MEETING MINUTES

Oil and Gas Technical Advisory Board Meeting December 5, 2024

TAB MEMBERS PRESENT

Voting Members: David Yoxtheimer, Ph.D., PG (Chair), Fred Baldassare, PG, Casey Saunders, PE, Amanda Veazey

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

DEP STAFF PRESENT

Kurt Klapkowski, Kris Shiffer, Dan Counahan, Don Hegburg, Joe Kelly, Josh Neyhart, Todd Wallace, Nic Pistory

CALL TO ORDER

A hybrid 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 and also via Microsoft Teams. This meeting was open to the public. Klapkowski called the meeting to order at about 10:00 a.m.

Yoxtheimer conducted a role call to establish a quorum. Yoxtheimer introduced Amanda Veazey as a new voting member of TAB. Veazey is a geologist and is Vice President of CSR Services, LLC. The Department of Environmental Protection (DEP) meeting participants introduced themselves.

Wallace informed individuals in the meeting room and on the Microsoft Teams call that this meeting is recorded in its entirety. Wallace stated that in accordance with the state Wiretapping and Electronic Surveillance Control Act, 18 Pa. C.S. § 5703, individuals participating in this meeting convey their implied acceptance and consent to be recorded.

APPROVAL OF MEETING MINUTES

Yoxtheimer asked board members if there were any comments or suggested edits to the meeting minutes of the September 5, 2024 TAB meeting and called for a motion to approve the meeting minutes. Baldassare moved to accept the minutes and Saunders seconded. The meeting minutes were approved unanimously.

PUBLIC COMMENT

Yoxtheimer asked the DEP if any members of the public registered to provide comment. Wallace responded that four individuals registered to provide comment including Kim

Anderson (Evangelical Environmental Network), John Rutecki (Environmental Defense Fund), Alice Lu (Clean Air Council), and Nathan Eachus (concerned PA citizen). One individual, Vanessa Lynch of Moms Clean Air Force, submitted written comments to TAB prior to the meeting, but did not wish to provide verbal comment during the December 5 TAB meeting.

Kim Anderson stated that living and going to school within a half mile radius (newer research shows as much as 5 to 10 miles) of oil and gas infrastructure is associated with negative health outcomes like respiratory and heart diseases and increased exposure to known cancer causing chemicals. Anderson said, methane is also responsible for 25% of the human-produced warming experienced today. With rising temperatures come increased smog and associated asthma attacks and increased cases of vector-borne diseases like Lyme Disease. Anderson stated there are actions the DEP can take now by rolling out the strongest possible methane standard and putting into place safeguards.

John Rutecki reported that the Environmental Defense Fund (EDF) applauds Governor Shapiro and the DEP's efforts to implement existing source methane standards that will protect public health, reduce emissions, and create jobs in the Commonwealth. EDF advocates for the swift implementation of the strongest possible protections in Pennsylvania. Rutecki stated that some leading operators in Pennsylvania, like EQT, have prioritized methane emissions reductions in their operations and shown that significant pollution reductions are feasible, but not all producers have made these choices. Implementing these safeguards will raise the bar in the state, provide regulatory certainty, and ensure that all producers control their pollution. Pennsylvania can provide this certainty and EDF is ready for meaningful stakeholder engagement to ensure the rule's vital benefits are fully realized. In addition, EDF urges Pennsylvania to engage with the United Nation Environment Programme's International Methane Emissions Observatory ("IMEO") to leverage methane emissions detection information received from satellites.

Alice Lu discussed the following three points. First, she stated that DEP should require all well sites with one wellhead and/or a piece of major equipment, to conduct quarterly instrument-based leak detection and repair (LDAR). Lu said, studies have pointed to the need for frequent inspections because leaks at well sites are random and not well correlated with a well pad's age, production type, or well count. Second, Lu suggested DEP should include separators in the definition of equipment that classifies a well site as complex and require monthly instrument-based LDAR at these well sites. Lu said research has pointed to the leak-prone nature of separators as malfunctions have contributed to high methane emissions. Finally, Lu discussed the need for repair timelines that minimize harms to health and the environment. With DEP's current RACT requirement for sites to complete a final repair within 15 days of leak detection, DEP already has a relatively protective timelines in place. The Clean Air Council supports maintaining this timeline and applying it to a tiered system where repair timeline stringency is commensurate with the severity of the leak.

