

MEETING MINUTES

Oil and Gas Technical Advisory Board

March 21, 2019

TAB MEMBERS PRESENT

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

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

DEP STAFF PRESENT

Scott Perry, Kurt Klappkowski, Joe Kelly, Ann Mathews, Crystal Magon, Todd Wallace, Jennie Demjanick, Elizabeth Davis

CALL TO ORDER

A meeting of the Oil and Gas Technical Advisory Board (TAB) was held via Skype conference call in Room 105 at the Rachel Carson State Office Building, 400 Market Street, Harrisburg. This meeting was open to the public. McConnell called the meeting to order at 10:00 a.m. and opened the meeting with introductions. Perry provided welcoming remarks.

APPROVAL OF MEETING MINUTES

McConnell asked for a motion to approve the meeting minutes of the August 8, 2018 TAB meeting. Saunders made a motion to approve the meeting minutes and Hendricks seconded. McConnell asked if there was any further discussion or suggested edits to the meeting minutes. There was no further comment or discussion. The meeting minutes were approved, unanimously.

PRELIMINARY DRAFT PROPOSED RULEMAKING FOR CONTROL OF VOC EMISSIONS FROM OIL AND GAS SOURCES

Perry introduced staff from DEP's Bureau of Air Quality including the Bureau Director Krishnan Ramamurthy, Naishadh Bhatt and Charles Boritz. Ramamurthy provided background information on the preliminary draft proposed Reasonably Available Control Technology (RACT) requirements.

The U.S. Environmental Protection Agency (EPA) issues guidance called Control Techniques Guidelines (CTG), in place of regulations, where they will be "substantially as effective as regulations" in reducing volatile organic compounds (VOCs) from a

product or source category in ozone nonattainment areas. States use CTGs as guidance in determining RACT requirements. States within ozone nonattainment areas and states located in the Ozone Transport Region must revise their state implementation plan (SIP) to implement RACT for sources of VOCs covered by a CTG. After a state promulgates a regulation implementing the requirements of the CTG, the state must submit the regulation to EPA for approval as part of the state's SIP. On October 27, 2016, EPA issued a CTG for the oil and natural gas industry for emissions of VOCs from existing sources.

Charles Boritz additional detail about the preliminary draft proposed VOC RACT regulation. McConnell asked if this rulemaking will have any impact on Exemption #38 of the Air Quality Permit Exemptions List. Ramamurthy explained that Exemption #38 is intended to apply to new sources of emissions whereas the RACT rulemaking applies to existing sources, so it will not affect Exemption #38.

McConnell opened the meeting for public comment on the draft proposed rulemaking.

One individual who participated via Skype, asked if the RACT analysis will be available for public review. DEP air quality staff responded that information will be included as part of the rulemaking package and will be made publicly available when submitted to the Environmental Quality Board.

Representative Vitali was in attendance at the meeting and stated that, in his role as a member of the public, he had three questions. He explained that his line of questioning is not intended to be a criticism of DEP and congratulated the Department on its efforts given available staff and resources.

Vitali questioned why the rulemaking is taking so long to develop given the urgency for the need for action on climate change. DEP responded that staff shortages contribute to longer regulatory development timeframes and explained that time-intensive efforts are required to gather emissions data, especially from older sources. Vitali asked why, given its ability to regulate methane directly through the Pennsylvania Air Pollution Control Act, DEP is not taking this approach. He further amplified this question by asking how much methane would not be captured under the Department's proposal if methane is not regulated directly. Ramamurthy explained that while this rulemaking regulates VOCs, methane emissions are reduced as a co-benefit. DEP is currently analyzing the estimated emission reduction. Finally, Vitali inquired about the production threshold for conventional wells and stated that he has been advised that 75% to 80% of conventional wells would be exempted. Vitali expressed a concern that conventional operators are exempt from leak detection and repair (LDAR) requirements. DEP responded that it only receives production data on unconventional sources since conventional operators are not required to submit emissions data to DEP. DEP can only estimate how many sources may be exempt from LDAR. DEP believes most conventional operators will fall below the applicability threshold, but the exact number is unknown to DEP. DEP noted that conventional sources must comply with other RACT requirements besides LDAR. Vitali asked what the next steps are in this rulemaking process. Ramamurthy responded that the

rulemaking will be presented to the advisory committees for a vote and it was already presented for informational purposes to the Air Quality Technical Advisory Committee and the Small Business Compliance Advisory Committee.

