MEETING MINUTES

Oil and Gas Technical Advisory Board December 1, 2022

[*The Oil and Gas Technical Advisory Board (TAB) meeting was held as a hybrid meeting in Room 105, Rachel Carson State Office Building, Harrisburg and via WebEx. This meeting was open to the public.*]

TAB MEMBERS PRESENT

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

Non-voting Advisors: Susan Brantley, Ph.D., John Walliser, Esq.

DEP STAFF (Meeting Participants)

Kurt Klapkowski, Joe Kelly, Harry Wise, Myron Suchodolski, Todd Wallace, Ann Mathew, Shahed Noyon, Andy Klinger

OPENING REMARKS

Klapkowski opened the meeting at 10:02 am and reminded meeting participants that the TAB meeting is being recorded and participation in the meeting implies consent to be recorded.

Klapkowski informed meeting participants of the recent passing of Mr. James (Jim) Erb, former Director of the DEP Bureau of Oil and Gas Management. Jim will be remembered for his many contributions to the development of the DEP's oil and gas program that were crucial in building a modern regulatory program to oversee conventional oil and gas operations in Pennsylvania. Aside from his professional contributions to the work that he accomplished while at DEP he did so with a kind and generous spirit. Jim will be missed but not forgotten.

APPROVAL OF MEETING MINUTES

Yoxtheimer asked the board members if there were any general comments regarding the July 25, 2022 draft TAB meeting minutes. Walentosky commented that his name was spelled incorrectly throughout the draft meeting minutes (Walentoski vs. Walentosky) and made a motion to approve the meeting minutes as amended. Saunders seconded the motion as amended and the motion passed unanimously.

PUBLIC COMMENT

Yoxtheimer opened the meeting for public comment. Wallace stated that no members of the public made prior arrangements with the Department to provide public comment. Yoxtheimer asked if any members of the public who are on the call are interested in providing public comment. No members of the public responded.

PA FUNCTION-BASED AQUATIC RESOURCES COMPENSATION PROTOCOL)

Andy Klinger of the DEP Office of Water Programs provided an overview of this protocol that determines compensatory mitigation which became effective on March 1, 2022. Klinger explained that a workgroup has been formed to evaluate the protocol and to listen to any concerns expressed by stakeholders. At this time, the use of the protocol is optional; however, its use satisfies the federal requirements. The protocol allows for alternate methodology to be used provided the methodology is recognized as an approved methodology by the Department.

Walentosky asked if there are options for the use of "in lieu" projects and what options are available. Klinger explained that there is an option for an operator to make a financial payment instead of conducting a project to satisfy the mitigation requirements. Klinger further explained that the Army Corps of Engineers does not currently acknowledge an "in lieu" fee program for projects that include federally recognized impacts.

UPDATE ON DRAFT TECHNICAL GUIDANCE DOCUMENTS (PART 1)

Trenchless Technology TGD and Alternatives Analysis TGD:

Klapkowski asked Yoxtheimer if the topic of "Trenchless Technology and Alternatives Analysis" could be moved up on the agenda to allow Klinger to discuss this topic while he is present in the meeting. Yoxtheimer agreed.

Klinger explained that the DEP Bureau of Waterways, Engineering and Wetlands has been coordinating with the DEP Regional Permit Coordination Office in the review of all comments received regarding both TGDs. The Department is currently revising both TGDs and is drafting the Comment/Response Documents associated with both TGDs. It is anticipated that the Alternatives Analysis TGD will be finalized for publication by the second quarter of 2023 and the Trenchless Technology TGD will be finalized for publication by the fourth quarter of 2023.

Walentosky asked if the Department expects there to be significant amendments to these two TGDs based on the comments received. Klinger responded that fewer comments were received for the Alternatives Analysis TGD compared to the Trenchless Technology TGD. Only minor changes to the Alternatives Analysis TGD are expected. Constructive comments were received regarding the Trenchless Technology TGD and though there will be a number of minor changes to this TGD, the revisions will not jeopardize the target date for publication.

Walentosky asked if any further discussion is anticipated with stakeholders prior to publication of the Trenchless Technology TGD. Klinger responded that the Department is still evaluating comments and this has not yet been determined. Klinger reminded the board that this TGD is not a regulation rather it is intended to serve as a useful technical guidance document that is intended to assist applicants and help to inform the applicant as to what to include in its application.

