February 3, 2025

Joseph Kelly
Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 2063
Harrisburg, PA 17105-2063

Re: **Guidance for Maintaining Freeboard and Dewatering of Well Development Impoundments for Unconventional Oil and Gas Operations** Submitted via PA eComment: https://www.ahs.dep.pa.gov/eComment/

Dear Mr. Kelly,

The Marcellus Shale Coalition (MSC), a regional trade association with a national membership, appreciates the opportunity to submit comments for consideration by the Department of Environmental Protection (PA DEP or Department) regarding PA DEP's proposed Guidance for Maintaining Freeboard and Dewatering of Well Development Impoundments for Unconventional Oil and Gas Operations (TGD).

The MSC was formed in 2008 and is currently comprised of approximately 145 producing, midstream, transmission and supply chain members who are fully committed to working with local, county, state and federal government officials and regulators to facilitate the development of the natural gas resources in the Marcellus, Utica and related geological formations. Our members represent many of the largest and most active companies in natural gas production, gathering, processing, transmission and utilization in the country, as well as the supply chain companies, contractors, professional service firms, and trade unions who work with the industry. Please find below comments on the draft TGD.

General Comments

1. Can an operator develop a dewatering plan and include it as part of their PPC plan information? The MSC suggests that flexibility should exist for how this information is provided to the Department.

2. There appear to be three types of dewatering events described in the draft TGD:
    a. Removing storm water/ground water from an unlined pond during construction or reclamation.
    b. Pumping water from a lined impoundment to maintain proper freeboard levels.
    c. Pumping water from a lined impoundment to make repairs or reclaim the impoundment.

The MSC recommends that the Department clarify if all three types of dewatering events require a written plan described in Section IV or is a written plan with Department approval only required when pumping water from a lined impoundment to make repairs or reclaim the impoundment as described in Section III. B? The MSC recommends that the draft TGD provide clarification on when dewatering plans must be reviewed and approved.

3. If you are storing water in a registered freshwater impoundment and withdrawing from an approved water source that is in your approved water management plan and have not introduced any additives to your water, why is there a need to sample the water? The MSC requests the Department provide clarification on when sampling is required and remove requirements for such sampling when there is not a reasonable basis to do so.

Specific Comments

1. Page 1, Summary, Paragraph 1 – *"Unconventional oil and gas well operators may utilize Well Development Impoundments (WDI) to store surface water, fresh groundwater, and other fluids approved by the Department for oil and gas well development activities at multiple well sites."*

   What does the Department envision *"other fluids"* are?

2. Page 1, Summary, Paragraph 2 – "*measures must be taken to avoid the spread of invasive species to water."*

   And Page 4, Narrative Requirements G – "*Measures must be taken to avoid the spread of invasive species to waters of the Commonwealth."*

   Typically, water haulers utilize skimmers on suction hoses when withdrawing water from streams. The MSC presumes that this control counts as a measure to prevent the spread of invasive species. While no specific definition or list exists the industry utilizes best practices to prevent the spread of invasive species that should be recognized by the Department. Clarity on this type of control measure would be helpful.

3. Page 1, Summary, Paragraph 2 (also part of IV. Narrative Requirements D, G, and H) – "*Need expressed written consent of the property owner over whose property the water will flow."*

   Operators typically do not obtain written consent from landowners associated with any freshwater discharge when dewatering WDIs on the land they have leased for the impoundment Operators typically work with landowners in their lease agreements to be able to perform this type of work Trucking costs would be significant in the unlikely event a landowner does not provide written consent. Additionally, the water is meant to infiltrate into the subsurface and not "flow".. Furthermore, it does not appear appropriate

for a TGD – which does not have the weight of regulation – to impose such a requirement.

4. Page 2, II, WDI – Before liner is installed or after liner is removed, 8 – *"Land application of water may not be conducted on saturated, frozen, snow covered or unvegetated ground or during precipitation events."*

   The MSC recommends removing *"during precipitation events"*. Precipitation events can vary greatly in intensity. Dewatering should not be restricted by precipitation when "saturated ground" is referenced.

5. Page 3, III, Lined WDI – Operational, A – "*Representative water samples of the water contained in the lined WDI shall be collected and analyzed annually for all the contaminant listed in Appendix A, in addition to anytime that water sources for the WDI changes, before land application can occur"*

   The MSC recommends changing the sentence to read, "*collected and analyzed within the previous 12 months*" to allow for sampling in one year and discharging the following.

   The Department does not provide language on dewatering plan approval duration and expiration or plan renewal. Currently the dewatering plan approvals are valid for 1-year from approval. Operator experience based on verbal guidance from Department staff has been that plan renewals require the re-sampling and analysis of the WDI water and submitting the new sample results for plan renewal approval. Clarity on these issues would be helpful.

6. Page 3, III, Lined WDI – Operational, A – "*If WDI operators propose to use treatment techniques and/or chemical additives, such as algaecides or oxidizers to maintain a desired water quality in the WDI, Department written approval shall be obtained prior to any chemical additives or treatment process used at a WDI*."

   In warmer weather conditions, the pH can be slightly below the normal range of 6.0 and 9.0. In the past Operators have recirculated the water back into the impoundment to increase the oxygen level, thereby increasing the pH. The MSC presumes that this recirculation will not fall under the Department's definition of "treatment" and requests the Department's concurrence..

