

# **MEETING MINUTES**

## **Oil and Gas Technical Advisory Board Meeting**

**September 5, 2023**

### **TAB MEMBERS PRESENT**

Voting Members: David Yoxtheimer, Ph.D., PG (Chair), Fred Baldassare, PG, Jeffrey Walentosky, PG, Kimberly Kaal, PG, CPG, Casey Saunders, PE

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

### **DEP STAFF PRESENT**

Kurt Klappowski, Kris Shiffer, Todd Wallace, Joe Kelly, Ann Mathews, Don Hegburg, Myron Suchodolski, Harry Wise, Kathleen Ryan, Maximillian Schultz

### **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. Yoxtheimer called the meeting to order at about 10:00 a.m. and opened the meeting with a roll call of the TAB members and introductions of DEP staff.

### **APPROVAL OF MEETING MINUTES**

Yoxtheimer asked for a motion to approve the meeting minutes of the June 6, 2023 TAB meeting. Walentosky made a motion to approve the meeting minutes and Baldassare seconded. Yoxtheimer asked if there was any further discussion or suggested edits to the meeting minutes. There was no further comment or discussion. The meeting minutes were approved unanimously.

### **PUBLIC COMMENT**

Yoxtheimer asked if any individuals registered in advance of the meeting to provide public comment. Wallace responded that one individual named Patrick Henderson registered in advance of the meeting to provide comment.

Mr. Henderson introduced himself as a representative of the Marcellus Shale Coalition (MSC) and provided comment related to the DEP interim-final Environmental Justice Policy that is a subject that is to be presented to TAB during today's meeting. On behalf of MSC, Henderson stated that the EJ Policy is not a regulation and cannot impose regulatory obligations on a permit applicant and suggested that several sections of the

policy seem to place such obligations on a permit applicant. Henderson also commented that the Department relied on several studies that were not credible or portions of which could be debunked. Finally, Henderson commented that “the MSC objects to including the mere presence of natural gas infrastructure in the scoring matrix for an environmental burden.”

## **UPDATE ON DEP ENVIRONMENTAL JUSTICE POLICY**

Justin Dula, DEP Director of Environmental Justice (EJ), presented on the draft DEP Environmental Justice Policy using a PowerPoint format. Following the presentation, Walentosky asked a number of questions about the EJ Policy.

Walentosky asked Dula to briefly explain the difference between the draft and interim final policy documents. Dula explained that many comments received by the Department were incorporated into the interim final policy, though a formal Comment/Response document was not developed. Some of the significant changes include:

- The oil and gas section in the draft policy was deleted based on comments received from TAB and the policy now includes the “opt-in” provision;
- The “Penn Environment Mapping Tool” was developed in parallel to this policy and is incorporated into the interim final policy;
- Compliance and inspection sections were made more explicit and more detail is provided.
- More detail was added to the “inspection, compliance and enforcement” section;
- Chapter 4 “Proactive Community Engagement” section was added

Walentosky asked if the Department plans to move toward developing an environmental justice regulation. Dula responded that it is not the current intent of the Department to advance a proposed Environmental Justice regulation, since the 1994 EJ Policy approach seems to be effective by itself.

Walentosky asked if the definition of “EJ Area” more clearly define this term. Dula responded that the Department is focusing mainly on socioeconomic and health factors since this seems to also be the direction that the U.S. EPA is headed. The Department wants to focus its efforts on the 20% most impacted communities. Rather than go into all 32 individual factors, the policy focuses on pollution burden and health/socioeconomic vulnerabilities.

Walentosky asked how the policy will actually be used with projects as it relates to the permit process. Dula explained that the Interim Final EJ Policy will be adopted by DEP on September 16, 2023 and the policy will be used by permitting staff. The intent of the policy is not to slow down the permitting process so existing permit timelines will be considered and an appropriate enhanced public participation process will be determined.

Yoxtheimer asked if the “EJ risk factors” that were included on the slide of the presentation that showed the mathematical formula were based on a national program or

were the risk factors developed by Pennsylvania. Dula explained that Pennsylvania looked at the national model that was developed by California and which was adopted by other states such as Maryland and Colorado.

Yoxtheimer asked about the utility in the use of this modeling. Dula explained that the Department plans to examine the data annually and will track the data year-over-year and post the data on its website. The intent is to track improvements on the implementation of the policy.

Brantley asked if Justin could provide an example of a positive outcome that could result from this policy. Dula explained that it is possible that impacted EJ communities might receive penalty dollars to be invested in the affected community.

