

# **MEETING MINUTES**

## **Oil and Gas Technical Advisory Board April 13, 2017**

### **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. (via WebEx)

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

### **DEP STAFF PRESENT**

Scott Perry, Kurt Klappkowski, Seth Pelepko, Bruce Jankura, Joe Kelly, Steve Brokenshire, Myron Suchodolski, Todd Wallace, Keith Salador, Joseph Iole, Jennie Demjanick, Ann Mathew, Tara DeVore

### **CALL TO ORDER**

A meeting of the Oil and Gas Technical Advisory Board (TAB) was held in Room 105 at the Rachel Carson State Office Building, 400 Market Street, Harrisburg. This meeting was open to the public. McConnell (Chair) called the meeting to order at 10:04 am.

### **OPENING REMARKS**

McConnell opened the meeting by inviting introductions of those in attendance. McConnell asked Perry if he had any opening remarks. Perry explained that it is the goal of the Office of Oil and Gas Management to operate a world class program. Perry suggested that to achieve this goal it is important that DEP, the regulated community and stakeholders engage in meaningful discussions with a primary focus on common interests rather than positions; while recognizing legitimate barriers that can be overcome.

### **ELECTION OF TAB CHAIR**

According to Article VI of the TAB bylaws, the members of TAB shall elect a Chair by majority vote and the elected Chair shall serve a term of two years. The term of the current Chairperson (McConnell) has expired so TAB must elect a Chair for another two-year term.

Perry invited members of TAB to nominate an individual to serve as Chair. Saunders moved to nominate Bryan McConnell to serve a second term as Chair and Hendricks seconded. Perry invited TAB members to vote on the motion to appoint McConnell to serve a second term. TAB voted unanimously in favor of McConnell to serve another two-year term as Chair.

## **TAB and PA GRADE CRUDE DEVELOPMENT ADVISORY COUNCIL**

Perry explained that in light of passage of Act 52 which established the PA Grade Crude Development Advisory Council (CDAC), DEP is interested in ensuring operational efficiencies to ensure matters related to conventional operations are presented only to CDAC and matters related to unconventional operations are presented only to TAB.

Perry suggested that a Memorandum of Understanding (MOU) be developed to memorialize the respective roles of TAB and CDAC. This would serve to clarify the roles of TAB and CDAC (i.e., TAB is the advisory board to consider unconventional issues and CDAC is advisory board to consider conventional issues).

Hendricks asked if this approach is statutorily sound. Perry responded that this approach is similar to the manner in which EPA and DEP currently delegates authority to Conservation Districts to review permits and environmental matters. Perry explained that since the oil and gas regulations have been bifurcated into Chapter 78 and Chapter 78a, this serves to facilitate this approach.

McConnell suggested that for administrative purposes, perhaps the TAB Bylaws should be amended to clarify this division of labor and review. Perry responded that DEP would be willing to prepare draft language to be included in the TAB Bylaws and work with the Chair. Klapkowski stated that the TAB Bylaws requires that proposed amendments be circulated to TAB members at least one month prior to taking action. Klapkowski suggested that DEP can work to provide draft amended Bylaw language to TAB members one month prior to the next meeting scheduled for August.

Saunders stated that both conventional and unconventional oil and gas operations have the potential to impact coal mining operations. Perry agreed that Act 52 is silent on this aspect and suggested that the revised TAB Bylaws can be worded to address this issue.

McConnell suggested that perhaps the TAB chair and the CDAC chair could serve as liaisons to their respective advisory boards to facilitate open dialogue and common areas of interest.

Perry reiterated that the primary interest on the part of DEP is to encourage operational efficiencies. McConnell and Hendricks concurred that there is no need to duplicate efforts.

## **APPROVAL OF MEETING MINUTES**

McConnell asked the members of TAB if there were any comments related to the draft November 22, 2016 TAB meeting minutes. Saunders noted a typographical error in the 6<sup>th</sup> paragraph on page 4; the word “pillar” was spelled incorrectly. Also, Saunders requested that the following edits be included:

- Page 5 Paragraph 4: “Saunders explained that it is his understanding that well plugs placed greater than 200 feet below a coal seam are generally stable **and are located below the area that could be impacted by longwall subsidence.**”
- Page 5 Last Paragraph: “McCurdy asked Saunders to clarify the reference that he made earlier in the meeting that related to the two-year timeframe before the first coal pillar permit is issued **with respect to unconventional wells in longwall chain pillars.**”

Yoxtheimer noted that he participated via WebEx in the November 22, 2016 meeting and requested that his name be added to the list of meeting participants for the record.

