[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., Kimberly Kaal, CPG, P.G., Casey Saunders, P.E., Jeffrey Walentosky, P.G.,

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

**DEP STAFF (Meeting Participants)**

Scott Perry, Kurt Klapkowski, Joe Kelly, Seth Pelepko, Elizabeth Davis, Brian Babb, Myron Suchodolski

**CALL TO ORDER**

Yoxtheimer called the meeting to order at 10:04 a.m. and invited Perry to provide welcoming remarks and introductions. Perry introduced DEP staff in attendance and Yoxtheimer introduced TAB members.

**APPROVAL OF MEETING MINUTES**

Yoxtheimer asked the board members if there were any general comments regarding the September 9, 2021 draft TAB meeting minutes. Walentosky made a motion to approve the meeting minutes as presented. Saunders seconded the motion 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. Perry asked if any members of the public who are on the call are interested in providing public comment. No members of the public responded.
UPDATE ON DRAFT PROPOSED CHAPTER 78 RULEMAKINGS
(CONVENTIONAL WELLS)

Klapkowski provided a verbal update to TAB members regarding the draft proposed Environmental Protection rulemaking and the draft proposed Waste Management rulemaking.

Klapkowski informed TAB that the Pennsylvania Grade Crude Development Advisory Council (CDAC) met on December 16, 2021 and passed a motion to convene a meeting of the Regulatory Development Subcommittee sometime in February 2022. The purpose of the subcommittee meeting is to discuss the development of a written report to be submitted to DEP to accompany the proposed rulemaking at the time it is submitted to the Environmental Quality Board (EQB), as provided for via Act 52 of 2016. The subcommittee will present a draft written comment document to the full CDAC at the meeting that is scheduled for April 2022. Klapkowski explained that the timing for presentation of the proposed Environmental Protection rulemaking is dependent on the overarching Department schedule for various other rulemakings that are moving through the regulatory review process, but a best estimate for advancing this proposed rulemaking is sometime in the second quarter of 2022.

Klapkowski explained that the draft proposed Waste Management Rulemaking is slightly trailing the draft proposed Environmental Protection Rulemaking, but the process for advancing that rulemaking will be essentially the same.

Walentosky asked what the Department envisions as the role of TAB moving forward. Perry responded that TAB has met its statutory role and could provide its own comments when the proposed rulemakings are published for comment. Perry suggested that TAB could approach CDAC directly about how the board and council can collaborate moving forward.

INFRASTRUCTURE INVESTMENT AND JOBS ACT (IIJA) UPDATE

Klapkowski provided a comprehensive update regarding IIJA and the four categories of funding that are provided by the Act.

Yoxtheimer stated that based on the projected IIJA funding and the Department’s cost estimates for plugging orphan and abandoned wells that it seems about 4,000 wells will be able to be plugged over a five year period, which is about 800 wells per year. Klapkowski agreed.

Saunders stated that he thinks the Department’s plan for proceeding makes sense, but he suggested that consideration be given to the creation of a rebate program that would encourage companies to plug wells at perhaps a lower cost than the estimated $77,000 average cost to plug a well. Klapkowski agreed with this concept, but explained that legislative changes would likely be necessary since it does not seem that the Department currently has the authority to use a rebate program.
Walentosky commented that there could likely be a potential shortage of available contractors to conduct well plugging services and he commended the Department for its efforts in conducting outreach via the survey that is posted on the DEP website. Walentosky asked about the responses of industry to the survey. Pelepko responded that more than 100 companies responded to the survey and many of the companies have registered to be eligible to bid on competitive contracts when they become available.

Yoxtheimer asked if many of the respondents to the survey are Pennsylvania-based companies. Pelepko explained that the respondents are a mixture of Pennsylvania-based companies and companies that are headquartered outside of Pennsylvania.

Kaal asked if DEP has considered assembling well data into databases that can be used by the Department to do risk-ranking of wells. Pelepko responded that some databases including eFACTS and others can be used to query such data. He said that the DEP Oil and Gas Program also uses a companion database to record a ranked list of wells according to known environmental and safety risks.

Brantley asked if the federal infrastructure funding can be used to hire additional DEP staff. Klapkowski responded that IIJA allows for up to ten percent of funding to be used for administrative costs; however, the U.S. Department of Interior has not released guidance to the states on this matter.

Brantley asked if IIJA funding can be used to improve its data systems and make well data available online. Perry responded that he thinks this might be possible.

Brantley asked if the Department has considered engaging local citizens to help identify orphan and abandoned wells. Klapkowski responded that this is a good suggestion. The Department is currently working with the U.S. Forest Service and other state resource agencies in a similar fashion, and he stated that the Department is also considering partnering with counties and municipalities to encourage local governments to contact the Department orphan and abandoned wells are identified.