7. Page 4, IV, Narrative Requirements, I – *"Identify that the land applied water will be dispersed over an undisturbed, vegetated area capable of absorbing the water and filtering solids contained in the land applied water. Discharge points should not be located on steep slopes of greater than or equal to 2:1 grade. Use of sprinklers or other methods to disperse the water more evenly on the land application area should be employed."*

   "Discharge points should not be located on steep slopes of greater than or equal to 2:1 grade." The MSC points out that to meet the setbacks requirements, it is challenging

given site constraints to find appropriate areas to discharge water. While discharging on slopes greater than or equal to 2:1 is not common practice, adding this will further limit discharge areas. The MSC recommends flexibility in this requirement, on a case-by-case basis.

8. Page 4, IV, Narrative Requirements, L.5 – The MSC recommends removing *"during precipitation events"* for the reasons previously stated.

9. Page 4, IV, Narrative Requirements, L.6 – *"Include proposed time intervals for monitoring pH and specific conductivity during land application of water."*

   Operator experience for this requirement has varied substantially based on regional office and PA DEP representative. The MSC requests guidance on a specific range that would be acceptable. With annual analytical testing short time intervals may be excessive.

10. Page 5, IV, Narrative Requirements, M – *"A statement that the operator will provide electronic notice to the Department prior to dewatering for freeboard maintenance, and a minimum 3-day electronic notice to the Department prior to dewatering of the WDI beyond a three (3) foot freeboard threshold."*

    The MSC questions the logic of being required to differentiate between general dewatering and dewatering beyond (3) foot freeboard threshold? For example, If an operator goes through the exercise of dewatering an WDI, it would not be an efficient use of time to go back in 3 months and dewater again only 1 foot beyond freeboard. Why has the Department selected 3 feet as the threshold? There should be flexibility in this requirement.

11. Page 6, VI, A – "*Notify the Department electronically…"*

    Should this be via email, Greenport, etc.? Currently some regions are operating on different forms of notifications. Additional clarification is needed here.

12. Page 6, VI, A.1 – *"For lowering freeboard level three (3) feet or less, notice must be given to the Department prior to the commencement of the dewatering activity."*

    Similar to the MSC's previous comment, the 3 feet freeboard threshold appears to be arbitrary. There should be flexibility.

13. Page 18, Appendix A - The Department should not use any of the drinking water standards as criteria for discharges from WDIs. Many freshwater sources commonly used in WDIs are not directly used as "drinking water" sources by the public. Examples of this would include river and stream direct sources. Large sets of data from various studies exist from freshwater sources and municipal drinking water providers that show exceedances of several of the parameters in Appendix A. There is no regulation that requires that discharges of fresh water to the surface of the ground must meet safe drinking water standards.

Further, it is likely that surface water from freshwater withdrawals may contain analytes at levels exceeding the maximum contaminant concentrations in Appendix A (i.e.., iron, manganese, nitrate, PFOA, PFAS). In lieu of meeting the maximum contaminant concentrations in Appendix A, The MSC recommends that "source background" contaminant level be established at freshwater withdrawal points.

14. Page 18, Appendix A - The Department references limits that were derived from various standards which include drinking water, water quality standards for rivers and streams, and typical values observed in freshwater rivers and streams. In the event a water sample would exceed a limit(s) as displayed in Appendix A, but the result would be lower than another regulatory action level, the Department should still approve the dewatering plan. Please see the examples below for consideration.

    Example 1: Appendix A references a limit of 25 mg/L for Chloride. 25 PA. Code Chapter 250 has a secondary maximum contaminant level for Chloride of 250 mg/L. If a water sample shows a value of 30 mg/L for Chloride, the Department should approve the dewatering plan.

    Example 2: Appendix A references a limit of .000018 ug/L for PFOS. 25 PA. Code Chapter 250 has a standard of .07 ug/L for PFOS which is over 3x the limit shown in Appendix A. If a water sample shows a value above the limit listed in appendix A but less than the Chapter 250 standard, the Department should approve the dewatering plan.

    It's important to note that for the WDI dewatering, operators will be discharging and achieving infiltration, no discharge to surface water would occur and therefore these limits in Appendix A may be problematic. Since the water is being spread over the surface of the ground the standards set out in 25 PA Code Chapter 250 are the appropriate standard to be used.

15. Page 18, Appendix A – Butoxyethanol - Current requirements provided by the Department is 13 µg/L and the draft TGD states a conflicting requirement of - 0.7 mg/L. The MSC requests the Department resolve the conflict and provide an explanation.

16. Page 18, Appendix A - PFAS/PFOA analysis - The availability of accredited lab sampling for these constituents is not only an issue in the Commonwealth but nationally as well. This lack of availability is causing large lead times for analysis that may cause situations of noncompliance with freeboard requirements while waiting on results. The MSC recommends the Department have flexibility with these requirements.

Conclusion

The MSC appreciates the opportunity to provide comments on the draft TGD. The MSC welcomes the opportunity to meet with Department staff to explain further or illustrate and discuss any of these issues. Thank you very much for your consideration of these comments.

Sincerely,

Patrick Henderson
Vice President,
Government Affairs & Communications