McConnell requested a motion to approve the November 22, 2016 meeting minutes, as amended.

MOTION: Saunders moved to accept the November 22, 2016 draft meeting minutes, as amended. The motion was seconded by Yoxtheimer. Motion carried unanimously.

### **2017 TAB MEETING DATES**

Perry explained that the newly established CDAC coincidentally selected the same meeting dates in 2017 as TAB previously selected at the end of calendar year 2016. Given the size of the CDAC and the composition of that council, Perry asked if TAB would consider rescheduling the remaining meetings of 2017 (e.g., August 17 and November 16) to alternate dates.

TAB was agreeable and suggested that DEP confirm the room availability of Conference Room 105 in the Rachel Carson State Office Building, Harrisburg during the 2-week periods of Aug. 13/ Aug. 20 and Nov. 6/ Nov. 13.

The TAB advisory committee liaison will follow up with members of TAB and DEP to select mutually convenient dates.

### **PRESSURE BARRIER TECHNICAL GUIDANCE FOR UNCONVENTIONAL OPERATORS**

Klapkowski explained that this guidance will be taken through the standard development process for Technical Guidance Documents (TGD) and will be published for public comment.

Pelepko provided a verbal overview of the technical aspects of this TGD. This TGD has been designed to function like a checklist to be used by operators on an operational basis. The guidance includes a list of regulatory citations of instances where pressure barriers might be needed or recommended.

McConnell inquired if pressure barrier requirements could be made part of the drilling permit and Pelepko responded that it is more appropriate that this be incorporated into an operator's PPC Plan.

Griffin suggested that DEP consider developing a decision tree to aid operators in better understanding under what scenarios pressure barriers are required to be installed.

Hendricks asked if DEP intends to incorporate any specific changes to Chapter 78, Subchapter D as it relates to well control matters. Pelepko responded that he does not anticipate any changes at this time. Perry encouraged Hendricks to provide any specific examples for the Department's consideration.

Pelepko stated there are several issues related to pressure barriers that might be addressed in a future Chapter 78, Subchapter D proposed rulemaking. This might include incident reporting, blowout preventer testing and shoe testing.

Hendricks asked what DEP's schedule is for completing this TGD. Klapkowski explained that all proposed TGDs must follow DEP's policy on the development of technical guidance documents and that, realistically, it would be early 2018 before a final draft of this policy would be brought back to TAB. In the interest of time, Klapkowski asked TAB members to provide any initial comments to DEP by the middle of May, 2017.

**GUIDELINES FOR THE DEVELOPMENT AND IMPLEMENTATION OF OIL AND GAS WELL SITE INTEGRATED CONTINGENCY PLANS FOR UNCONVENTIONAL WELL SITES**

Klapkowski explained that the purpose of developing this guidance is to streamline and consolidate current emergency response reporting requirements into a single tool.

Brokenshire provided additional background and history on what led to the development of this guidance document. Brokenshire stated that DEP and PEMA collaborated in the development of this guidance so that emergency response requirements of both agencies will be achieved by following this guidance.

Klapkowski reminded board members that Act 9 specifically directs operators to submit emergency response plans to DEP, PEMA, the county emergency management agency and the local 911 call center. DEP will be sending a letter to all unconventional operators informing them that by submitting an emergency response plan via DEP's OGRE system, this will meet the burden of notifying all entities specified in Act 9.

Klapkowski stated that given the emergency nature of this TGD document coupled with the significant involvement of industry in the development of this guidance, DEP plans to proceed with publishing this document for public comment prior to the August TAB meeting; provided TAB does not have any major concerns.

