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Proposed Amendments to Ground Water Quality Standards Could Significantly Impact Ongoing Remediation Projects in New Jersey

George W. Crimmins

Greenbaum, Rowe, Smith & Davis LLP Client Alert

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What You Need to Know

- The NJDEP has proposed amendments to New Jersey's Ground Water Quality Standards, including more stringent criteria for some of New Jersey's most common ground water contaminants.
- If adopted into law, the proposed rules will have a major impact on many ongoing remediation projects, including more difficult delineation and remediation requirements and significantly increased costs.
- The deadline for submission of public comments on the rule proposal has been extended by the NJDEP to April 5, 2024.

The New Jersey Department of Environmental Protection (NJDEP) published proposed amendments to the Ground Water Quality Standards (GWQS) on January 2, 2024. The rulemaking process is currently underway, and the new standards may be adopted into law in the coming months.

More specifically, the NJDEP has issued a rule proposal seeking to update the specific ground water quality criteria and/or practical quantitation levels (PQLs) for 73 constituents of Class II-A ground water. (PQLs represent the lowest concentrations reliably detectable under routine laboratory conditions, and if a compound's PQL is higher than its ground water quality criterion, then only the PQL must be met.)

Attorneys

George W. Crimmins



More stringent standards are proposed for 50 constituents, including the following common ground water contaminants:
Current
Proposed
Current
Proposed
PCE
1.0 ug/l
0.40 ug/l
Benzene
1.0 ug/l
0.45 ug/l
TCE
1.0 ug/l
0.28 ug/l
Ethylbenzene
700 ug/l
150 ug/l
PCBs
0.5 ug/l
0.20 ug/l
Vinyl Chloride
1.0 ug/l
0.035 ug/l



If adopted, the proposed rule amendments will have a major impact on many ongoing site remediation projects. The more stringent requirements will result in larger areas of ground water being considered "impacted" by contamination, and so the costs of delineation and time to complete remedial investigations will rise accordingly. More active remediation will be required to achieve the proposed requirements and monitored natural attenuation will take much longer to complete. These factors are expected to result in significant additional costs and time required to complete ground water remediation in New Jersey.

Potential Impact on Valid NFAs, RAOs & RAWPs

New Jersey's Brownfield and Contaminated Site Act (the Brownfield Act) contains protections for parties conducting remediation, including preventing the NJDEP from reopening a valid No Further Action (NFA) or Response Action Outcome (RAO) determination, or an approved Remedial Action Work Plan (RAWP) after new cleanup standards are adopted. However, for the following 7 constituents, the proposed new requirements are restrictive enough to trigger the "order of magnitude" exceptions to these protections:

1,1 biphenyl;	
Heptachlor epoxide;	
Cobalt;	
Methoxychlor; and	
Cyanide (free);	
Vinyl chloride.	
1,3-dichlorobenzene (meta);	

The rule proposal acknowledges that this change will impact hundreds of closed sites (most notably 639 closed sites involving Vinyl Chloride).

The Brownfield Act prohibits the NJDEP from reopening an NFA or RAO (and requiring additional remediation) on a closed site unless the current concentrations exceed a new standard by an order of magnitude (10x) or more. For instance, under the current regulations, a licensed site remediation professional (LSRP) can issue an RAO for ground water impacted by Vinyl Chloride that has been reduced to a level of 0.99 ug/l. But if the proposed Vinyl Chloride PQL of 0.035 ug/l is adopted, DEP will be permitted to reopen any NFA or RAO involving levels exceeding 0.35 ug/l (10x the new standard). If the RAO is reopened the responsible party may need to conduct further delineation of the ground water, and then conduct additional remediation all the way down to the new PQL (e.g., 0.035 ug/l).



The Brownfield Act prohibits a reopener if the responsible party can demonstrate "the existing engineering or institutional controls on the site prevent exposure to the contamination and that the site remains protective of public health, safety and the environment." However, this may be difficult to prove given New Jersey's Administrative Requirements for the Remediation of Contaminated Sites (ARRCS) Rules already provide that if the order of magnitude test is met, a remedial action is not "protective of the public health, safety and the environment." Notably, the biennial certification process required for ground water remedial action permits requires the LSRP to determine whether any order of magnitude exceedances are present on a site.

The Brownfield Act also protects parties conducting remediation under an approved RAWP by preventing the NJDEP from imposing new cleanup standards on that RAWP. Yet, this protection does not apply if the new cleanup standards are made more stringent by an order of magnitude or more – as would be the case for these seven compounds. If the proposed rule is adopted, the NJDEP will be permitted to reopen approved RAWPs involving these seven constituents (which RAWPs may have already been implemented, budgeted, funded, and in operation for years), require additional delineation, and then require the remediation be conducted until the new remediation standards are achieved.

The rule proposal acknowledges that this could impact thousands of ongoing remediation projects (including 1,810 known approved RAWPs involving Vinyl Chloride).

On the other hand, the other 43 of 50 proposed more stringent standards do not meet these order of magnitude tests, meaning the Brownfield Act's protections will still apply. Sites with ground water impacted by any of those 43 constituents should consider expediting plans for development and approval of a RAWP and lock in the current applicable cleanup standards.

Other proposed rule amendments include:

- New regulatory language to enable the NJDEP to update the specific ground water quality criterion for a constituent with a corresponding Maximum Contaminant Level (MCL) in the Safe Drinking Water Act rules, when the Department determines the weight of evidence approach would more appropriately address the risk posed by the constituent than the risk addressed by the health-based level used to establish the MCL.
- New default values for body weight and drinking water consumption rate to be consistent with the US EPA Final Updated Ambient Water Quality Criteria for the Protection of Human Health.
- New rounding provisions to round new or revised ground water quality criteria and PQLs to two significant figures, rather than one, when scientifically supportable.

A full copy of the NJDEP's rule proposal is available here. Public comments are due by Friday, April 5, 2024 and can be submitted on the NJDEP's website.



Please contact the author of this Alert with questions related to the NJDEP's rule proposal or to discuss any possible impacts these new requirements may have on your projects. **George W. Crimmins**Counsel, Environmental Department
gcrimmins@greenbaumlaw.com

973.577.1772