

MEETING MINUTES

Oil and Gas Technical Advisory Board

July 25, 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), Fred Baldassare, P.G., Casey Saunders, P.E., Jeffrey Walentoski, P.G.

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

Department STAFF (Meeting Participants)

Kurt Klapkowski, Joe Kelly, Myron Suchodolski, Harry Wise, P.G., Todd Wallace, Darek Jagiela, Shahed Noyon, P.E.

CALL TO ORDER

Klapkowski opened the meeting at approximately 10:02 am with welcoming remarks and introductions. By way of opening remarks, Klapkowski informed the TAB members that the Department received a letter of resignation from Dr. Griffiths, who has served as a non-voting member of the Oil and Gas Technical Advisory Board (TAB). Klapkowski stated his appreciation for Dr. Griffiths' service and commended him for his contributions to TAB. Klapkowski invited TAB members to submit names of other individuals who might be considered for appointment by the Secretary of Environmental Protection.

APPROVAL OF MEETING MINUTES

Chairperson Yoxtheimer asked the board members if there were any general comments or suggested edits to the April 25, 2022, draft TAB meeting minutes. Walentoski made a motion to accept the meeting minutes as presented. Saunders seconded the motion, and the motion passed unanimously.

EVALUATION OF ENVIRONMENTAL IMPACTS FROM DUST SUPPRESSANTS USED ON GRAVEL ROADS

Dr. William D. Burgos, of the Pennsylvania State University (PSU) and lead author of the report, provided a comprehensive summary of the study titled the "Evaluation of Environmental Impacts from Dust Suppressants Used on Gravel Roads" (study). Burgos

explained to the board members how the test roadbed was constructed to reflect one lane of traffic from the crown of the road to the road edge at a 5% slope. Gravel from a quarry in Pittsfield, Pennsylvania (Warren County) was used to mirror the same materials from which dirt and gravel roads are constructed in the Northwest region of the commonwealth. A rainfall simulator was designed to mimic a 24-hour/2-year storm event scenario. Samples were collected from the roadbed before, during, and after rain events, and various analytes were measured. Dust generation was measured by mechanical abrasion, and humidity was controlled to a level of 20% to reflect a “sunny patch of road” and 50% to reflect shaded road surfaces. The dust generation portion of the study was field validated. The study concluded that oil and gas produced waters were little to no more effective than rainwater at suppressing dust on gravel roads.

Walentoski asked Burgos a question about the length of time from the application of the dust suppressants to the time of the rain event. Burgos explained that each test scenario took a week to conduct. After the dust suppressant was applied, the test method allowed for about 20-24 hours between the time of application and the start of the rain event. Burgos stated that all brines were washed off the roadbed surface during each rain event. Burgos stated that the soybean oil was found to be the most effective dust suppressant in the study and that the soybean oil applications might have benefited by a longer rest period since as an organic substance, the longer the waiting period, the harder the soybean oil might seal to the road surface. Burgos stated that it is unlikely that a longer timeframe would have benefited the inorganic brine solutions.

Walentoski stated that on slides 17 and 18 of the report, he found it hard to distinguish the points that are located between the 0 – 10,000 mg/L Total Dissolved Solids (TDS) levels. Burgos stated that PSU used a log scale on the “Y” axis and ran six separate panels of tests. During preliminary discussions, the Department stated that it preferred a linear scale approach to more accurately show the comparisons of the six test panels. Burgos mentioned that although the linear scale was reflected within the body of the report, each of the six panels using the log scale are included in the appendices of the report and are available there for review.

Chairperson Yoxtheimer asked Burgos if any mass balance was used to compare what was added versus what was retained. Burgos referred to pages 45 and 46 that speak to this matter. The report defines Retained Mass as being equal to the Applied Mass minus the Flushed Mass. On page 46 of the report, the brown dots represent what was retained on the road, and the blue dots represent what was washed off the road surface.

Chairperson Yoxtheimer stated that he was a bit surprised by the amount of radium that was in the runoff from the soybean oil. Burgos responded that there is background radium in quarry rock, but the levels of soybean oil itself were below the quantification levels.

PUBLIC COMMENT

Chairperson Yoxtheimer asked if any individuals registered to provide public comment. Wallace responded that no individuals registered to provide comment.