Hendricks explained that prior to the development of this guidance industry has proactively constructed methods and efficiencies for handling emergency response actions, and suggested that the implementation of this guidance might present a burden on industry if an adequate transition period is not allowed. Hendricks also asked whether DEP expects industry to conform to this guidance document or if it is acceptable for industry to comply with the statutory and regulatory requirements as defined in the law. Klapkowski explained that this is a guidance document and is intended to serve as a useful tool to industry; however, industry may choose to comply with the law as it deems appropriate. Klapkowski pointed out that First Responders have suggested to DEP that a short summary document (aka, "Quick Sheet) that outlines all potential hazards in an easy-to-reference document would be very useful when First Responders arrive to a site in response to an emergency incident.

Baldassare asked if the guidance should include language to address Chapter 78.89 as it relates to stray gas incidents. Perry responded that the TGD is intended to address incidents at well sites rather than when stray gas incidents affect receptors off the well site; such as water supply impacts. Baldassare explained that sometimes First Responders are called by the public to respond to stray gas impacts such as with private water supplies; however, the First Responders are unaware or uninformed that the source of the impact could be related to a stray gas migration incident. Perry acknowledged this situation, but was not sure that this concept really fits with the intent of this particular TGD. Perry stated that the Office of Oil and Gas Management will consider how best to address this particular issue.

### **PUBLIC COMMENT**

McConnell opened the floor and invited the public to provide comment.

One individual from the public named Charity Fleaner submitted a question via the Webinar chat feature. Ms. Fleaner asked what is considered to be a "mechanical pressure barrier" as referenced in the TGD. She asked if DEP could provide examples of such. Pelepko responded that the oil and gas regulations require operators to ensure that two pressure barriers are incorporated into the design and construction of a natural gas well. Examples of mechanical pressure barriers include engineering controls such as blow-out-preventers (BOP). Common types of BOP include annulars and various types of rams. Klapkowski suggested that perhaps the TGD could be updated to include diagrams or schematics of examples of mechanical pressure barriers.

Prior to breaking for lunch, Klapkowski introduced Keith Salador and Joseph Iole from DEP's Office of Chief Counsel, Bureau of Regulatory Affairs. Salador and Iole will serve as counsel to DEP's oil and gas program during Elizabeth Davis's absence.

### **AREA OF REVIEW TECHNICAL GUIDANCE DOCUMENT**

Klapkowski reported that both the Area of Review (AOR) TGD and the Water Supply TGD were published as interim final as a result of the promulgation of the Chapter 78

surface activities rulemaking last October. Both TGDs were published with a 60-day public comment period that closed in December 2016. Klapkowski explained that prior to publication as interim final, both TGDs underwent extensive review. Klapkowski explained there was no requirement for DEP to publish TGDs for public comment; however, the Department chose to publish both TGDs for public comment in the interest of transparency and to seek meaningful input.

The purpose of placing this topic on the meeting agenda is to allow DEP an opportunity to brief TAB about the types of comments received during the public comment period and discuss next steps in finalizing the TGDs.

Pelepko reported that DEP received 57 comments from 10 commentators and DEP has reviewed all comments. About 60 percent of all comments were received from industry trade organizations, 20 percent from citizens, 11 percent from operators, 7 percent from environmental advocacy organizations and 2 percent from TAB.

About one third of all comments pertained to the Landowner Survey. Other comments pertained to topics such as how the TGD relates to various forms and the timing of submission requirements. Pelepko explained that DEP is half way through developing formal responses to comments and plans to finalize the TGD by August.

DEP is also generating a list of Frequently Asked Questions (FAQs) that will be posted to the DEP website and will determine if any existing forms should be modified to make them more functional and/or user-friendly.

McConnell asked Pelepko if any comments will result in wholesale changes to the TGD. Pelepko responded that no comments should result in wholesale changes to the guidance document; however, DEP received some substantive comments that pertain to data availability and reportable incidents that will be considered and acted on as appropriate.

Klapkowski pointed out that DEP recently published and posted the AOR Summary Report on the oil and gas website to make this information available to the public.

### **WATER SUPPLY TECHNICAL GUIDANCE DOCUMENT**

Brokenshire reported that six commentators submitted comments to DEP regarding this TGD. Three of the commentators were from industry and the remaining three commentators were environmental advocacy organizations. Many of the comments related to questions about where specific language in the TGD originated. Since this TGD was developed using several different existing guidance documents and policies, it will be fairly easy to respond to these questions. Brokenshire highlighted several other comments.