STATUS OF PROPOSED CHAPTER 78 (CONVENTIONAL OIL AND GAS) CHANGES AND UPDATES

Klapkowski provided an overview of the background and history related to the development of the Chapter 78 and Chapter 78A regulations.

He reminded the TAB members that in 2016 the General Assembly passed Act 52 which abrogated the rulemaking process regarding conventional wells and established the Pennsylvania Grade Crude Oil Development Advisory Council (CDAC). In 2017, Representative Causer and Senator Hutchinson introduced bills in the House and Senate that would have created a stand-alone statute called the Conventional Oil and Gas Act (as opposed to amending the 2012 Oil and Gas Act). The Department had concerns with this approach since it used Act 223 of 1984 as the starting point and would result in the roll-back of some key provisions of the 2012 Oil and Gas Act. DEP stands ready to engage with members of CDAC and the General Assembly to resolve any ongoing issues with a goal of developing a workable solution. The Department's Regulatory Agenda contemplates the possibility of moving forward to develop a rulemaking geared toward the conventional industry, but it is currently awaiting to see what steps the General Assembly plans to take in either developing a stand-alone bill versus amending the 2012 Oil and Gas Act.

UPDATE ON STATUS OF ESCGP-3

Kelly provided an update on what has been accomplished regarding the Erosion and Sediment Control General Permit-3 (ESCGP-3) since the TAB meeting on August 8, 2018. DEP published the ESCGP-3 paper permit on October 6, 2018 and the electronic ESCGP-3 permit went live on October 29, 2018. Although DEP originally intended for the last day for receipt of paper ESCGP permits to be December 29, 2018, DEP extended the use of paper permits until further notice. DEP offered a series of web-based and classroom-based training sessions after the ESCGP-3 paper and electronic permits went live.

From October 6, 2018 to the date of the TAB meeting, DEP received 46 ESCGP-3 permits and 122 ESCGP-3 permits are currently under review. Of the 122 permit applications, 28 permits were submitted using the electronic ESCGP-3 permit.

Hendricks asked if landowners will be required to conduct routine well site inspections if they take ownership of a well site. Kelly responded that if landowners assume ownership of the well site, they are required to accept all long-term operating and maintenance requirements.

Klapkowski emphasized the work that will be accomplished by the Prioritized Review Workgroup to examine and establish superior environmental practices. DEP convened a workgroup that includes the three major oil and gas associations (i.e., Marcellus Shale Coalition, PA Chapter of the American Petroleum Institute and the Pennsylvania Independent Oil and Gas Association), several Non-Governmental Organizations and representatives of the Department of Conservation and Natural Resources. One matter that must be addressed is how to effectively “process” permits to ensure they are reviewed in a timely manner despite the ability for some permit reviews to be prioritized as a result of superior environmental performance.

PROPOSED UNCONVENTIONAL OIL AND GAS PERMIT APPLICATION FEE UPDATE

Perry updated TAB on the status of the proposed oil and gas permit application fee rulemaking. The comment period of this proposed rulemaking closed on Monday, August 13. There were 14 commentators and comments ranged from no opinion to general support and general opposition. The most significant comment encouraged DEP to continue to work with stakeholders to identify alternative sources of funding. Perry explained that DEP agrees with this comment and has considered alternate sources of funding; however, the statutory mechanism seems to limit the options to relying on a permit fee that corresponds to the cost of administering the oil and gas program.

