, PA Game Commission

A copy of this PowerPoint presentation is available on the COGAC web page.

WASTE REPORTING CODES UPDATE

Chris Solloway of DEP's Bureau of Waste Management provided a PowerPoint presentation regarding new residual waste codes that have been developed by DEP to more effectively track the types of waste that are generated and disposed of during normal oil and gas activities.

Waite asked whether residual wastes must be re-analyzed in light of the new residual waste codes that the Bureau of Waste Management has developed. Solloway responded that he would need to check into this matter further.

A copy of this PowerPoint presentation is available on the COGAC web page.

WELL COMPLETION REPORT UPDATE

Myron Suchodolski provided a PowerPoint presentation to update the members of COGAC about DEP's well completion reporting requirements. Suchodolski explained

that DEP conducted outreach during the development of the draft well completion report form and received input from the Marcellus Shale Coalition, the Pennsylvania Grade Crude Coalition and the American Petroleum Institute of Pennsylvania. In October 2015, DEP released a final version of the revised well completion report form. Although DEP originally intended to require that the revised well completion report form would be mandatory as of March 1, 2016, the electronic form is still under development within DEP's Bureau of Information Technology; therefore, DEP plans to extend this deadline to a future date.

A copy of this PowerPoint presentation is available on the COGAC web page.

OIL AND GAS COORDINATION ISSUES

Perry explained that this topic was placed on the agenda to allow COGAC members the opportunity to discuss this matter with the Department. In particular, DEP is interested in receiving feedback from COGAC as it relates to the ability for third parties to adopt abandoned wells that penetrate workable coal seams for the purpose of putting the wells back into production. DEP is also interested in receiving feedback about what coal operators might want to see included in a well adoption permit that could be developed by DEP in the future. Perry also noted that Casey Saunders who is a member of the Oil and Gas Technical Advisory Board (TAB) provided the members of TAB with a copy of a proposed rule that includes a process for mapping wells that penetrate coal seams.

David Yingling explained that he would like to discuss these issues further with his colleagues before delving into these specific issues today. Perry invited COGAC to include this topic on any future meeting agenda as appropriate.

Waite asked if third parties can volunteer to pay the cost of plugging an abandoned well without taking physical ownership of the well. Perry responded that there are liability issues that must be considered when doing so, but he mentioned that the Good Samaritan Act addresses similar liability issues. Perry mentioned that it might be more efficient and less expensive for a third party to simply plug an abandoned well itself. Perry explained that the Commonwealth Financing Authority (CFA) has funds available to plug abandoned wells and DEP has reached out to the CFA to determine how the two agencies can partner with each other to promote the plugging of abandoned wells.

DEP agreed to provide the following three items to the members of COGAC:

- A link to the Environmental Good Samaritan Act;
- Several examples of successful grant applications that have been approved by the CFA;
- A link to the CFA website where grant application materials are available.

NEW BUSINESS

Ochs asked what the timetable is for DEP advancing the draft Chapter 78, Subchapter D rulemaking. Pelepko responded that DEP is currently focusing on the completion of the Chapter 78/78a, Subchapter C final form rulemaking and training departmental staff on the components of the that rulemaking. Pelepko stated that DEP will likely revisit the concept paper related to Chapter 78, Subchapter D and begin moving the regulatory development process forward sometime during the second half of calendar year 2016.

Adjournment

Waite made a motion to adjourn the meeting and the motion was seconded by Grindle. Motion passed and meeting was adjourned at 2:45 pm.