Hendricks asked if there is a need for any additional input or discussion from TAB regarding this TGD since there was less intensive interaction in the development of this document as there was with the AOR guidance document.

Brokenshire stated the only topic that might require some additional discussion pertains to the topic of water treatment serving as a temporary potable water source when a drinking water supply is negatively impacted.

Klapkowski suggested that after the Department is able to fully review and consider the comments it will determine if it would be useful to bring any remaining issues to TAB for further discussion.

## **INDUCED SEISMICITY/AREA OF ALTERNATIVE METHODS**

Klapkowski reported that since the last TAB meeting, DEP published a report about the seismic event that occurred in the spring of 2016 in Lawrence County. Klapkowski asked Pelepko to discuss what actions the Department is taking to address the issue of seismicity that could be related to hydraulic fracturing or deep well injection disposal practices.

Pelepko responded that it is important to fully understand risks and how they are distributed. In the case of the Lawrence County seismic event, there are several known factors that contributed to this occurrence including: the depth to crystalline basement rock in which the seismic event occurred and the type of hydraulic fracturing method that was used (i.e., zipper fracturing).

Some initial concepts for consideration include the need to form a technical workgroup to further investigate this matter and the need for localized seismic monitoring at points where risk is the greatest. Both industry and academia have expressed an interest in participating in this technical workgroup.

Pelepko explained that some possible issues to be considered by the technical workgroup should include: 1) Is it possible to de-escalate a future seismic event and, if so, what is the best means to do so, 2) What would local seismic monitoring networks look like and how can they be efficiently run, and 3) How to develop a dynamic regulatory framework, as areas of elevated risk can change based on changing detection limits of seismic monitoring equipment.

Hendricks asked about the timeframe for forming this technical workgroup. Pelepko responded that he would like to see the formation of the workgroup come together in the next several weeks so it can work through the various issues over the next three to six months. McConnell reminded the Department that TAB members would be a good resource and addition to the workgroup along with individuals from sister agencies.

Griffin asked Pelepko to clarify his comment about how risks are changing and increasing. Pelepko explained that given the current statewide seismic monitoring network of 42 stations compared to the original 6 stations when the network was in its earlier phase, there is now a greater level of precision in terms of detecting seismic

occurrences. Although the geology has not changed, the improvements in monitoring have enabled the ability to detect risks at a finer level than was possible in the past.

Yoxtheimer reminded the board and DEP that the Pennsylvania State University is currently conducting studies and developing depth to basement bedrock mapping that will serve as a useful tool in the future.

## **GP-5 DISCUSSION**

McConnell reported that over the past several months he has received a number of inquiries from various stakeholders about the proposed GP-5 permit. Perry responded that he has also been personally engaged in meeting with operators and industry trade organizations about this matter. Perry explained that the common themes of the discussions relate to excessive permit review timeframes and the inability of operators to be able to conduct drilling operations in a nimble fashion (i.e., moving engines in and out of service on a well pad) due to the reporting requirements associated with the GP-5 permit.

Other than the frequency of Leak Detection and Repair Requirements (LDAR) and potential excessive permit review timeframes, Perry asked TAB if there are any additional issues related to GP-5 that should be addressed. Perry invited TAB to submit any such comments to DEP.

McConnell stated that he has received feedback that Exemption 38 has done a fairly good job at addressing methane control issues at well sites; however, a lot of volatile organic carbon (VOC) issues are tied to the GP-5 so it doesn't advance the reduction of VOCs while burdening the permitting processes and activities process. Perry responded that he believes that there is a way to address this concern and there is a solution in the works as the Department finalizes the GP-5.

## **OIL AND GAS WORKGROUP DISCUSSIONS**

### **Coal-Gas Coordination Workgroup Report**

Saunders provided a verbal update on the status of the Coal-Gas Coordination Workgroup. Saunders explained that this workgroup involved the participation of two competing industries (i.e., coal and gas), two state agencies and one federal agency working together to achieve a common goal.

Saunders reported that the workgroup has been in active discussions over the past year and is currently in the stage of drafting a Technical Guidance Document that relates to the coal pillar permit. Currently, a coal operator must submit a coal pillar permit when its activities come within 500 feet of a gas well. The new approach will involve a conditional coal pillar permit that is more extensive than the current permit and will involve gas operators taking gas wells out of production during the timeframe that coal mining operations pass through the affected coal seam.