Brantley asked how the Department is factoring environmental justice issues into the process of addressing the identification and plugging of orphan and abandoned wells. Klapkowski responded that the Department is awaiting guidance from the U.S. Department of Interior (DOI), but in the interim, the Department will be reviewing the locations of orphan and abandoned wells and comparing them to the Department’s available environmental justice data layers.

**LEGACY WELL UPDATE**

Pelepko updated TAB on three topics on interest related to legacy wells.

First, Pelepko discussed the status of private acquisition of low producing legacy wells. There are traditional bonding requirements that apply when wells are transferred from
one entity to another and the Department can also use enforcement tools if necessary to ensure the transfer of such wells.

The second topic pertained to the comparison of methane leakage rates between orphan and abandoned wells and low producing conventional wells. Pelepko stated that several recently published academic studies seem to contain the best emissions data and these studies have contributed toward emission factors that are under development at the U.S. Environmental Protection Agency. He mentioned that the U.S. Department of Energy is also working on a long-term emissions study of low producing wells that should be published sometime later this year.

Finally, Pelepko talked about ongoing Departmental efforts to locate legacy wells and explained that the efforts of verifying wells as part of the due diligence efforts related to IIJA has helped in identifying additional legacy wells.

Kaal commented that, though sometimes difficult, the identification of legacy wells is very important especially since unknown legacy wells can lead to methane leakage that could affect future carbon capture and sequestration efforts.

**EROSION AND SEDIMENT (E&S) CONTROL PLAN TEMPLATE FOR WELL PLUGGING ACTIVITIES & GEOLOGIC HAZARD MITIGATION PLANNING GUIDANCE FOR EROSION AND SEDIMENT CONTROL GENERAL PERMITS**

Kelly reported that work on these two documents was delayed due to competing priorities to address multiple deadlines related to the Settlement Agreement with the Marcellus Shale Coalition. Kelly outlined the various documents that have been updated as a result of this Settlement Agreement and reported that the Department will be offering internal training that will be followed by training to the regulated community regarding the revised documents.

The E&S Control Plan Template has been reviewed internally and is expected to be posted to the DEP website within the next several weeks.

After the internal review of the Geologic Hazard Mitigation Planning Guidance is completed, the document will be shared with the workgroup that was established in 2016 that developed the ESCGP-3 to discuss the context of this document before moving forward with finalizing this guidance.

**CLASS II UNDERGROUND INJECTION CONTROL (UIC) DISPOSAL WELL UPDATE**

Babb stated that there are currently 14 active UIC disposal wells in Pennsylvania. There are currently no new permit applications under review at the Department; however, there are five applications that have been under review at EPA and could result in future reviews by DEP.
Babb reported that EPA issued a permit on January 14, 2022 to Roulette for a UIC well in Potter County and DEP participated in a pre-application meeting last week. In addition, EPA is conducting a review of four additional permits including those submitted by Catalyst Energy (McKean County), Penneco (Allegheny County) and two permits from Diversified Oil and Gas (Jefferson County and Fayette County).

Yoxtheimer asked if any of the permits are for the drilling of new wells or if they represent existing depleted wells to be re-worked as disposal wells. Babb responded that they are depleted wells.

Brantley asked if the term “active” used to describe the 14 active UIC wells means that these wells are operating under an active permit or that they are actively in operation as a disposal well. Babb responded that these are wells that operate under an active permit; however, to his knowledge they are also actively accepting fluids for disposal.

**CLASS VI UIC (CARBON CAPTURE STORAGE) DISCUSSION**

Perry explained that a Class VI well used for carbon capture storage is a well that is regulated under the Pennsylvania Oil and Gas Act. The Department would conduct a similar permit review compared to a Class II disposal well; however, the EPA would have a significant role in the permitting process and oversight of such wells. At this time, no such wells are currently proposed in Pennsylvania.

**DATA MANAGEMENT DISCUSSION**

Klapkowski highlighted some recent actions the Department has taken to eliminate duplication of data through changes to the Form 26R. Operators that report volumes of waste generated and the ultimate disposition of wastes via the oil and gas reporting tool (aka, OGRE) are not required to submit that information to the Department using the Form 26R. There are additional data management upgrades such as ESCGP-3 and mobile inspection data and the integration of multiple data systems that the Department is aware of, but the list of such upgrades is long.

Yoxtheimer stated that based on conversations with industry, there seems to be some general redundancies in data entry and lack of access to some data such as pre-drill data and water testing data. Walentosky mentioned that as a hydrogeologist he is always interested in access to more data. Brantley stated that she understands the significant effort that is involved with making such data available electronically to the public via web-based systems and that could likely require the Department to increase the number of staff and focus additional funding to address these sort of data upgrades.