Charging alternate fees for services seems to be as unpredictable as charging a fee on unconventional and conventional oil and gas well permit applications. The proposed rulemaking assumes a permit volume of 2,000 unconventional permits received per year; however, DEP is currently on track to receive only 1,400 unconventional permits. This amounts to a \$7.5 million shortfall in what would be collected under the proposed fee structure. Small variations in the number of permits received can amount to large reductions in the amount of permit fees collected. Even under the current fee structure, permit revenue is falling short about \$500,000 to \$800,000 each month to sustain a long-term positive fund balance.

Perry stated there is no specific date for DEP to advance the proposed unconventional permit fee package, but pursuing a permit fee increase seems to be the most likely path forward.

McConnell asked whether DEP considered charging a fee on compliance inspections at oil and gas well sites. Perry responded that DEP is concerned that such an approach would provide the appearance that DEP conducts inspections for the purpose of making a profit. Perry stated that DEP has considered pursuing an annual registration fee as opposed to a well-drilling permit fee. If the annual fee structure is properly designed, it would allow DEP to operate its oil and gas program in a very predictable and sustainable manner and could even generate sufficient revenue to provide increased funding to support the plugging of some orphan and abandoned wells throughout Pennsylvania. It is unclear whether this approach would gain traction; therefore, DEP will likely pursue the current course of increasing the unconventional well drilling permit fee.

PUBLIC COMMENT

McConnell opened the meeting to comment from the public; however, nobody on the Skype telephone conference call or in attendance in-person at the meeting expressed an interest in providing comment. TAB recessed for lunch.

UPDATE ON DEP'S GUIDANCE FOR DEALING WITH RADIOACTIVITY IN SOLID WASTE

David Allard, Director for DEP's Bureau of Radiation Protection, presented an informative Power Point presentation on DEP's guidance for addressing radioactivity in solid waste that is being revised by DEP's Bureau of Radiation Protection (BRP). BRP plans to take the draft guidance document to an upcoming meeting of the Solid Waste Advisory Committee and the Radiation Protection Advisory Committee before publishing it in the *Pennsylvania Bulletin* for comment.

Hendricks asked Allard if he is aware of any issues with the oil and gas industry as it relates to a shortage of disposal capacity. Allard explained there are currently about 12-13 solid waste landfills that routinely accept waste from the oil and gas industry and he is not aware of any capacity problems at this time. There is at least one waste processor that ships sludge to a low-level radioactive waste disposal facility in Utah since the waste must be manifested as low-level radioactive waste pursuant to U.S. Department of Transportation regulations and cannot be managed in Pennsylvania.

McConnell asked if the solid waste from the oil and gas industry that exhibits radiation is sourced mainly from waste water treatment sludge rather than drill cuttings. Allard mentioned that a prior qualitative analysis conducted by DEP indicated that some drill cuttings samples in southwest Pennsylvania (particularly in the wet gas areas) occasionally set off radioactive alarms at landfills. This issue is discussed in the DEP TENORM Study.

Yoxtheimer asked if as part of the TENORM Study DEP evaluated the solubility of sludges and drill cuttings that might result in radiation being detected in landfill leachate. Allard responded that in the short-term, DEP didn't detect anything, but that the Department should continue to look at that long-term effects of landfill leachate since the composition of landfill leachate might change over time due to the chemistry inside landfills. Klapkowski stated that the DEP TENORM Study addresses this topic in Section 5 of the report.

ePERMIT UPDATE

DEP developed an ePermit application tool for both the Erosion and Sediment Control General Permit-3 (ESCGP-3) and the Drill and Operate a Well (DOW) permit.

As for the ESCGP-3 ePermit, DEP continues to fine-tune the ePermit application and fix some bugs; therefore, DEP will currently accept either paper or electronic permit applications. Later this year, DEP will require ESCGP-3 permits to be submitted via the ePermit tool. To ensure ample opportunity for operators to plan for this transition, DEP will provide advance notice to industry via direct outreach and publication in the *Pennsylvania Bulletin* prior to requiring use of the ePermit.