Baldassare asked if the 32 factors in the policy are weighted. Dula responded that the factors are not weighted since it is difficult to quantify individual impacts. Baldassare inquired about how “transient” activities such as the hydraulic fracturing of wells factor into the policy and Dula responded that he would look into this matter further.

## **STATUS OF TECHNICAL GUIDANCE DOCUMENTS**

### Integrated Contingency Plan (ICP) TGD

This TGD pulls together emergency response and pollution prevention requirements from both the Pennsylvania Emergency Management Agency (PEMA) and DEP. This document was developed to provide operators with a single document that addresses multiple requirements from both agencies. This TGD is not mandatory, rather it is an optional tool that can be voluntarily used at the discretion of the regulated community. The draft ICP TGD was published in the *Pennsylvania Bulletin* with a 30-day comment period. A total of 69 comments were received from two commentators (i.e., Marcellus Shale Coalition and Range Resources). The Department is currently in the process of reviewing and organizing the comments and will eventually discuss with the Pennsylvania Emergency Management Agency (PEMA) before sending to DEP’s Office of Policy and Legal for final review.

### ESCGP-3 to ESCGP-4 Transition and Timeline

Kelly reported that the Erosion and Sediment Control General Permit (ESCGP-4) was Administratively Extended until January 6, 2024. The reason for the extension is to enable the ESCGP-4 to be harmonized with a related earth disturbance general permit (i.e., PAG-02) that is being advanced in parallel under the Chapter 102 program that includes a U.S. EPA deadline in January 2025. Rather than risk the likelihood that future changes to the ESCGP-4 would be required as a result of the ultimate outcome of the PAG-02 process, the Office of Oil and Gas Management decided to Administratively Extend the ESCGP-4. Kelly stated that the ESCGP workgroup will be reconvened in late winter/early spring to begin work on the ESCGP-4.

### Pressure Barrier Policy

The requirement to develop a pressure barrier policy is contained in 25 Pa.Code, Chapter 78a.55 of the Oil and Gas Regulations and that a draft policy was published in the *Pennsylvania Bulletin* on August 29, 2020 with a 30-day comment period. The Department received 107 comments and reviewed and amended the policy based on comments received. The final policy was published on May 6, 2023 and it included a “model guidance” within the policy. Hegburg reported that the Department has conducted internal training to DEP staff about this policy and is coordinating with the Marcellus Shale Coalition to offer training to operators on October 25, 2023.

### Civil Penalty TGD

Klapkowski stated that the DEP Civil Penalty Assessment Policy was originally adopted in 2002 so it is appropriate that the policy is being updated to recent developments such as the passage of Act 13 that increased civil penalty assessments. The Department has been following statutory requirements in instances where the policy is outdated.

Klapkowski took the opportunity to inform the board of recent efforts that the Department has taken to more broadly address compliance and enforcement. As a starting point, Klapkowski noted that the Oil and Gas Compliance and Enforcement Policy was updated in 2015, so it is relatively more up-to-date than in some other DEP Programs. Currently, all DEP Programs are reviewing their compliance and enforcement documents.

The Department is hiring an Enforcement Coordinator to work with field operations staff and compliance staff to ensure consistency across DEP regions and districts. The Department also hired a Customer Service Coordinator within the DEP Office of Excellence to enhance customer service across the Department.

Finally, Klapkowski noted that the Department is increasing efforts to collaborate and share information with its federal partners. The Department is also considering the use of Community Environmental Projects in lieu of penalties in situations that are warranted.

Saunders asked Klapkowski to clarify that Act 13 resulted in increases to unconventional wells rather than conventional wells. Klapkowski indicated that penalty amounts for unconventional operators increased, while penalties for conventional operators did not change.

### **STATUS OF INFRASTRUCTURE INVESTMENT AND JOBS ACT (IIJA) FORMULA GRANT AND ORPHAN WELL GRANT PROGRAM**

Klapkowski provided a comprehensive update on the status of the IIJA Initial Grant and Formula Grant. Klapkowski informed the board that the Department awarded the full \$25 million in IIJA Initial Grants into well plugging contracts (except for the 10% that was allocated to help defray administrative costs). At the time of the board meeting, the Department had overseen the plugging of 74 wells and expects to plug the 100<sup>th</sup> well in the next four to six months. This amounts to more wells being plugged within the first eight months of the Initial Grant initiative as was plugged over the past five years

combined. Klapkowski reported that the Department requested a no-cost extension of the performance period of the Initial Grant projects from September 30, 2023 to December 31, 2024. The justification for this request was based on the length of time for a contractor to complete all plugging work an approved contract that exceeds the current period of performance. The U.S. Department of Interior approved this request.