WMGR163 UPDATE & 26R REPORTING

Klapkowski explained that Act 70 of 2021 directs the Department to develop a general permit for the transfer and processing of oil and gas waste at temporary facilities that do not operate for more than 180 days and where the waste is beneficially used to hydraulically fracture other wells. The Department developed WMGR163, published the general permit for public comment in early 2022, and issued the permit on June 25, 2022. This permit is valid for ten year. Questions related to the use of WMGR163 should be directed to the Bureau of Waste Management (BWM) because that Department program is responsible for establishing this general permit.

Klapkowski reported that the (OOGM) coordinated with the BWM to streamline the 26R reporting process that tracks the residual waste composition and disposition. Historically, oil and gas operators have been required to submit residual waste data to both the BWM via the 26R Form and the OOGM via the Oil and Gas Electronic Reporting System (OGRE). Since the information submitted to both Department programs is very similar, the Department amended the reporting process so that oil and gas operators are now only required to check a box on the 26R Form to acknowledge that the data is submitted to meet the requirements of both programs.

UNCONVENTIONAL SPILL POLICY UPDATE

Kelly stated that staff in the OOGM started reviewing the draft spill policy flow chart that was developed by the Spill Policy Workgroup, but it has not been able to dive deep into a detailed review of the flow chart given competing priorities. Walentoski reported that industry stakeholders have made good progress and are also reviewing the flowchart and hope to have a draft flowchart to share with DEP at the next TAB meeting. Klapkowski reminded the board that the current spill policy already applies to the conventional industry.

EROSION AND SEDIMENT CONTROL GENERAL PERMIT (ESCGP3) UPDATE

Kelly reported that staff in the Division of Surface Activities have been reviewing comments received during the public comment period and have been editing the Erosion and Sediment Control General Permit (ESCGP3) Prioritized Review draft Technical Guidance document to address comments received. Some examples of the more significant comments received include the air quality scoring framework and forest conservation practices. The Department is making good headway on preparing a final draft product and will be advancing the document through internal legal and policy review. It will then reconvene the ESCGP3 Workgroup and present the final draft document to the Workgroup for review. Klapkowski reminded TAB members of the

DEP Non-Regulatory Agenda and explained that the current target date for finalizing this document is the end of 2022, provided there are no complicating factors.

ACID PRODUCING ROCK CONSIDERATIONS

Kelly explained that 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 is an opportunity for pollutional events (i.e., when acid producing rock is encountered) 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 because general permits are intended to apply to a broad range of similar projects. Walentoski mentioned that he has heard anecdotally that the issue of acid rock and the need for individual permits seem to be more prevalent lately. Kelly suggested that there could have been instances in the past when an operator might have participated in a pre-application meeting with the Department and decided to voluntarily adjust the location of a well pad to avoid disturbing acid producing rock formations, thereby avoiding the need for an individual permit. Walentoski asked if it might make sense to develop an FAQ document to address this matter. Kelly responded that this would require discussions with other technical Departmental staff in the Office of Water Management, but it is something that could be considered.

UPDATE ON DRAFT PROPOSED CHAPTER 78 RULEMAKINGS (CONVENTIONAL WELLS)

Klapkowski provided a verbal update to TAB members regarding the two draft proposed Chapter 78 rulemakings (Environmental Protection Standards rulemaking and Waste Management rulemaking).

Klapkowski reminded the board that on April 21, 2022, the Regulatory Committee to the PA Grade Crude Development Advisory Council (CDAC) presented formal comments to the full council in response to the Environmental Protection Standards proposed rulemaking. The council voted in support of accepting the comments prepared by the subcommittee and will submit the comments to the Department to accompany the rulemaking that is submitted to the Environmental Quality Board. It is anticipated that this will occur at the next CDAC meeting scheduled in December 2022.

The timeline of the Waste Management proposed rulemaking is trailing the Environmental Protection Standards proposed rulemaking and has not yet been advanced to CDAC, it but will follow a similar rulemaking path.

The competing priorities related to standing up the oil and gas programs that will implement the Infrastructure Investment and Jobs Act has impacted the Department's ability to focus additional efforts on these Chapter 78 proposed rulemakings at this time.