PROPOSED CHAPTER 78 RULEMAKING UPDATE

Klapkowski revisited the history of the development of this rulemaking and reminded the board that the process started in 2016 with the approval of the Chapter 78 rulemaking by the Environmental Quality Board (EQB) and Independent Regulatory Review Commission (IRRC) that was later abrogated by the passage of Act 52 of 2016 and the creation of the Pennsylvania Grade Crude Development Advisory Council (CDAC). The rulemaking was separated into two proposed rulemakings commonly called the Environmental Protection Standards rulemaking and the Waste Management rulemaking.

The Environmental Protection Standards proposed rulemaking was submitted to CDAC and the council took action to prepare a report to accompany this rulemaking when it is submitted to the EQB in March 2023.

The Waste Management proposed rulemaking has not yet been formally reviewed by CDAC, but the Department intends to submit this proposed rulemaking to CDAC for its review at the meeting that is scheduled for December 15, 2022. Two of the most significant aspects of this proposed regulation will address spill/release reporting and remediation that is address in Section 78.66 of the Pennsylvania Oil and Gas Regulations and the second aspect relates to Area of Review (AOR) requirements. The proposed AOR rulemaking is trailing the Environmental Protection Standards proposed rulemaking, but is expected to be presented to the EQB in the summer of 2023.

Klapkowski took the opportunity to discuss a recent well control incident that occurred on November 6, 2022 in Cambria County to which the Department responded on a 24/7 basis until the incident was brought under control on November 20, 2022. The purpose for discussing this topic was to inform TAB of the possibility that future amendments to the natural gas storage regulations in Chapter 78, Subchapter H are possible and that the Department will work with both TAB and CDAC should the Department advance a proposed rulemaking in the future.

Klapkowski explained that the incident is currently under investigation, but responded to questions that were raised by multiple TAB members. Saunders stated that he is interested in participating in any future discussions that pertain to the interface between natural gas storage and coal mining activities.

UPDATE ON DRAFT TECHNICAL GUIDANCE DOCUMENTS (PART 2)

ESCGP-3 Prioritized Review TGD:

Kelly reported that the Department has nearly completed the development of a draft ESCGP-3 document based on comments that were received and considered. This document will undergo internal review and then the External ESCGP-3 Workgroup will be reconvened for the purpose of reviewing the final draft document. The document will then be published as final.

Kelly reminded the board that the ESCGP-3 expires in October 2023; therefore, the Department will be advancing the ESCGP-4 in 2023.

Walentosky asked when the ESCGP-3 Workgroup is expected to be reconvened and Kelly responded sometime in the spring of 2023.

Integrated Contingency Plan TGD:

Kelly reported that the Department partnered with the Pennsylvania Emergency Management Agency (PEMA) several years ago to begin drafting this TGD. Due to some personnel changes at PEMA this TGD was temporarily delayed; however, the TGD was prepared and a draft version of the document was presented to TAB in January 2022. Afterward the TGD was published in the *Pennsylvania Bulletin* and was further discussed during a Forms Training Review session held by DEP in March 2022. The TGD is currently undergoing internal review and will be published for comment in the near future.

Spill Policy TGD:

Klapkowski reminded the board that a version of the current Spill Policy is available to the public on the Department's eLibrary and it has relevance as it relates to brine releases. The concepts of the Spill Policy are addressed in the proposed Chapter 78 Waste Management rulemaking and the Department's preference is to see this matter addressed in regulation rather than by policy.

The Office of Oil and Gas Management has been in discussions with the DEP Environmental Cleanups and Brownfields Program and there is a general recognition of the importance of standardization and consistency in the way spill reporting and response is implemented across the Department.

Walentosky reported that the Industry Spill Policy Workgroup is making progress on preparing a draft policy document for DEP's consideration. Progress has been slow, but it is anticipated that a draft document will be available for presentation to the Department sometime in the first quarter of 2023. Klapkowski thanked Walentosky for his efforts and that of the workgroup.

FORM OG-71 (DISCHARGE OF STORMWATER FROM SECONDARY CONTAINMENT)

Kelly explained that the Pennsylvania oil and gas regulations at Section 78a.60 currently regulates the process of discharging stormwater from secondary containment. It has been the practice of the Department to require operators to submit a Standard Operating Procedure (SOP) for handling the discharge of stormwater from secondary containment since precipitation that collects can easily become contaminated when in secondary containment. The Department must ensure that the discharge of precipitation from secondary containment is handled properly in not only instances of storage at oil and gas sites but other industrial sites also.

The process that has been used is for an operator to attach an SOP to the OG-71A for the initial project. When the OG-71A is processed in the future, the operator submits an OG-71B and references the SOP that was approved as part of the original OG-71A which will apply to future similar activities. Kelly reported that this can be done on a "per site" basis rather than on a "per well" basis.

Yoxtheimer asked how many OG-71A submittals have been approved. Kelly responded that many have been approved, but he did not know the exact number off the top of his head.