In the near future, the conditional pillar permit will be put into use for the first time at the Enlow Fork mine when the coal operator turns the belt entry into the projected coal pillar. Pelepko stated that DEP's oil and gas inspectors will be participating in the upcoming Coal-Gas Workgroup Subcommittee meeting to discuss how this permit will function in an actual "real world" situation that will involve this Enlow Fork mine operation.

### **Erosion and Sediment Control General Permit-3 (ESCGP-3) Workgroup**

The ESCGP-2 permit is due to expire on December 29, 2017. Although this workgroup has not yet been formed, Kelly reported that DEP's permit review engineers are currently reviewing the ESCGP-2 permit language in relation to the oil and gas erosion and sediment control policy and the Notice of Intent (NOI). In particular, DEP staff want to consolidate the post construction stormwater management requirements and remove duplications from the ESCGP-2 permit, instructions and NOI documents.

The draft ESCGP-3 permit will be consistent with the recent amendments to the oil and gas regulations included in Chapter 78a.65 as it relates to site restoration. DEP also plans to add clarifying language for riparian buffer waivers and exceptions.

DEP's oil and gas central office and district office permit staff will finalize the draft ESCGP-3 permit at which point a workgroup will be convened to review and comment on the draft permit. After the workgroup reviews and addresses any final issues, the draft ESCGP-3 permit will be published for a 30-day public comment period.

Perry explained that one of the high-level goals of reissuing the ESCGP-3 permit is to address common issues that are slowing down the permit review process and to overhaul the expedited review program. Perry reported the findings of a DEP review of the expedited ESCGP-2 permit process that found that of all permits received under the expedited review, 59 percent of the expedited permits were technically deficient. Of the remaining 41 percent of the permits, 80 percent were deficient on second review.

Perry explained that DEP prefers to develop an expedited permit review program that results in superior environmental practices as the basis for the expedited permit review. Examples of superior environmental performance could include reduced width of pipeline right-of-ways and/or the use of indigenous plants that are used to revegetate and restore disturbed lands.

McConnell stated that he has observed that DEP staff that manage the Chapter 102 program routinely reinterpret the regulations without providing clear guidance to the Conservation Districts and this can cause confusion and problems with implementing the oil and gas program. Kelly explained that upcoming training provided by DEP's Chapter 102 program will help to address this matter.

## **Noise Control at Unconventional Well Sites**

Klapkowski provided background about how DEP has made attempts to address the issue of noise at well sites and compressor stations. In 2014, the proposed rulemaking for oil and gas surface activities did not include provisions for the management of noise at well sites and/or compressor stations. DEP received more than 100 comments during the public comment period for the proposed rulemaking specifically regarding noise at well sites. Commentators overwhelmingly urged DEP to promulgate a section of the rulemaking to address noise issues. Consequently, DEP included language in the Advanced Notice of Final Rulemaking to address noise issues; however, comments received during the second comment period were evenly divided both in support of and in opposition to the new language that would address noise-related issues.

In response, DEP removed the noise provisions from the draft final rulemaking, but committed to develop a set of “best management practices” that would apply to well site operations and/or compressor stations as a first step to address noise issues.

Klapkowski explained that other state agencies such as Colorado have been grappling with the issue of noise control as it relates to oil and gas operations. The province of Alberta, Canada appears to be at the forefront in terms of regulating noise at energy development sites in Canada.

There are some Administrative Code provisions that relate to noise as a public nuisance. For example, the Environmental Hearing Board rendered a decision involving the processing operations at mine sites that pertains to noise as a public nuisance.

Klapkowski urged TAB to consider forming a workgroup similar to the Coal-Gas Coordination Workgroup whose purpose would be to examine noise-related issues that pertain to oil and gas exploration and production practices.

Hendricks asked if DEP has observed a decrease in the number of noise complaints related to the oil and gas industry. Perry explained that the Department continues to receive noise complaint, but the number of complaints has been affected by reduced drilling activity coupled with the shorter timeframes involved in drilling unconventional wells today.

Perry stated that he views an opportunity for industry to act proactively to address noise-related issues now to prevent the need for future regulatory actions being taken by the Department.