UPDATE ON DRAFT TECHNICAL GUIDANCE DOCUMENTS (TGD)

Trenchless Technology TGD

Kelly reported on the Trenchless Technology TGD and informed the board that the Department's Bureau of Waterways, Engineering and Wetlands (BWEW) is presently preparing the Comment/Response Document and revised Chapter 105 regulations package with the goal of presenting these documents to the Environmental Quality Board in the fall of 2022 or in early 2023. This topic was discussed by the BWEW at the Water Resources Advisory Committee on July 21, 2022. After internal review, this package will proceed through the standard publication process. Walentoski commented that he had heard rumor that some Department oil and gas staff might have already started to use this TGD prior to finalization.

Integrated Contingency Plan (ICP) TGD

Klapkowski reported that the ICP TGD was developed in response to Act 9 of 2012 that established the emergency response requirements for unconventional well sites. The Department expects to publish this TGD as draft for public comment by late 2022. After publication, the Department plans to move expeditiously to finalize and publish the guidance document as final.

Pressure Barrier Policy

Wise reported that the Pressure Barrier Policy is under internal review and is expected to be ready for publication by the next quarter, if possible. After publication, the Department intends to offer training to the regulated community. Walentoski mentioned that it seems there is a pressure barrier requirement that relates to well plugging activities. Wise stated that there is such a requirement as part of the Control and Disposal Plan requirement. Walentoski suggested that an FAQ or clarification document would be helpful to operators so they can better understand specifically what is required.

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

Kelly explained that it has been the Department's practice to require operators to submit a Standard Operating Procedure (SOP) for handling the discharge of stormwater from secondary containment because 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 also other industrial sites.

In the current process, an operator attaches 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 similar future activities. There were no questions or comments from TAB following Kelly's discussion.

UPDATE ON ORPHAN & ABANDONED WELL FUNDING AND CONTRACTING

Wise reported that the Department was informed that it will receive an award of \$25 million under the Infrastructure Investment and Jobs Act (IIJA) Initial Grant. The U.S. Department of Interior (DOI) has established the “date of receipt” as October 1, 2022, and the term will run through September 30, 2023, which is consistent with the federal fiscal year. The Department will have a 90-day window from October 31, 2022, through December 31, 2022, to publish bids for plugging contracts.

Klapkowski added that the Department submitted the Initial Grant application to DOI on May 12, 2022, and Initial Grants are expected to be awarded to states by mid-August. It is not certain whether all Initial Grants will be awarded to states at the same time or on a “rolling” basis. In addition to the Initial Grant, the IIJA program also includes the Formula Grant, which represents the largest sum of federal grant dollars as well as the Performance Grant and Matching Grant. The Performance Grant will consist of two \$20 million rounds, and the Matching Grant could include another \$30 million.

Klapkowski stated that the Department hosted a public “Information Session” in late April 2022 to discuss the federal IIJA program and where the Department expects this program to go in the future. The Department will be hosting around seven additional workgroup sessions that will target specific topics related to IIJA, such as the quantification of methane and data management issues that the Department will encounter as part of the IIJA initiative. The Department developed a “contractor survey” that is probably more aptly termed an “interested party survey” to gather input from a variety of individuals with an interest in IIJA. The Department is using this survey to build a contact list to identify individuals with particular skills and interests and will use the list to invite interested individuals to participate in the workgroup meetings. Klapkowski informed the TAB members that the survey is available on the DEP Orphan and Abandoned Wells webpage and encouraged all individuals who are interested in participating in the workgroup meetings to fill out and submit this survey to the Department. He also took the opportunity to encourage any individuals who are interested in joining the Department oil and gas team to explore the various current employment opportunities, particularly as they relate to the implementation of IIJA.

Wise mentioned that the Department has also developed an IIJA webpage that is currently available to the public on the Department’s website.

NEW BUSINESS

Chairperson Yoxtheimer asked if there are any new business items to discuss. Saunders asked how many wells are expected to be plugged under the IIJA Initial Grant. Wise responded that the Department has developed a preliminary list of 398 wells, which are listed on the IIJA webpage. Saunders asked if these wells are located throughout the various regions of the commonwealth, and Wise responded that the wells are located throughout Pennsylvania, but most of the abandoned wells reside in the northwest region.

ADJOURNMENT

Chairperson Yoxtheimer requested a motion to adjourn the meeting. Walentoski made a motion and Chairperson Yoxtheimer seconded. The motion passed unanimously, and the meeting was adjourned at approximately 12:15 pm.

DRAFT