Nathan Eachus stated that violation rates of conventional operators has been increasing since 2015 and said that despite the dramatic increase in violations issued, DEP has only seen an increase in noncompliance, confirming yet again its conclusion that the conventional oil and gas industry has a culture where non-compliance is an "acceptable norm." Eachus referenced an incident that involved a pipeline in Morris Township, Greene County owned by CNX Gas Company that was punctured. CNX reported that the incident was an accidental line strike on CNX's pipeline committed by contractors engaged by CONSOL for land clearing and excavation work. Eachus stated "Once again this is one utility blaming another utility and no accountability for the public about a serous hazardous radioactive nuclear wastewater public health risk and environmental legacy pollution issue contaminating the local community ecosystem." Eachus stated, "During the last September 5th meeting, it was concerning to hear this leadership board addressed that breathing in dirt road dust is worse than being exposed to the radioactive hazardous nuclear wastewater itself on dirt roads. That is a ridiculous comment, and you should be ashamed of these comments. Also, this comment was not addressed in the September minutes either. This is just another way to whitewash the minutes and avoid scientific truth. PA is now ranked 49th of 50th worst for the highest cancer rates in the USA." Finally, related to the topic of "Streamlining Permits for Economic Expansion and Development" (SPEED) that is listed on today's meeting agenda, Eachus posed multiple questions to TAB generally related to how the Administration and DEP can justify implementation of the SPEED initiative with so many violators breaking state law and regulations?

Vanessa Lynch's written comments stated that to strengthen the proposed methane state plan, DEP should consider requiring quarterly instrument-based leak monitoring at all well sites, including separators in the list of items requiring instrument-based inspections. Lynch also recommended that DEP create rapid compliance deadlines once the plan is adopted, establish an exemption policy, and supplement the Super Emitter Program. Robust leak detection and quick repair could have a meaningful effect on the cumulative impacts frontline communities face. Since the EPA will receive super emitter notifications, the DEP should consider proactively establishing a state-wide notification system to inform families of these events in their community right away.

<u>UPDATE ON "REDUCING INDUSTRIAL SECTOR EMISSIONS IN PA (RISE PA)</u>

Louie Krak, DEP Energy Programs Office, presented a PowerPoint presentation to the TAB members to inform them of the RISE PA initiative. The PowerPoint presentation will be posted to the TAB website for future reference.

Yoxtheimer asked what the deadline is for medium and large projects. Krak said the deadline for medium and large projects is 6 months from the opening of the grant and 4 months for small scale projects. The announcement will be published in the *Pennsylvania Bulletin*.

UPDATE: U.S. EPA'S "METHANE RULE (STANDARDS OF PERFORMANCE FOR NEW, RECONSTRUCTED, AND MODIFIED SOURCES AND EMISSION GUIDELINES FOR EXISTING SOURCES: OIL AND NATURAL GAS SECTOR CLIMATE REIVEW

Panna Chibber of the DEP Bureau of Air Quality delivered a PowerPoint presentation to TAB members to update them on EPA's Methane Rule and the DEP's obligation to develop a State Plan to adopt the Clean Air Act Section 111(d) emissions guidelines established by EPA at 40 CFR, Part 60, Subpart OOOOc. Viren Trivedi, Naishadh Bhatt, Jesse Walker, DEP Bureau of Air Quality representatives and counsel, also attended the TAB meeting to assist with responding to questions that were raised by the board members.

Yoxtheimer asked if the DEP is on track to submit its OOOOc State Plan to EPA by the 2026 deadline and Chibber responded in the affirmative. Baldassare asked if other states are considering microbial sources of methane and planning to actively reduce naturally occurring methane from those agricultural sources. Chibber responded that OOOOc only addresses industrial sources and not agricultural sources.

Yoxtheimer asked if the DEP is required to consider financial costs for technology upgrades necessary to reduce methane emissions. Trivedi responded that EPA conducted a comprehensive cost analysis of the proposed OOOOc regulations and determined a benchmark cost of \$2,185 per ton of methane reduced at that benchmark. The DEP is relying on the EPA cost data and the DEP cannot be less stringent than EPA. Yoxtheimer asked if Pennsylvania-specific costs will be reflected in the plan. Trivedi responded that this is not required by OOOOc; therefore, will not be included in the plan.

WELL PLUGGING SUBCOMMITTEE REPORT

The board and DEP invited Walentosky to provide a verbal update to TAB regarding the Well Plugging Subcommittee. Yoxtheimer praised Walentosky for his prior five years of service to the board and the contributions he made during that time.