DEP launched the eWell electronic permit for DOW permits in 2014. Since then, DEP developed an enterprise-wide electronic permit tool that will replace the eWell electronic permit. DEP has also been addressing several “bugs” with the ePermit tool and plans to migrate to the ePermit tool when DEP is satisfied that it is working seamlessly. The Marcellus Shale Coalition is partnering with DEP to sponsor a training opportunity on May 8, 2019 for industry representatives to learn more about the ePermit tool.

POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) MODEL PLAN

Kelly provided an update on DEP’s intent to develop a PCSM Model Plan. DEP developed an Erosion and Sedimentation Control (ESC) Model Plan in 2015 which is a useful tool for industry, so DEP plans to develop a similar model plan to address PCSM issues. The goal of developing a PCSM Model Plan is to provide standardization and consistency in PCSM Model Plans. Also, the use of a model plan will eliminate redundancies between ESC and PCSM plans. A model plan will also improve the accuracy of calculations that are used in PCSM plans such as stormwater calculations. Finally, the model plan will reduce the time it takes operators or their consultants to develop PCSM Plans. DEP intends to develop a draft PCSM Model Plan over the coming months with a goal of publishing the plan by the end of this year.

NEW BUSINESS

Coal-Gas Subcommittee Report

Saunders provided an update to TAB regarding the ongoing efforts of the Coal-Gas Subcommittee. The interim final Longwall Mining Adjacent to Unconventional Wells in Chain Pillars guidance document is expected to be completed soon.

The subcommittee developed a document that is similar to a Standard Operating Procedure that pertains to drilling behind mining issues. This document is also in the final stages of development. This document might be transformed into a guidance document, and if this happens it will be presented to TAB for review.

The subcommittee developed a “Risk Matrix” that identifies various risk scenarios associated with longwall mining adjacent to wells that are not located in chain pillars.

The Coal-Gas Subcommittee was formed in 2016 with the goal of developing technical guidance on longwall mining adjacent to unconventional wells in chain pillars and this work is effectively completed. Although there are other technical issues that have been

addressed by this subcommittee, there no longer seems to be a critical need to maintain a formal subcommittee into the future.

Casey made a motion to discontinue this subcommittee with the understanding that DEP will continue to run future coal-gas policy and guidance documents by TAB. Baldassare seconded. There was no further discussion. The motion passed unanimously.

Public Comment

Tom Yarnick of XTO Energy who attended the meeting remotely via the Skype telephone link, asked DEP if it considered, as an alternative to advancing a fee package, using revenue generated from lease fees collected by the Pennsylvania Department of Conservation and Natural Resources (DCNR). Yarnick stated that the *Shale Monitoring Report* indicated that about \$80 million in lease fund revenue has been collected by DCNR and some of this money is deposited into the General Fund. Perry stated that it is his understanding that all the lease fund revenues are deposited into the Marcellus Lease Fund that is administered by DCNR and, by law, must be used for “conservation purposes.” There is ongoing litigation about whether DCNR staff salary costs are eligible as an appropriate use of the Marcellus Lease Fund monies. DEP is willing to look into this matter further, but does not expect this funding can be used by DEP to pay for staff salary and program costs.

On a related topic, Perry reported that DCNR and DEP have partnered to address the plugging of orphan and abandoned wells on state owned lands operated by DCNR. DCNR agreed to transfer \$20 million over a ten-year period to DEP. DEP will use the money to administer contracts to plug orphan and abandoned wells on DCNR lands and provide technical support.

Election of TAB Chairperson

McConnell reminded TAB that the TAB Bylaws require that TAB elect a chairperson every two years and the current term of the chairperson has reached this time limit. McConnell recommended that the TAB members address this matter at the next regularly scheduled TAB meeting.

ADJOURNMENT

McConnell asked if there was a motion to adjourn the meeting. Hendricks made a motion to adjourn the meeting and Saunders seconded. Motion passed unanimously, and the meeting was adjourned at 2:06 pm.