Klapkowski then reported that qualified to receive about \$76 million in the first of four rounds of the IJA Performance Grant and the application deadline is December 31, 2023. The Formula Grant expands the use of the IJA grant dollars to be used for more than plugging wells (i.e., documenting undocumented wells, measuring methane emissions before and after well plugging projects, etc.). Pursuant to Act 96 and Act 136, the Department is standing up an orphan well grant program that will use 20 percent of the IJA Formula Grant plugging to plug wells. Qualified well pluggers will be able to apply for grants of up to \$40,000 and \$70,000 to plug shallow and deep wells, respectively.

Klapkowski also informed the board of another federal grant program that was recently announced. The program is called the Methane Emission Reduction Program (MERP) and provides about \$350 million nationwide to states to address marginal conventional wells that emit less than 90,000 cubic feet per day of methane or less than 15 barrels of oil equivalent per day. Pennsylvania is expected to receive about \$33 million to plug marginal. This is a formula grant and Pennsylvania received the third highest amount of money behind Texas and Kansas. The EPA did not appear to have included many eligible wells that did not report production, so Pennsylvania should have likely received even more funding than it was allocated. There is a 30 day deadline for DEP to submit the MERP application, so all attention has turned to completing this grant application.

Walentosky asked what lessons have been learned by the Department now that it has been about one year since IJA began. Klapkowski said that one positive outcome is that there seem to be adequate Pennsylvania contractors that are able to enter into grants to plug wells. Klapkowski mentioned that the Commonwealth bonding requirements that apply to the well plugging contracts can be a bit burdensome on smaller contractors. The Department is exploring potential alternative approaches to the current bonding structure. Another item that became clearer is the lack of information about some orphan and abandoned wells that could assist the Department and contractors in effectively plugging wells.

Saunders asked if the Department has started developing grant guidance that can be used by qualified well plugging operators to apply for the orphan well plugging grant program. Klapkowski responded that the Oil and Gas Program has been working with the DEP Grant Center and will be including information about this program in the IJA Formula Grant Guidance that is currently under development. Saunders stated that there is lots of expertise in the industry that could also benefit DEP.

Brantley asked how Pennsylvania compares to other states in terms of the cost to plug wells under IJA. Klapkowski responded that Pennsylvania is somewhere in the middle and he has seen the cost to plug wells in some other states to be higher and in some states

like Texas to be much lower. Some of the reasons why it costs more to plug some wells in Pennsylvania compared to other states is that site access is not as easy and erosion and sediment controls can be more complex in Pennsylvania than in other states like Texas. Brantley asked if any wells were unable to be plugged and Klapkowski responded that he is not aware of any wells that could not be plugged. Brantley asked if there will be a standardized process that DEP will follow in conducting methane measurements. Klapkowski responded that Pennsylvania will be guided by the methodology that has been released by the U.S. Department of Interior.

### **UNCONVENTIONAL WELL SPILL POLICY**

Walentosky provided an overview of the draft Unconventional Well Spill Policy that has been in development by an industry-based workgroup and provided to the Department. Walentosky explained that one of the main goals of the policy is to improve the understanding of and create better consistency between the regulators, consultants and operator representatives as to what to do when spills occur. Walentosky discussed a portion of the policy that displays a flow chart that depicts the three sections of the policy (i.e., reporting of spills, interim actions/corrective measures, remediations when spills less than 42 gallons and greater than 42 gallons).

Brantley commented that when evaluating impacts to water resources from spills, it is most important to understand the volume of the spill and the nature of what is spilled (i.e., what is the chemical composition of the spill). Brantley encouraged the Department to consider this if any future regulations are developed or amendments made that pertain to spills at well sites.

### **DISCUSSION: DEVELOPMENT OF TAB SUBCOMMITTEES**

#### **Evaluation of Type 1L Cement in Well Construction Activities**

Hegburg explained that cement manufacturers are moving away from the production of traditional cement blends to formulations that use different percentages of limestone that result in less generation of carbon dioxide in the manufacturing process. The cement industry refers to this “low carbon” cement as Type 1L and it is estimated that total carbon dioxide emissions across the nation could be reduced by up to 10 percent when the cement industry fully switches to the manufacture of Type 1L cement.

DEP has consulted with the Ohio DEP and other states about the suitability of Type 1L cement as a product to plug wells and also in the use of well construction. Ohio has done the most research of any state in the country and contracted an independent evaluation of the use of Type 1L cement for plugging activities. Based on this evaluation, Type 1L cement was determined by the Ohio DEP to be suitable for well plugging, but the evaluation did not determine whether Type 1L cement is suitable for use in well construction.

