

MEETING MINUTES

Oil and Gas Technical Advisory Board

January 15, 2020

TAB MEMBERS PRESENT

Voting Members: David Yoxtheimer, P.G. (Chair), Fred Baldassare, P.G., Casey Saunders, P.E., Jeffrey Walentosky, P.G.

Non-voting Advisors: Susan Brantley, Ph.D.

DEP STAFF PRESENT

Scott Perry, Kurt Klappkowski, Joe Kelly, Seth Pelepko, Steve Brokenshire, Bruce Jankura (Skype), Myron Suchodolski (Skype), Crystal Magon, Shahed Noyon, Todd Wallace, Elizabeth Davis, Joe Iole, Kate Cole, David Allard, Andrew Foley, Rebecca Dunlap, Hayley Book

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 and individuals who could not participate in person were able to participate remotely via Skype conference call. Yoxtheimer called the meeting to order at 10:05 a.m. and opened the meeting with introductions. Perry provided welcoming remarks and announced that the meeting is recorded in its entirety and participation in this meeting conveys implied acceptance and consent for all meeting participants to be recorded.

APPROVAL OF MEETING MINUTES

Yoxtheimer asked for a motion to approve the meeting minutes of the September 19, 2019, TAB meeting. Saunders made a motion to approve the meeting minutes and Walentosky seconded. Yoxtheimer asked if there was any further discussion or suggested edits to the meeting minutes.

Wallace clarified the second paragraph of the section titled "Election of Officers" on page 1 of the meeting minutes. Wallace reminded TAB members that the TAB Bylaws state in Article VI, Paragraph A that "In the absence of the duly elected Chair at an Advisory Board meeting, prior to the meeting the Chair may designate another member to serve as the Chair for that meeting." Wallace explained that the meeting minutes refer to Walentosky as an "alternate" rather than "Vice Chair" since the TAB Bylaws do not specifically provide for the election of a Vice Chair, as currently written. TAB was

advised that if it so chooses, it may amend the current Bylaws to include the role and responsibilities of a “Vice Chair”. TAB members agreed that the wording of the meeting minutes captures the intent of TAB during the September 19, 2019, meeting.

The meeting minutes of the September 19, 2019, TAB meeting were approved, unanimously.

TRENCHLESS TECHNOLOGY TGD & ALTERNATIVES ANALYSIS TGD

Andrew Foley and Rebecca Dunlap of the DEP Regional Permit Coordination Office met with TAB to present an overview of the Trenchless Technology Technical Guidance Document (TGD) and Alternatives Analysis TGD. Foley explained that pursuant to a stipulated settlement, DEP established two technical workgroups to develop these TGDs and is in the process of reviewing stakeholder comments. DEP’s Regional Permit Coordination Office is currently meeting with various DEP advisory committees and boards to present the concepts of the draft TGDs while they are still under development. Contributors to the TGDs include various state agencies, federal agencies, appellant representatives and industry representatives such as the Marcellus Shale Coalition.

Walentosky stated that he appreciates that this topic is included on today’s meeting agenda, but would like to have had an opportunity to participate on the technical workgroup. Foley responded that the TGDs are still undergoing development and extended an opportunity for TAB members to provide comments to DEP. Foley agreed to provide a “comment table” to the DEP Office of Oil and Gas Management for distribution to members of TAB in order to solicit feedback on both TGDs. Perry thanked Foley for allowing TAB the opportunity to provide comment on these TGDs, since the DEP Regional Permit Coordination Office is, otherwise, under no obligation to do so.

STATUS OF “RADIOACTIVITY MONITORING AT SOLID WASTE PROCESSING AND DISPOSAL FACILITIES” TGD

Dave Allard, Director of DEP’s Bureau of Radiation Protection, updated TAB on the status of this TGD. The comment period for this TGD ended in October 2019 and DEP is currently reviewing the comments and expects to prepare a Comment/Response Document by the second quarter of 2020. Yoxheimer inquired whether DEP has observed any pinch points with the oil and gas industry as it relates to setting off radioactive alarms at solid waste processing and disposal facilities. Allard responded that occasionally drill cuttings set off radioactive monitoring alarms; however, any waste that is determined to not be eligible for disposal at solid waste processing and disposal facilities are transported to facilities that are permitted to accept such waste. Currently, much of this type of waste is transported to the state of Utah for disposal.

