

DEP Announces Availability of Draft Technical Guidance for Maintaining Freeboard and Dewatering of Well Development Impoundments for Unconventional Oil and Gas Operations

March 4, 2025

Pittsburgh, PA and Washington, DC

The Foundation Water Law Newsletter

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On January 4, 2025, the Pennsylvania Department of Environmental Protection (DEP) announced the availability of draft [Technical Guidance for Maintaining Freeboard and Dewatering of Well Development Impoundments for Unconventional Oil and Gas Operations](#) (Draft Guidance). See 55 Pa. Bull. 146 (Jan. 4, 2025).

The purpose of this Draft Guidance is to assist unconventional operators with how to comply with the Pennsylvania Clean Streams Law and associated regulations regarding freeboard maintenance and dewatering of well development impoundments (WDI) through land application of excess water. The Draft Guidance discusses dewatering when there is no liner in the impoundment, such as during construction and restoration phases, as well as when there is a liner in the impoundment during operational and decommissioning phases. It advises how excess water due to precipitation should be managed during construction, operation, decommissioning, and restoration phases of WDIs to prevent WDIs from overflowing and undermining the structural integrity of the WDI.

For example, before a liner is installed, or after a liner is removed, operators may need to dewater the unlined WDI to allow construction or restoration activities to continue. The Draft Guidance advises that operators should confirm and document that no regulated substances have been added or have accumulated in the water and specifies 16 different conditions that should be followed in confirming and documenting such information.

Once a liner is installed and the WDI is filled with surface water, fresh groundwater, or other fluids approved by DEP, maintaining freeboard in the WDI is necessary to ensure its safe operation. The Draft Guidance indicates that the Office of Oil and Gas Management, when necessary, will consider periodic land application from WDIs to maintain freeboard, with a recommendation that a minimum of two feet of freeboard always be maintained in WDIs to prevent the WDI from overflowing. If the Draft Guidance is approved as currently drafted, before proposing any land applications of water from the WDI, operators should sample the water in the WDIs, and the results should not exceed the maximum limits for contaminants found in Appendix A of the Draft Guidance. Appendix A contains maximum contaminant concentrations that were derived from drinking water standards, water quality standards for rivers and streams, and typical values observed in freshwater rivers and streams. Sample results from the accredited laboratory that performed the analysis should be submitted to DEP.

The Draft Guidance discusses that a WDI Dewatering Plan be submitted and approved by DEP before land applying water from a lined WDI that is in operation or being decommissioned. This Dewatering Plan should discuss the narrative requirements, as outlined in Section IV of the Draft Guidance, and include a map and aerial photograph of the facility. The narrative requirements include the history of use of any chemical additions as well as a proposed sample plan or current sample results from the WDIs.

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