Walentosky asked Kelly where he sees this process going in the future. For example, does the Department plan to develop some sort of SOP or Frequently Asked Questions document. Kelly explained that the feedback he has received thus far is that the quality of submissions seems to be of good quality. If the Department receives feedback from the regulated community that there are questions about the process, then the Department would consider developing some sort of guidelines to address this matter further.

ACID PRODUCING ROCK CONSIDERATIONS

When the Chapter 102 regulations were updated in 2010, language was added to the regulations to require the use of individual permits rather than general permits when there was an opportunity for pollutional events to occur (i.e., when acid producing rock is encountered or other pollutional substances beyond sediment and/or stormwater) as a result of earth moving activities. The rationale for this change relates to the fact that permit conditions can be included in an individual permit, but cannot be added to a general permit since general permits are intended to apply to a broad range of similar projects.

Kelly reported that since this issue touches on many areas of the Department, an internal meeting is scheduled for December 19, 2022 with the Office of Oil and Gas Management, Bureau of Clean Water, Environmental Cleanups and Brownfields Program, Regional Permit Coordination Office and the Mining Program to ensure there is a good cross-dialogue within the Department. After this meeting, Kelly will convene a meeting of stakeholders to meet with the Department and discuss this matter further.

Walentosky expressed to Kelly an interest in participating on the external workgroup.

Yoxtheimer asked Kelly how widespread in general is the Department seeing situations where acid producing rock are being encountered by operators. Yoxtheimer has heard from some operators that the Department requires a coal mining permit to be issued in some cases when coal with acid producing characteristics are encountered. Kelly responded that he is not aware of the specific number of times this occurs, but he explained that this is something he hopes to learn more about at the internal meeting that is scheduled for December 19.

INFRASTRUCTURE INVESTMENT AND JOBS ACT IMPLEMENTATION

Klapkowski provided a detailed update to TAB regarding the current status of the implementation of the Infrastructure Investment and Jobs Act (IIJA).

The U.S. Department of Interior announced in August 2022 that DEP was awarded a full \$25 million Initial Grant under IIJA. Ninety percent of this grant will be allocated to the plugging of orphan wells and ten percent will be used to administer the program as is allowed under the Initial Grant award.

The Department is awarding the Initial Grant monies in two rounds. In the first round, DEP published five separate Invitations to Bid in the commonwealth's electronic bid solicitation tool and this round will result in the plugging of 79 abandoned wells.

The Department developed and advanced nine Invitation to Bid packages that are expected to plug an additional 157 abandoned wells. If there are any remaining Initial Grant dollars after these bids are issued, the funds will be allocated to plugging projects in the Complanter State Forest in conjunction to ongoing efforts with the Pennsylvania Department of Conservation and Natural Resources.

Klapkowski reported that the U.S. Department of Interior (DOI) shared some initial thoughts about the Formula Grant program at the annual Interstate Oil and Gas Compact Commission meeting that was held in October 2022. The DOI stated that it is their goal to publish a draft guidance related to the Formula Grant by the end of November 2022. The DOI plans to award the Performance Grant funding in four installments.

Brantley asked a series of questions. First, she asked how the \$70,000 cost to plug each abandoned well is broken out between rig time costs, insurance costs, labor and other costs. Klapkowski responded that all cost variables were factored into the Department estimate of approximately \$68,000 to plug a typical abandoned well. Next, Brantley asked how long it takes to plug a well. Klapkowski responded that the length of time relates to the individual conditions of each well and the complexity encountered when plugging the well (i.e., ease or difficulty in entering the well and reaching the total depth of the well bore). Finally, Brantley asked how the Department determines when a well plug is completed (i.e., when cementing operations are complete or when well is no

longer venting methane). Klapkowski responded that there are both statutory and regulatory provisions that address how a well is to be plugged. Section 32.20 of Act 13 includes language that loosely states that on abandoning a well the operator must plug the well to stop the vertical flow of fluids or gas within the well bore. In addition, regulatory requirements exist in Chapter 78, Subchapter D (Sections 78.91 through 78.98) that discuss where and how to set cement in the well bore during plugging operations.

Wise commented in response to the question about the cost to plug a well, that the Department reviews the ultimate bid amounts that are submitted to the Department by plugging contractors, but the contractors are not required to divulge the cost criteria they use to arrive at their bid amount. Wise stated that since the plugging projects are funding using federal dollars, that prevailing wage rates apply to all contracts that are awarded by the Department for the plugging of wells under IIJA.

