

ENVIRONMENTAL AND ENERGY INFORMATION MEMO

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NJDEP Amends Ground Water Quality and Remediation Standards

On Feb. 3, 2025, the New Jersey Department of Environmental Protection (NJDEP) amended the Ground Water Quality Standards (GWQS) promulgated at N.J.A.C.7:9C, significantly changing the ground water quality criteria and/or practical quantitation levels (PQLs) for 73 constituents of Class II-A ground water, which is the default designation for all groundwater in New Jersey.¹ Specifically, NJDEP changed the ground water standards for 64 of the 73 constituents, making 50 more stringent, 12 less stringent, in addition to replacing two constituents that had interim generic criteria with specific ground water quality criteria.² These changes will have far-reaching implications as these GWQS are frequently used for permitting, remediation and enforcement decisions.

Notably, the Brownfield Act prohibits the NJDEP from reopening sites (and requiring additional remediation) for which a No Further Action letter or Response Action Outcome (RAO) were issued unless the current concentrations exceed a new standard by an order of magnitude (10x) or more. However, New Jersey's Site Remediation Program requires parties to reevaluate previously closed sites for constituents where any applicable GWQS has been reduced by an order of magnitude or more. As shown in the chart below, seven constituent standards are more stringent by one or more orders of magnitude:

Constituent	CASRN	Prior Ground Water Quality Standards (ug/L)	New Ground Water Quality Standards (ug/L)
1,1-Biphenyl	92-52-4	400	5.0
Cobalt	7440-48-4	100	2
Cyanide (free)	57-12-5	100	5.0
1,3-dichlorobenzene (meta)	541-73-1	600	5
Heptachlor epoxide	1024-57-3	0.2	0.020
Methoxychlor	2-43-5	40	0.1
Vinyl chloride	75-01-4	1	0.035

NJDEP is aware of thousands of remediation sites, both active and closed, that are contaminated by one of these seven constituents. The GWQS reductions will inevitably have significant economic impacts on each of these sites.

At the closed sites with any of these seven constituents, it is a question of when, not if, the remedial party will need to conduct a new evaluation showing the remedy is still protective of human health and the

¹ GWQS are determined using both the groundwater quality criteria and PQLs. The PQL is the lowest concentration of a constituent that can be reliably achieved by groundwater testing laboratories. N.J.A.C. 7:9C-1.4. Generally, the ground water quality criteria must be met unless the PQL for a constituent is greater than the ground water criterion, in which case the PQL must be met.

² N.J.A.C. 7:9C-1.7(c)3ii.

environment. The timing will be different depending on whether the site has a restricted, limited restricted or unrestricted use remedy. For sites with a restricted or limited restrictive use remedy, such as cases that have an institutional and/or engineering control, the order of magnitude evaluation will be a component of the required biennial remedial action protectiveness certification. For sites that have fulfilled an unrestricted use remedy, the order of magnitude evaluation will be required when the site “re-enters” the NJDEP’s Contaminated Site Remediation and Redevelopment program. In many cases, additional groundwater remediation will be required to meet the reduced GWQS. For sites that do not currently have a final remediation document, ground water delineation must be completed in compliance with all the newly adopted, more stringent standards. Regardless of where a site is in the remedial process, all remedial parties and their LSRP’s will be faced with new issues and increasing expenses.

In addition to the changes noted above, the NJDEP amended the Remediation Standards under N.J.A.C. 7:26D-7.2(b) to authorize the NJDEP to update the remediation standard when it modifies a ground water quality criterion through either rulemaking or notice of administrative change. The amendments also authorize 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 (SDWA) rules, N.J.A.C.7:10, if the Department determines that the “weight of evidence” approach, specified at N.J.A.C. 7:9C-1.7(c)3ii, would better address the risk posed by the constituent than the health-based level used to establish the MCL. NJDEP also amended the default values for body weight and drinking water consumption rate used to calculate health-based Groundwater Quality Criteria. Finally, the NJDEP amended the rounding provisions for new or revised ground water quality criteria or PQLs to two significant figures instead of one, which could have substantial impacts on remediation strategy.

If you want to better understand how these changes may impact your ongoing or previously completed remediation project, please contact [Allison Gabala](#).