Walentosky reported the subcommittee met on December 4, 2025 in the DEP Knox District Office and the main topic of discussion revolved around what constitutes "attainable bottom." Joel Keller (DEP subcommittee member) explained that the primary issue to be resolved is what constitutes a 'reasonable effort' in determining whether or not attainable bottom is reached or attempted to be reached. Saunders stated that industry and DEP are on opposite ends of the spectrum as it pertains to "reasonable effort" and that more data should be provided up-front to DEP inspectors to help improve communication and decision-making efforts. Saunders further stated that if DEP develops a "decision matrix", this would be a useful tool.

Saunders echoed the sentiments of Yoxtheimer in terms of appreciation to Walentosky for his service to the board and as a member of the Well Plugging Subcommittee. Saunders stated he is willing to serve as the chairperson of the Well Plugging Subcommittee if established.

Baldassare made a motion to nominate Saunders as chairperson of the Well Plugging Subcommittee and Veazey seconded. The motion passed unanimously.

UPDATE ON INFRASTRUCTURE INVESTMENT AND JOBS ACT (IIJA) INITIAL GRANT, FORMULA GRANT, REGULATORY IMPROVEMENT GRANT AND MATCHING GRANT AND METHANE EMISSION REDUCTION PROGRAM (MERP)

Shiffer provided a comprehensive update to the TAB members on the current status of the IIJA-related grants and the MERP. Significant headway has been accomplished on plugging wells under the Initial Grant and efforts have been ongoing to prepare for the implementation of the Formula Grant. Phase 1 of the Formula Grant will include not only the plugging of wells, but will also address locating undocumented wells, methane monitoring, remediation and the Orphan Well Plugging Grant Program. Two Request for Proposals (RFPs) are being developed including one for well plugging and another multiservice RFP to address services other than well plugging. Hegburg mentioned that both RFPs will be published on eMarketplace in the near future.

Klapkowski reported that the U.S. DEP of Interior provided clarification to states that the "end date" of the Formula Grants is five years from the date of award, not September 30, 2030.

Shiffer reported that DEP must comply with the federal requirements when awarding IIJA grant monies to subrecipients (i.e., individuals/organizations who have applied for Formula grants) which has delayed the award process.

Veazey asked if the full \$44 million MERP federal dollars must be spend in the first year of the grant. Shiffer responded that the end date of the federal grant is not until September 2028 and the money will be allocated over four years.

Brantley asked if additional staff are being hired to assist with the implementation of the IIJA and MERP programs. Shiffer responded that when IIJA passed in 2021, DEP evaluated its resource needs and determined that 41 positions are required to administer these programs. The efforts to administer the Orphan Well Plugging Grant Program was not contemplated in these 41 positions.

Brantley asked if the upcoming changes with the U.S. Presidential Administration will affect the IIJA and MERP programs. Klapkowski responded that the promulgation of IIJA and the Inflation Reduction Act was a bipartisan effort at the federal level, so the grant programs are expected to continue to have bipartisan support.

TYPE 1L CEMENT FOR USE IN WELL CONSTRUCTION

Type 1L cement is a type of cement that generates less carbon dioxide during the manufacturing process of the cement than traditional cement blends. Hegburg reported that a workgroup should be established to evaluate Type 1L cement for use in well

construction. Specifically, the workgroup should evaluate the technical suitability of Type 1L cement for oil and gas use and determine what regulations must be modified. Hegburg suggested that in addition to several DEP technical staff, the workgroup should include members of the National Energy Technology Lab (NETL), University of Pittsburgh and other industry representatives. DEP requested that TAB make a motion to establish this workgroup.

Saunders made a motion to establish this workgroup to examine the above issues with regard to Type 1L cement used for well construction. Baldassare seconded the motion and the motion passed unanimously.

Yoxtheimer indicated his willingness to participate on this workgroup and invited other TAB members to participate if interested. Yoxtheimer stated he will also consider additional individuals who might be effective members of the workgroup.

EROSION AND SEDIMENT CONTROL GENERAL PERMIT (ESCGP-4)

On October 5, 2024, the DEP published notice as final the Erosion and Sediment Control General Permit-4 (ESCGP-4) for "Earth Disturbance Associated with Oil and Gas Exploration, Production, Processing or Treatment Operations or Transmission Facilities" in the *Pennsylvania Bulletin*.

Kelly reminded the board that an Administrative Extension for the use of ESCGP-3 was made available for any ESCGP-3 that was received on or before October 11, 2024. The extension moves the end date for use of this permit from January 6, 2025 to March 6, 2025.

