New Jersey DEP Proposes Significant Overhaul of Remediation Standards Required for Contaminated Sites

Client Alert

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The New Jersey Department of Environmental Protection (DEP) has published a proposal for an extensive regulatory overhaul of its remediation standards for contaminated sites, codified at N.J.A.C. 7:26D.

Although published on April 6, 2020, amid the disruption of the COVID-19 pandemic, this proposed regulatory amendment deserves a close review by the regulated community, particularly with respect to the DEP's extensive recalculation of the numerical remediation standards for soil. The initial deadline for submission of comments, June 5, 2020, has been extended until August 5, 2020.

Proposed Amendment Overview

The extensive changes proposed by the DEP include the following:

- A reexamination and recalculation of every numerical remediation standard for soil exposure pathways for both residential and nonresidential properties. The DEP also proposes adding new contaminants to the list of soil remediation standards while removing others.
- An update and codification of other remediation standards currently covered through DEP guidance documents including:
    - Soil remediation standards for inhalation exposure pathway, both residential and nonresidential (currently referred to as “vapor intrusion screening levels”)
    - Soil remediation standards for the migration to ground water exposure pathway (currently referred to as “impact to ground water soil screening levels”)
    - Soil leachate remediation standard for the migration to ground water exposure pathway (currently referred to as “default leachate criteria”)
    - Indoor air remediation standards for vapor intrusion – residential and nonresidential (no change in terminology)
    - **Note:** No change is proposed to the current numerical ground water or surface water quality standards.

- An expansion of the existing process for establishing site-specific alternate remediation standards for soil to allow it to be used for other exposure pathways such as soil migration to groundwater and vapor intrusion.
- A modification and expansion of the existing process for establishing interim soil remediation standards to allow it to be used for all exposure pathways.
- Documentation of the DEP's assessment of the chemical and physical properties of contaminants and the toxicity factors for the contaminants
- Documentation of the equivalency between the equations used by the DEP to develop the proposed soil and indoor air remediation standards and the equations the USEPA used in its Regional Screening Levels when it developed soil and indoor air risk-based screening levels.

Extensive Recalculation of Soil Remediation Standards

The changes proposed by the DEP for the residential and nonresidential soil remedial standard tables is particularly interesting. Each chemical listed in the existing tables was reassessed using updated toxicity factors, exposure assumptions, and chemical and physical factors. The result is a mixed bag of changes to the numerical remediation standards.

- For the existing soil remediation standards for residential properties that would be revised by the proposal, 64% would become less stringent, 16% would become more stringent, and 20% would remain the same.
- For non-residential properties, 82.5% would become less stringent, 12.5% would become more stringent, and 2% would remain the same.

A few of the proposed changes in numerical standards would be substantial. For example, the soil remediation standard for methyl ethyl ketone would be raised from 3,100 mg/kg to 47,000 mg/kg for residential properties and from 44,000 mg/kg to 780,000 mg/kg for nonresidential properties. The soil standard for benzaldehyde, on the other hand, would be lowered from 6,100 mg/kg to 170 mg/kg for residential properties and from 68,000 mg/kg to 910 mg/kg for nonresidential properties.

There would also be changes in the chemicals included in the soil remediation standard tables. The proposed amendment would remove fifteen of the chemicals listed in the existing soil remediation standard tables. According to DEP, some or all of these were removed because USEPA no longer supports the toxicity information upon which the existing standards are based, and reliable toxicity information is not otherwise available. Nineteen new chemicals would be added to the soil remediation standards table for residential properties and eighteen would be added to the nonresidential properties table. DEP advises that twelve of the additions to the proposed soil remediation standards tables were added because they are on the U.S. Environmental Protection Agency's Target Compound List.

Order of Magnitude Changes

As a general rule, any new remediation standards approved by DEP in a final rule would apply to all remediation sites in New Jersey once the final rule becomes effective. Persons who are close to implementing a remedy, however, would be able to use pre-amendment remediation standards (instead of newly promulgated more stringent standards) if:

- the pre-amendment remediation standards are specified in an approved remedial action workplan or remedial action report that is submitted to DEP no later than six months after the effective date of the remediation standard amendment,
- the remedial action is in compliance with the applicable regulatory timeframes, and
- the newly promulgated remediation standard is not at least an order of magnitude more stringent than the corresponding pre-amendment remediation standard.

The DEP proposed amendment has seven contaminants for which at least one proposed remediation standard is an order of magnitude more stringent than an existing remediation standard. They are benzaldehyde, butylbenzyl phthalate, caprolactam, cobalt, 1,1-Dichloroethene, ethylbenzene, and hexachlorocyclopentadiene. These "order of magnitude" remediation standards would immediately apply to all ongoing remediation sites if the proposed amendment becomes effective, even if an approved remediation work plan or remedial action report had been submitted to DEP.

In some instances, sites where the remediation has been completed can be reopened to address subsequently promulgated order of magnitude remediation standards. The DEP requires the person responsible for the remediation to conduct an "order of magnitude" evaluation for completed remediation sites in two circumstances:

- For remediation sites that have been completed in reliance on engineering and/or institutional controls, the order of magnitude evaluation is required as part of a biennial certification that is completed to confirm the engineering and institutional controls are being properly maintained and continue to be protective of public health and safety and of the environment.
- For remediation sites that have been completed without reliance on engineering and/or institutional controls, the order of magnitude evaluation is required whenever the site “re-enters” DEP’s Site Remediation Program, such as when an industrial property is sold, triggering a review under New Jersey’s Industrial Site Recovery Act (ISRA).

Other Proposed Changes

If finalized, the proposal will require practitioners to adapt to some changes in familiar terminology. For example, "practical quantitation limit" would be replaced by "reporting limit." "Vapor intrusion screening levels" would become "soil remediation standards for inhalation exposure pathway." The DEP would also have to update its existing technical guidance and develop new guidance to adapt to the multitude of changes.