## **OTHER TECHNICAL WORKGROUPS**

### **Wellbore Deviation Workgroup**

Perry explained that DEP was notified by an operator that purchased gas wells from another operator, that a number of the inherited wells had wellbores that deviated from the permitted wellbore trajectories.

The purpose of this workgroup is to determine what constitutes a reasonable margin of error of the actual wellbore compared to the wellbore trajectory as reported in a drilling permit. It will be helpful to plot actual wellbore deviations electronically for future reference.

Perry stated that one possible area of concern relates to the practice of operators intentionally deviating from the wellbore drill path, versus when such incidents are unintentional. This is a practice that will need to be better understood.

### **Spill Policy Workgroup**

Perry thanked McConnell and Mr. Jeff Walentosky for volunteering to take the lead on formulating suggested revisions to the Spill Policy. The existing policy references the alternate process that was eliminated as a result of passage of the Chapter 78a rulemaking. DEP will be pleased to accept recommendations from this workgroup as a basis for making adjustments to the current Spill Policy.

### **Mine-Influenced Water Workgroup**

Perry reported that this workgroup is evaluating several issues related to the storage of mine influenced water (MIW) in well development impoundments. Several years ago, DEP developed a “white paper” that included a set of standards that must be achieved in order to store mine influenced water in well development (i.e., freshwater) impoundments.

As a result of the passage of the Chapter 78a surface activities rulemaking, several changes have occurred including: well development impoundments must be lined, protected from third-party activities and constructed to engineering standards for embankments. Considering the impact of this rulemaking, the standards in the “White Paper” will be re-evaluated to see if any modifications should be made.

Perry stated that Hendricks is leading an evaluation of several issues including: local conditions where MIW will be stored as compared to the chemical composition of the MIW, other considerations related to the construction of well development impoundments and considerations for the disposition of well development fluids stored in impoundments that may no longer have an apparent end use. Perry mentioned that this workgroup does not currently include a member from the coal industry, so he asked Saunders if he could recommend the name of an individual from CONSOL who would be willing to participate. Saunders agreed to check into this and coordinate with Hendricks.

Perry stated that DEP's overarching goal is to encourage the use of degraded sources of water for hydraulic fracturing provided it is stored and used in a manner that is protective of the environment.

### **Liner Processing Workgroup**

The intention to create this workgroup came about through questions that were raised during FAQ discussions with the Marcellus Shale Coalition regarding Chapter 78a implementation issues. Following these discussions, Perry reached out to solid waste specialists in the district offices and asked if they would share some good examples of OG-71 permits (i.e., Alternative Waste Management Processing) for the processing of liners so DEP could post them on its website for reference by industry. The solid waste specialists were unable to locate any examples of OG-71 permits, so Perry is unsure whether this issue is ripe for the creation of a formal workgroup. Perry explained it does not make sense to form a workgroup now if there are no known instances where industry desires to use alternative waste management processes to process well pad liners. Perry encouraged TAB members to let him know if any such situations exist.

### **NEW BUSINESS**

Hendricks inquired about the status of the monthly calls with industry members to discuss implementation issues related to the Chapter 78a rulemaking that is currently in effect. Perry responded that after the first several calls, questions from industry seemed to dramatically taper off so DEP plans to respond to any additional questions during quarterly meetings with industry. Hendricks stated that there might be a few questions that require a final resolution so he will check his notes and let DEP know.

Perry revisited the issue of whether an additional TAB meeting is necessary to occur before the next regularly scheduled meeting in August. Perry is not sure there are enough substantive topics that will need to be discussed prior to August. Hendricks and McConnell responded that TAB might be interested in having an opportunity to discuss the Water Supply Replacement and Area of Review TGDs prior to DEP publishing them for public comment. Perry responded that he wants to ensure that the public comment period is meaningful and that the guidance documents should not be "locked down" to a point that no room exists for further input and changes. DEP committed to bringing both TGDs back to TAB in August for another opportunity to discuss prior to publication for public comment.

Wallace stated that he will check availability of Room 105 for the month of August and contact TAB members so a final meeting date can be selected.

### **ADJOURNMENT**

Hendricks made a motion to adjourn the meeting and Saunders seconded. Motion passed and meeting was adjourned.

DRAFT