Based on the conclusions of the work that was conducted by the Ohio DEP, the Pennsylvania DEP posted a memorandum on the DEP oil and gas website approving Type 1L cement for plugging; but not for well construction activities. On behalf of the Department, Hegburg requested that TAB consider forming a workgroup to specifically consider and evaluate whether Type 1L cement would be appropriate for use in the construction of unconventional wells.

Baldassare informed the group that the University of Pittsburgh is doing some related research about cement and their research might be of interest to the Department. Walentosky asked if the Department is interested in TAB seeking industry representation on the work group and Hegburg responded in the affirmative.

Yoxtheimer stated that he will take the lead in working with TAB set up this work group.

#### Electronic Data Submissions

Suchodolski reported that the Department has had internal discussions about the request to form an electronic data submissions subcommittee and there are some concerns at this time with forming such a subcommittee. Examples include competing Departmental IT priorities and the changing of such priorities, availability of IT resources, and funding constraints. Suchodolski stated that the Department wants to be respectful of the time and efforts of the board members and also of DEP staff if there are real limitations in how effective the subcommittee can be in influencing changes to the current IT systems. That said, Suchodolski stated that the Office of Oil and Gas Management is willing to be more proactive in briefing TAB on ongoing IT development activities.

Yoxtheimer responded that he has received feedback from industry members that there are some redundancies in some of the existing IT applications and that full utility of the data systems cannot always be realized. Yoxtheimer suggested that he have a conversation with Suchodolski about these real or perceived short comings as well as the potential roadblocks that were presented to the board.

Klapkowski interjected that the Department intends to evaluate the data management systems that are currently in place and intends to initiate an overarching IT Modernization initiative in the near future.

Yoxtheimer said that he would contact Suchodolski to continue this general discussion and Suchodolski welcomed the offer.

#### Well Plugging Issues

The board and Klapkowski discussed the benefits of forming a TAB subcommittee to collaborate with the Pennsylvania Grade Crude Development Advisory Council (CDAC) address general issues regarding the plugging of wells. Saunders explained that one ancillary issue that could also be addressed by the subcommittee is the issue of attainable bottom since about half of the costs to plug wells is driven by reaching the attainable bottom of a well.

Walentosky made a motion to form a subcommittee consisting of TAB representatives, CDAC representatives, Department representatives and other industry participants that will function to consider and make recommendations to the Department regarding well plugging issues. Saunders seconded the motion. Motion passed unanimously.

Wallace stated that the TAB Bylaws state that the board shall identify a Chairperson to lead a subcommittee. Yoxtheimer asked if a motion must be made today. Wallace explained that the motion could be made today or at the December TAB meeting before the subcommittee meets on official business. Yoxtheimer stated that he would prefer that a chairperson be voted on at the December meeting. The Department will include this matter on the meeting agenda for the December TAB meeting.

**DISCUSSION: HOW CAN TAB ASSIST DEP WITH DETERMINING ANTICIPATED WELL PLUGGING COSTS AND EXAMINE FINANCIAL STRATEGIES TO ADDRESS FUTURE WELL ABANDONMENT**

Yoxtheimer started the discussion by asking the Department what challenges are being encountered on this front so the board can better determine how it can assist the department. Klapkowski responded that the issue primarily stems from the bonding piece of Act 13 which talks in terms of projected costs to the commonwealth to plug wells and actual bonding amounts established under Act 13 that were affected by Act 96 for conventional operations. Currently, the Department is confined to the statutory bonding requirements, but is open to a discussion of projected plugging costs that might be considered in relation to the unconventional bonding Petition that is before the Environmental Quality Board. The Department is also open to a broader discussion about concepts of financial assurance in general as it relates to the cost of plugging wells. Klapkowski referenced two such examples. The first example relates to the model used in the DEP Waste Management Program that pertains to paying for the cost of cleaning up underground storage tanks. The Department has partnered with the Department of Insurance to establish an Underground Storage Tank Indemnification Fund (USTIF) that is funded by a fee on each gallon of gasoline sold in Pennsylvania. This fund has been actuarially sound for decades and pays for the responses to cleaning up underground storage tanks in Pennsylvania. Another example pertains to recent conversations the Office of Oil and Gas Management has had with a company that has developed an insurance program based on the standard Life Insurance model that would apply to oil and gas wells.

Yoxtheimer asked if other states use other types of financial assurance models that have been found to be successful. Klapkowski responded that Colorado has examined financial assurance for oil and gas wells a fairly deep level and developed complex system that is driven by legislation.

