EPA Groundwater Guidance Fails to Answer Key Questions

By Marcia Greenblatt

Law360 (December 21, 2020, 5:43 PM EST) -- On Dec. 8, the U.S. Environmental Protection Agency issued draft guidance to clarify the U.S. Supreme Court decision regarding regulation of indirect groundwater discharges to surface water under the Clean Water Act.



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This draft guidance intends to assist regulators and the regulated community in determining the need for a National Pollutant Discharge Elimination System, or NPDES, permit for

existing and new groundwater discharges that may discharge into navigable waters. But overall, the draft guidance is vague, providing little clear direction for implementation and leaving many legal and technical questions unanswered.

Background

In April, the U.S. Supreme Court decided, in County of Maui v. Hawaii Wildlife Fund, that an NPDES permit is required "where there is a direct discharge from a point source into navigable waters or where there is a functional equivalent of a direct discharge."

The decision did not define "functional equivalent" — and the court recognized that it could not clearly define what discharges would be regulated, but acknowledged that the primary factors to determine if an NPDES permit would be required for a groundwater discharge would be travel, time and distance from the point of discharge to the waterway.

- Other factors that would be used to determine CWA jurisdiction include:
- The nature of material through which the pollutant travels;
- Extent of dilution or chemical change of the pollutant;

- Amount of pollutant entering the navigable water relative to the amount discharged;
- The area over which, or the means by which, a pollutant enters the waters; and
- The degree to which the pollutant can be identified.
- The opinion anticipated that the EPA could provide administrative guidance, such as grants of individual permits, promulgation of general permits, or the development of general rules.

The Draft Guidance

The draft guidance articulates three concepts to support clarification of the Maui decision: (1) that an actual discharge of a pollutant to a water of the United Stated is the threshold condition that triggers the evaluation for the need for a NPDES permit; (2) that the discharge of pollutants that reach a water of the U.S. must be from a point source to trigger a need for a NPDES; and (3) that the system design and performance should be considered in the evaluation of functional equivalent.

The EPA's draft guidance cites the court decision clarifying that the Clean Water Act requires an actual discharge, and "not potential discharges, and certainly not point sources themselves." Although a threshold condition, the release of a pollutant from a point source is not sufficient to trigger NPDES permitting requirements.

Example scenarios in which the EPA recommends considering the need for a technical evaluation include discharges of highly mobile pollutants from a point source into sandy soils or into shallow groundwater near a water of the U.S. The evaluation would support determination of the occurrence of an actual discharge, and the functional equivalence of the groundwater discharge to a direct discharge.

However, the draft guidance does not provide specific metrics to determine when an evaluation would be needed, and by which to judge the evaluation. Not only does the draft guidance not provide threshold travel times above which there would be no permitting requirement, it does not clearly indicate when a travel time should even be specifically considered.

The second threshold condition to trigger potential NPDES permit requirements is that the groundwater discharge is from a point source. The guidance reiterates the Clean Water Act

point source definition as "any discernable, confined and discrete conveyance." The draft guidance offers no examples or defining tests for identification of release from a point source.

Once an actual discharge from a point source has been demonstrated, a functional equivalent evaluation would then be performed to determine permitting requirements. The time and distance traveled by the discharge to reach a water of the U.S. — as well as any changes to the pollutant as it travels, such as uptake or dilution — would be evaluated. Changes in pollutant concentration or composition as it travels through groundwater could lead to a finding that the discharge is not a functional equivalent of a direct discharge.

A groundwater discharge reaching a water of the U.S. with similar or the same chemical concentration and composition "may be more like a direct discharge to the jurisdictional water." But again, the draft guidance does not provide any specific evaluation parameters to support determination of functional equivalence, such as what extent of pollutant change would trigger a permit requirement.

Finally, the EPA proposed that the system design and performance be considered as an additional factor, in addition to the seven factors identified by the Supreme Court, for determination of a functional equivalent direct discharge. If a facility or system includes storage, treatment, attenuation and/or dilution that may change the pollutant, or the amount of pollutant, entering a water of the U.S., "it may be less likely that a NPDES permit would be required."

Examples of such systems provided in the draft guidance are septic systems, cesspools and settling ponds. Conversely, if a facility or system "consistently and predictably" discharges pollutants through groundwater and into a water of the U.S., a permit may be required. But how system design and performance would be quantified or considered with the other factors is not clear.

Conclusion

This draft guidance intends to provide a starting point for determination of the need for NPDES permit for an indirect groundwater discharge into a water of the U.S., but overall, the guidance is vague, with no clear direction for application. From a practical perspective, the determining factors regarding when to perform an evaluation, what evaluation to perform and how to judge the evaluation remain undefined.

If a regulatory agency were to signal that a groundwater discharge was subject to evaluation for regulation under the Clean Water Act, significant discussion would be required to establish the technical approach, such that the regulated party could develop the relevant information. Factors for consideration include what tests or studies must be done to measure, estimate or model the determining factors; what data will be used, and how and where will it be collected to evaluate an existing discharge; and/or how estimates will be made in the case of a proposed discharge.

Once data or models are developed, an approach to evaluate the results must be clarified. For example, to determine functional equivalent, there would need to be a definition of the threshold travel time from the point of groundwater discharge to the water of the U.S. that requires a permit.

Another critical issue is how to evaluate pollutant concentrations at the point of discharge into the water of the U.S. relative to the groundwater discharge concentrations — in other words, how much dilution, attenuation or sorption that occurs as the pollutant travels through the groundwater is considered sufficient such that the discharging groundwater and any associated pollutants do not require a permit. The technical challenges in the determination of the functional equivalence of a groundwater discharge to a point source discharge remain unanswered by the draft guidance.

The draft guidance will be published in the Federal Register, followed by a 30-day public comment period. Only time will tell whether the Biden administration will provide additional clarification or implement a larger reform before finalizing the guidance. In the interim, legal counsel for regulated entities will need to wait and see if, or how, the guidance is applied — and potentially engage regulators in the challenging technical issues discussed above to define a path forward for their clients.

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