COAL-GAS COORDINATION COMMITTEE UPDATE

Saunders and Pelepko updated TAB on the recent work conducted by the Coal-Gas Coordination Committee. Saunders highlighted three topics that were considered by the group during the fourth quarter of 2019. The first involves the “Risk Matrix Document” that includes examples of mine pass-through scenarios; however, there continues to be weaknesses in the document that would benefit by inclusion of more examples of potential scenarios. Another topic pertains to the process of hydraulically fracturing wells that are in close proximity to active/sealed areas of coal mines. Saunders explained that the group is in the early stages of evaluating this matter and would benefit by input and participation by the hydraulic fracturing industry. In particular, there is a need for additional safeguards and notification requirements. Finally, the group has been examining deviation surveys to determine what constitutes a “safe distance” involving offsets between mining and unconventional wells.

Pelepko stated that the Coal-Gas Coordination Committee plans to meet at least six times in 2020 and the first meeting is scheduled for February 5. One of the items the committee will focus on this year is integrating lessons-learned from a recent well control incident into the Pressure Barrier TGD that is under development.

LEGACY WELLS – ROLE/ASSISTANCE OF TAB

Walentosky discussed several goals in 2020 that are related to legacy wells including: getting a coal to non-coal well reclassification process in place; developing a tool that can be used by industry to better define the attainable-bottom for wells that are in the process of being plugged; and summarizing the findings of DEP’s study of failed well plugs.

Walentosky asked whether TAB can provide DEP any further assistance as it relates to the subject of legacy wells. Perry explained there is an ongoing debate about what geological formations should be isolated using cement plugs and welcomed any suggestions from industry. Perry also stated that DEP would appreciate greater insight into what drives the industry’s costs when plugging legacy wells.

Yoxtheimer asked DEP how many wells the Department plugs each year. Perry responded that, on average over the past three years, DEP has plugged about seven wells per year. Yoxtheimer reported that the Pennsylvania State University is working in partnership with Safer-PA to develop brochures and a “well mapper” electronic application.

Perry discussed that one of the most significant issues facing the conventional oil and gas industry is how to effectively manage produced fluids from exploration and development operations. Currently, there is an extremely limited capacity for the disposal of such waste in Pennsylvania. Recently, EPA implemented a federal rule that prohibits brine from conventional and unconventional operations being treated at Publicly Owned Treatment Works. Currently, most produced fluids are transported to neighboring states for disposal in Class II Underground Injection Control (UIC) disposal wells. Perry asked if industry has conducted any studies to identify areas in Pennsylvania that exhibit the

geology that is conducive to the placement of Class II UIC disposal wells. Perry stated that this information would be helpful to the Department.

UNDERGROUND GAS STORAGE ISSUES UPDATE

Klapkowski provided an update to TAB regarding the current status of underground gas storage wells in Pennsylvania. Klapkowski stated that in 2020 the Department intends to continue to build on its efforts to evaluate the current condition of the underground gas storage industry in Pennsylvania and will establish a workgroup to address a number of issues including developing risk assessment tools to evaluate the efficacy of underground gas storage reservoirs and operations. The workgroup will also examine current industry practices and protocols for how underground gas storage wells are ranked in terms of risk/safety. Klapkowski welcomed TAB to participate in any future workgroup efforts.

PUBLIC COMMENT

Tom Yarnick, of XTO Energy, commented on page 6 of the meeting minutes from September 19, 2019, that reads “The American Petroleum Institute ‘API’ recently revised its standard (API-RP53) that is referenced in Section 78a.72 of Subchapter D of Pennsylvania’s oil and gas regulations. DEP is in the process of accessing this standard since API has not made a version of this available to the public at no charge.” Specifically, Yarnick asked if there are any updates regarding how version 5 of the standard will affect DEP’s implementation of Section 78a.72. Pelepko indicated that DEP has been able to gain access to the most recent versions of the API standard and is making changes to a FAQ to reflect the language and concepts in version 5.

REGIONAL GREENHOUSE GAS INITIATIVE

Hayley Book, Special Assistant to the DEP Secretary, spoke to TAB about the status of this initiative. She reminded the board that on October 3, 2019, Governor Wolf established Executive Order 2019-7 that directs DEP to develop and present to the Environmental Quality Board, by July 31, 2020, a proposed rulemaking to, among other things, abate, control or limit carbon dioxide emissions from fossil-fuel-fired electric power generators.

At the Air Quality Technical Advisory Committee (AQTAC) on Thursday, February 13, 2020, DEP will present preliminary draft regulations to allow Pennsylvania to participate in the Regional Greenhouse Gas Initiative (RGGI) for informational purposes only. RGGI is a market-based collaboration among 10 Northeast and Mid-Atlantic states to reduce greenhouse gas emissions while generating economic growth.