Perry reported that the goal of the Department is to make as much data available to the public as possible, but explained that it takes much time and money to implement these sorts of database and system enhancements.
DRAFT GUIDELINES FOR THE DEVELOPMENT AND IMPLEMENTATION OF OIL AND GAS WELL SITE INTEGRATED CONTINGENCY PLANS FOR UNCONVENTIONAL WELL SITES

Brokenshire introduced Mr. Joseph Roberge of the Pennsylvania Emergency Management Agency (PEMA) who is the representative of PEMA who collaborated with DEP during the development of this draft guidance document.

Brokenshire explained that after passage of Act 9 and the Chapter 78a.55 regulations, the Department began the process of developing an emergency response plan guidance document. Prior to this, the Department relied on a document titled “Guidelines for the Development and Implementation of Environmental Emergency Response Plans”; however, the DEP received feedback from oil and gas operators that the guidance was too broad. About this time, the Pennsylvania Emergency Management Agency (PEMA) informed DEP that it was also planning to develop a similar emergency response planning guidance document, so both agencies decided to collaborate on the development of a single plan. The Department focused on the aspects related to the unconventional industry and PEMA focused on the emergency response provisions of the plan.

The draft guidelines include four sections: An Emergency Response Plan (with “Quick Sheets” that contain standard information that is of use to emergency responders at the initial time of a response); Site-Specific information that can be customized to address unique circumstances to each site; a Base Emergency Response Plan section; and a PPC Plan.

Walentosky asked the Department when the draft guidance is scheduled to be published for comment. The goal of the Office of Oil and Gas Management is to finalize this draft guidance document by the end of the calendar year.

Baldassare asked if the guidance document is intended to apply over the entire life of a well or are there provisions should future development occur around the well. Brokenshire stated that some information that is more general in nature will likely remain in place over the long term; however, “site specific” components of the plan should be updated to reflect the actual site conditions and affects of land use changes around the well site.

Brantley asked what happens when companies use proprietary chemicals and how this matter is addressed. Brokenshire stated that there is a requirement for Material Safety Datasheets (MSDS) to be maintained on a well site. Perry commented that as part of the submittal of a Completion Report, an operator must disclose proprietary chemicals to the Department. This information is maintained confidentially by the Department. Klapkowski mentioned that MSDSs are shared with emergency services personnel.

Roberge stated that PEMA fully concurs with the draft guidelines as they are written.

MISCELLANEOUS TOPICS
Update on Trenchless Technology TGD
Kelly reported that he consulted with the Regional Permit Coordination Office (RPCO) and was informed that RPCO received comments from its advisory committee last year and has updated the Trenchless Technology TGD based on the comments received. The draft TGD is under internal review and it is expected to be published for comment in the first quarter of 2022.

WMGR123 Update
Kelly reported that he consulted with the Bureau of Waste Management (BWM) and was informed that the BWM is finalizing comments received during the March to May 2021 comment period. Any pending general permit applications noticed in the March 20, 2021 Pennsylvania Bulletin have been acted on, unless there were definitive issues preventing the action such as outstanding compliance issues and/or technical deficiencies. In the meantime, the new WMGR163 has been advanced and is similar to WMGR123 except that it proposed the authorized processing and transfer of oil and gas liquid waste at facilities that operate for no more than 180 consecutive days and will be beneficially reused to process or hydraulically fracture an oil or gas well. This will be published as a draft permit in the Pennsylvania Bulletin on January 15, 2022 for a 60-day public comment period.

Spill Related TGD and Intersection with Current Oil and Gas Spill Regulations
Klapkowski reported that on October 16, 2021 the Department’s Bureau of Clean Water published for comment a document titled “Guidance on Notification Requirements for Spill Discharges and Other Incidents of Substances Causing or Threatening Pollution to Waters of the Commonwealth Under the Pennsylvania Clean Stream Law.” The comment period closed in December 2021, and the Department received about 700 comments. The Bureau of Clean Water will prepare a Comment/Response Document and this TGD is expected to be released as final guidance sometime in 2022. Klapkowski stated that the Office of Oil and Gas Management plans to invite staff from the Bureau of Clean Water to share an information update on this guidance document with TAB at a future meeting.

NEW BUSINESS
Yoxtheimer commended Seth Pelepko for his dedication and good work during the time he worked in the Office of Oil and Gas Management and on behalf of TAB wished him well in the future. Walentosky concurred.

Walentosky reminded the Department that when the Pennsylvania State University (PSU) completes the Brine Study, he would appreciate the opportunity for PSU to provide an informational session at a future TAB meeting.

ADJOURNMENT
Yoxtheimer requested a motion to adjourn the meeting. Walentosky made a motion and Baldassare seconded. The motion passed unanimously, and the meeting was adjourned.