Additional Statutory Developments (Act 96 of 2022 & Act 136 of 2022):

Klapkowski asked Chairperson Yoxtheimer if he could take the opportunity to share some additional information about two statutory provisions that were passed since the last TAB meeting and that pertain to the topic of IIJA. Yoxtheimer agreed.

Klapkowski explained that as part of the recent budget negotiation process, the General Assembly passed HB2644 that was later allowed to become law as Act 96 of 2022 without Governor Wolf's signature. Although this bill was allowed to become law, Governor Wolf issued a Lapsing Statement that spoke to this bill and obligated the Department to issue a report to the Governor regarding the current practices of the conventional oil and gas industry in Pennsylvania.

Act 96 created an orphan well plugging grant program to be funded by 20 percent of all IIJA monies that are "received" by DEP. This orphan well plugging program requires DEP to award to all eligible well pluggers grants in the amount of \$10,000 for orphan wells with less than 3,000 feet of bore length and \$20,000 for orphan wells with greater than 3,000 feet of bore length. In addition to the orphan well plugging grant program, this Act also blocks the ability of DEP and the Environmental Quality Board (EQB) from increasing conventional bond amounts for a period of ten years. Finally, the Act directs that six months after the effective date of the bill (January 23, 2023) that any conventional well drilled after this date must pay \$1,000 in bonding up to a maximum blanket bond amount of \$100,000. The prior maximum blanket bond was \$25,000 so this can conceivably increase the prior conventional blanket bond threshold up to a maximum of \$100,000 depending on the number of wells an operator drills after January 23, 2023.

There were two significant problems that resulted in the passage of Act 96. First, the provisions of the Act waived federal requirements for the use of IIJA funds and second, it did not require any specific demonstration of actual expenditures on the part of an entity that receives an orphan well plugging grant. The U.S. Department of Interior sent the Department a letter that expressed its concerns with the waiver of federal requirements.

Consequently, the General Assembly passed HB2528 that was signed into law as Act 136 of 2022 that addressed the two problems referenced above. In addition to fixing these deficiencies, the orphan well plugging grant thresholds were increased to \$40,000 for orphan wells with less than 3,000 feet in length and to \$70,000 for orphan wells with more than 3,000 feet in length. Act 136 also included provisions for an orphan well plugging grant to reflect the actual costs to plug an abandoned well. The Act also includes a provision for the Department to increase the orphan well plugging grant thresholds to \$80,000 and \$140,000 per orphan well, for shallow and deep wells as described above. The effective date of Act 136 is January 3, 2023. Klapkowski noted that the definition of "eligible plugger" can include entities such as municipalities and other individuals and is not restricted to operators that are strictly in the business of plugging wells.

Baldassare asked if the orphan well grant plugging funds pursuant to Act 136 can be used to address situations where gas migration causes threats to pubic health and safety, but where the well location is unknown or risk prevents plugging of a well. Klapkowski responded that the Department is awaiting further direction from the U.S. Department of Interior on this point.

Brantley asked how a well near coal mines that are vented can be plugged. Wise responded that the vents are placed specifically in only the area where the coal mine activities are occurring, but the geologic formation above and below the coal mine remains plugged. Wise offered to share visual schematics with Brantley to better visualize the design of such wells.

Saunders asked where information will be available to operators and the public who are interested in applying for an orphan well plugging grant in the future. Klapkowski responded that the Office of Oil and Gas Management is coordinating with the DEP Grants Center on the development of this program since this is new to the Office of Oil and Gas Management. Klapkowski envisions that information will be made available on the IIJA webpage, the single grant application webpage and on the OOGM webpage. The Department will provide more information to TAB in the future after the details of the program are worked out.

NEW BUSINESS

Yoxtheimer asked if any members had any new business or if any individuals from the public want to provide comment.

Wallace responded that no individuals in Room 105 at the Rachel Carson State Office Building are available to offer further public comment.

Wallace suggested to TAB that meeting dates in 2023 be formally adopted by the board. In anticipation of the need to select 2023 meeting dates, Wallace explained that the availability of Conference Room 105 in the Rachel Carson State Office Building was explored and the room is available on the following dates in 2023:

March 13 (Monday) June 6 (Wednesday) September 5 (Tuesday) December 5 (Tuesday)

Yoxtheimer asked if there was a motion to accept these meeting dates in 2023. Walentosky made a motion to accept these suggested meeting dates and Saunders seconded. The motion passed unanimously.

ADJOURNMENT

Yoxtheimer asked for a motion to adjourn today's meeting. Walentosky made a motion to adjourn and Saunders seconded. The motion passed unanimously and the meeting concluded at 12:40 pm.

File: TAB Final Meeting Minutes (12-01-2022).docx