The preliminary draft is consistent with the RGGI Model Rule but has several specific distinctions: it adds a waste coal set-aside allowance allocation; it adds a qualifying offset for abandoned well plugging; it provides flexibility for on-site generation tied to manufacturing facilities; and it includes an auction provision, indicating that DEP will

determine whether to participate in a multi-state auction based on certain factors or hold a Pennsylvania-run auction.

A draft proposed regulation, as required by the governor's Executive Order, is expected to be presented to the Environmental Quality Board in summer 2020.

Baldassare asked if any formal studies have been conducted to examine the largest contributors of greenhouse gas emissions in Pennsylvania. Book responded that these have been examined as part of the Climate Change Impact Assessment and Climate Action Plan.

ESCGP-3 PRIORITIZED REVIEW WORKGROUP

Kelly reported that on January 14 DEP hosted the third meeting of the ESCGP-3 Prioritized Review Workgroup. In addition to Office of Oil and Gas staff, attendees included Office of Chief Counsel and DCNR Bureau of Forestry staff, as well as several professionals representing industry, trade organizations, resource advocacy groups and environmental consulting firms.

Innovative approaches through design and implementation of environmentally enhanced Best Management Practices (BMPs) and superior construction practices reduce environmental impacts from oil and gas operations. To incentivize these technologies and practices, the Department intends to replace the ESCGP Expedited Review process with a Prioritized Review process that will allow for voluntary participation by industry. Permit applications submitted as Prioritized Review will be given a score based on the BMPs and environmentally superior construction practices used. Projects that score well will be given priority to be reviewed before projects that are not submitted as Prioritized Review.

The goal of the third meeting of the Prioritized Review Workgroup was to refine the suite of BMPs and construction practices to be included in the program and discuss scoring system concepts. Other topics included; a comparison of similar programs already being offered by local municipalities and other state and county agencies, forest fragmentation, pipeline co-location and width of right-of-way, wildlife habitat enhancements and third-party certification programs.

The Department plans to draft the initial Prioritized Review document outline and present it to the workgroup during the next meeting that is scheduled on March 17, 2020. Based on the current timeline, DEP should be in a position to bring the document back to TAB at its meeting in September 2020.

UPDATE ON CHAPTER 78, SUBCHAPTER C (CONVENTIONAL OIL AND GAS REGULATIONS)

Klapkowski updated TAB on the history and anticipated next steps related to the development of a proposed conventional oil and gas rulemaking. He reminded the

TAB members that in 2016 the General Assembly passed Act 52 which abrogated the ongoing rulemaking process regarding conventional wells and established the Pennsylvania Grade Crude Oil Development Advisory Council (CDAC). Act 52 directed the Department to work with CDAC to “[e]xamine and make recommendations regarding existing technical regulations promulgated under 58 Pa.C.S. (relating to oil and gas) ... that impact the conventional oil and gas industry of this Commonwealth and [e]xplore the development of a regulatory scheme that provides for environmental oversight and enforcement specifically applicable to the conventional oil and gas industry.”

Since 2016, the program has worked with CDAC as a body and with individual members on potential legislation and proposed regulations relating to conventional oil and gas wells. Specifically, proposed rulemaking concepts were discussed at several CDAC meetings throughout 2016, 2017 and 2018. In April 2018, program staff and CDAC members met and developed a scoping document outlining where agreement could be reached on potential legislative or regulatory language. In 2018 and 2019, program efforts on this issue centered more directly on legislative language with the hope that regulatory development could commence once the Conventional Oil and Gas Wells Act (“COGWA”) was passed. Because those discussions reached an impasse, DEP plans to proceed with the development of a proposed conventional oil and gas rulemaking and will likely advance the rulemaking via several concise packages in parallel.

Chapter 32 of the Oil and Gas Act provides authority for DEP to consult with both CDAC and TAB; therefore, DEP plans to present the proposed rulemaking to TAB after the proposed packages are developed.

NEW BUSINESS

Walentosky reminded TAB members that industry representatives are currently working on developing a draft spill policy proposal that it plans to present to DEP for consideration.

Yoxtheimer reminded TAB members that DEP is scheduled to present the final-form Unconventional Permit Fee Rulemaking to the Environmental Quality Board on January 21, 2020.

Yoxtheimer mentioned that TAB is also interested in learning more about the status of an announcement by Governor Wolf in November 2019 that funding will be allocated for the purpose of the PA Department of Health to conduct studies to examine issues related to hydraulic fracturing and the occurrences of childhood cancer rates. Perry explained that this study is being conducted by the DOH and he is not aware of any further details regarding these studies.

ADJOURNMENT

Yoxtheimer asked if there was a motion to adjourn the meeting. Walentosky made a motion to adjourn the meeting and Saunders seconded. Motion passed unanimously, and the meeting was adjourned at about 1:15 pm.