The first ESCGP-4 was received on October 23, 2024 and 11 more have permits have been received since that time. The DEP provided two training opportunities for the ESCGP-4 on October 3, 2024 and October 10, 2024, respectively. These trainings were recorded and posted to the DEP Oil and Gas website. The DEP is developing a "Frequently Asked Questions" document that will also be posted to the DEP website.

STATUS OF UIC WELL PRIMACY & UNDERGROND GAS STORAGE INSPECTION UPDATE

Hegburg reported that the DEP submitted an application to the U.S. Environmental Protection Agency (EPA) to pursue a grant in the amount of about \$2 million to help offset the costs of DEP preparing its application to seek primacy of this federal program. EPA is currently reviewing the application and has not yet awarded a grant.

Hegburg reminded the board that SB831 was enacted as Act 87 of 2024. This gives the DEP permitting authority and requires the Environmental Quality Board to promulgate regulations related to Carbon Capture and Underground Storage (CCUS).

Regarding underground gas storage, Hegburg said that industry members requested DEP to develop a Standard Operating Procedure (SOP) that could be used by DEP inspectors

to assist with the consistency of inspections at underground gas storage fields as required by Chapter 78.402. Hegburg reported that the DEP drafted this SOP and it is under review by DEP district oil and gas staff. Baldassare asked if the SOP will be shared with TAB for review. Hegburg explained this is an internal SOP to be used by Oil and Gas inspectors in the inspection of UGS fields/wells and would have to check as to whether it will be shared for review and comment by TAB.

DRILLING & PERMITTING ACTIVITY IMPACTS TO DEP BUDGET

Klapkowski provided background to TAB about the history of the well drilling permit fee and the \$6 million Impact Fee that helps to support the administration of the DEP's Oil and Gas Program. The current permit application fee of \$12,500 for unconventional wells was based on initial estimates of the receipt of about 2,000 permits each year. Due to a variety of industry and economic reasons, the number of unconventional permits received each year since the fee was established is much less. Klapkowski said the FY2024-25 General Fund budget included \$11 million to be deposited into the Well Plugging Fund which is the fund that pays for administrative costs to run DEP's Oil and Gas Program, not to plug abandoned and orphan wells.

<u>UPDATE: FINANCIAL ASSURANCE OF OPERATOR'S POTENTIAL LIABILITIES</u>

Klapkowski explained that the current tool available to DEP to address well abandonment is the bonding requirement in Section 3225 of Act 13. This section contains bonding requirements for conventional and unconventional wells. Klapkowski reminded the board that legislative amendments in 1997 removed the bonding requirements for wells drilled before 1985; these would be for conventional wells. So, there are many conventional wells in Pennsylvania that are not bonded.

Klapkowski explained that one of the possible approaches the DEP is considering to addressing well abandonment is a tool similar to the Underground Storage Tank Indemnification Fund (USTIF) that is used by the DEP to provide a reliable source of funding to respond to leaking underground storage tanks. The DEP is considering soliciting for an actuarial study to be conducted to get a better sense as to how effective this approach could be at providing sufficient funds to address the future abandonment of abandoned and orphan wells in Pennsylvania and how much such a program would cost. Klapkowski stated that many other states are in the same position as Pennsylvania and are not well-positioned to address the abandonment of wells.

STREAMLINING PERMITS FOR ECONOMIC EXPANSION AND DEVELOPMENT (SPEED)

Klapkowski explained that the SPEED initiative is essentially a resource enhancement program that might result in a more expedited review of DEP permits. The SPEED initiative will allow qualified professionals to review eligible permits and DEP staff will conduct a final review of the permit prior to issuance. If an individual chooses to take this approach, the cost of the permit review will be paid for by the permit applicant. As for the Oil and Gas Program, the Erosion and Sediment Control General Permit is included in an eligible permit under the SPEED program along with Chapter 105 permits

and several others. Klapkowski was pleased to report to TAB that the DEP Oil and Gas Program was the first Program within the DEP to eliminate its permit backlog while remaining in compliance with the PayBack Program.

Klapkowski said the DEP has opened up a bid solicitation to professionals who are interested in becoming "qualified" to conduct permit reviews under the SPEED initiative. The solicitation period is scheduled to close on December 31. 2024 and information about the SPEED initiative and the bid solicitations can be found on the DEP website on the "solicitations" page.

NEW BUSINESS

No new business.

ADJOURNMENT

Yoxtheimer asked for a motion to adjourn the meeting. Saunders made a motion and Baldassare seconded. The motion passed unanimously, and the meeting was adjourned.

File: TAB - Final Meeting Minutes - 12-05-2024.docx