Walentosky commented that perhaps DEP might consider engaging the industry associations and perhaps the board and the Oil and Gas Program can discuss this issue in greater detail at the December TAB meeting after the board digests the issue further.

Yoxtheimer stated that he likes the USTIF concept and that this might be a possible and perhaps part of an approach that could transfer to Pennsylvania's oil and gas industry.

Saunders asked a clarifying question about whether the focus is on unconventional wells only. Klapkowski responded that this is the current focus.

Yoxtheimer suggested that perhaps TAB can begin the process of forming a subcommittee to initiate some discussions about thoughts for where to head with regard to examining potential financial assurance strategies with a goal of being about to have more focused discussions at the December TAB meeting. Klapkowski agreed that this approach makes sense.

## **MISCELLANEOUS ISSUES**

### **Update on Rager Mountain Gas Storage Field Release and Potential Regulatory Implications**

Klapkowski reported that Equitrans recently released an after-action report regarding this incident and the Department will be reviewing the findings of this report. As for regulatory implications, one consideration is the role of the federal government. The Pipeline and Hazardous Materials Safety Administration (PHMSA) has taken on a more active role since the "Aliso Canyon" storage field incident that occurred in California. In Pennsylvania, there is an issue regarding the pre-emption of these standards and there is some ongoing litigation related to the Equitrans incident so the Department is in the process of examining the issue of preemption.

### **Proposed Rulemaking, Fee for Unconventional Operations**

This proposed application fee rulemaking is on the DEP 6-month regulatory agenda. The Department developed a 3-Year Fee report that found that the current permit fee is not sustainable to continue to fund the oil and gas program since the number of permits submitted to the Department is decreasing. Although the number of permits are decreasing, the number of active wells is increasing so the workload of the Department continues to increase. The fund that pays for the Oil and Gas Program will sustain the Program through fiscal year 2023-24, but is expected to run into the red by fiscal year 2024-25.

Walentosky asked if the Department is looking at any other sources other than permit application fees. Thus far, the permit application fee has been the single approach to funding the Oil and Gas Program. The Program is open to other funding mechanisms as long as it is stable and predictable. An annual fee based on the number of active well pads has been considered as an alternative approach.

Baldassare asked if money from the General Fund has been considered as a possible funding source though he is not advocating for this approach. Klapkowski stated that the allocation of the General Fund is not his decision.

### Application for Underground Injection Control (UIC) Primacy

Klapkowski reported that the Department filed a Notice of Intent was filed with EPA regarding pursuing federal primacy of Class VI wells that are carbon sequestration wells. Under the Infrastructure Investment and Jobs Act, the EPA was allocated \$50 million to award to states that are interested in pursuing federal primacy of administering the UIC programs. Klapkowski stated that he could see the Department pursuing primacy for all classes of UIC wells, but EPA has not released any guidance to states for how to apply for the IJA grant monies.

### **NEW BUSINESS**

#### Plum Borough Natural Gas Home Explosion Incident

Klapkowski provided a detailed update on the Department's response to the natural gas home explosion event that occurred in Plum Borough. The Department has been mobilized with responders immediately following this incident and has been on site continuously following this tragic event and has been conducting a thorough investigation. The Department has examined facilities within a 2,500 foot radius around the affected residence of facilities that DEP has authorization to regulate. Specifically, the Department has looked at seven conventional oil and gas wells and two natural gas gathering lines within the 2,500 foot radius. The Department also investigated an unconventional gas well located about 1.5 miles from the affected residence. Although one of the natural gas gathering lines was found to have a pin-hole leak, no significant amount of natural gas was detected in the soil samples surrounding that gathering line. The Department is conducting isotopic analyses to attempt to determine the presence and nature of methane in the area. Klapkowski also reported that Olympus Energy responded to the Department's request to provide 250 methane monitors/alarms to the residents of the Rustic Ridge community to provide an ability to test for the presence of methane within the residences in the community. The methane monitors/alarms were well received by the residents in the community.

#### University of Pittsburgh/PA Department of Health Study

Klapkowski stated that the Department wants to be certain that the oversight of the oil and gas industry is based on sound science and relies on studies and data such as what was done via this study in its decision making process. Klapkowski reported that these studies are one set of data the Department is examining as it takes a broad view into the various studies that have been conducted. Klapkowski said that he does not have a specific response to these studies today, but explained the Department is taking a hard look at the studies to determine what steps might be warranted in the future such as potential legislation or regulations that should be advanced.

### **ADJOURNMENT**

Yoxheimer asked if there was a motion to adjourn the meeting. Saunders made a motion to adjourn the meeting and Walentosky seconded. The motion passed unanimously, and the meeting was adjourned.