



EPA Issues New Contaminated Sediments Guidance

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Earlier this year, EPA released revised guidance for remediation of contaminated sediments at sites being addressed by EPA under CERCLA (the “New Sediment Guidance”). The guidance identifies six key clarifications to EPA remedial action policies used to characterize, evaluate, and implement response actions for sediment cleanups. The New Sediment Guidance changes how industry will be required to investigate and remediate contaminated sediments in the following respects:

1. Early Action

The New Sediment Guidance requires sediment projects to incorporate “early or interim corrective measures” before the sediment contamination is fully characterized:

Even before the sediment at a site is well characterized, if risk is obvious, it may be very important to begin to control significant ongoing land-based sources. It may also be appropriate to take other early or interim actions followed by a period of monitoring, before deciding on a final remedy.

New Sediment Guidance at p. 3. There is no direction given on how to determine what risks are “obvious” or guidance on how much characterization is required prior to beginning early or interim actions. Instead, EPA recommends its regional offices evaluate site data early “to determine if there are opportunities to reduce...unacceptable human...and environmental exposure and risk through use of early actions.” This approach could prove costly for regulated entities when data are not fully developed; there is a risk cleanup actions will be unnecessary and duplicative.

2. Support Alternatives with Early Data

The New Sediment Guidance encourages collection of data early in the assessment process. For example, it states that “due to the long-time frame often needed to collect data to evaluate Monitored Natural Recovery (“MNR”) as a remedial option,” facilities should be directed to collect data “as soon as possible.” Where bioaccumulative toxics are involved, evaluation of background levels and potential for “recontamination” must also be evaluated. This renewed effort to collect early data may also increase costs for sediment investigations.

3. Assess Risks from Submerged Sediments

EPA encourages states and EPA regions to require potentially responsible parties (PRP) to review risks associated with exposure to submerged sediments. Prior guidance required EPA regions to evaluate health risks resulting from “direct contact with sediment.” The New Sediment Guidance expands the

analysis to buried contaminants by re-defining dermal contact:

Direct Contact (dermal exposure) with sediments may be particularly important in areas where swimming or wading may occur, including contact to submerged sediment, and therefore, is an important exposure particularly to evaluate at contaminated sediments sites.

New Sediment Guidance at p. 5. This means companies required to investigate sediments will be forced to broaden receptors affected by a site release, increasing scope and costs of cleanups.

4. Collect Ecological Data

The New Sediment Guidance requires companies to study impacted sediments for ecological toxicity as a whole, not just concentrations of contaminants known to be associated with the site. For the first time, EPA regions are required to design “site specific sediment toxicity tests” to evaluate holistic effects of known and unknown contaminants on the entire ecosystem present at the site. This new approach may result in companies being required to address contaminants in sediments not associated with the site.

5. Monitoring Endpoints

The NCP simply requires PRPs to “[e]stablish remedial action objectives specifying contaminants and media of concern, potential exposure pathways, and remediation goals.” 40 CFR 300.430 (e)(2)(i). The New Sediment Guidance says remedial action objectives (RAOs) must also provide “timeframes for achieving the [RAO]” and conditions expected to exist when the RAO is met. To accomplish this, the New Sediment Guidance requires that RAOs include “quantitative... conditions” such as fish tissue and sediment concentrations expected to be achieved as part of the cleanups. The RAOs will be enforced through fish tissue monitoring, even if there are multiple unrelated sources for contaminants, which can result in duplicative and false data.

6. Collaborate with Clean Water Act Programs

The New Sediment Guidance encourages close coordination between the Superfund and Clean Water Act programs regarding contaminated sediments. “For example, permits and other actions taken under CWA authority could reduce the risks of sediment remedy recontamination.” The New Sediment Guidance goes on to state that information gathered during Superfund cleanups “can [also] help support CWA program[s] in defining and addressing areas of ongoing recontamination” through limits in NPDES permits, impaired water designations, TMDL development, or long-term monitoring.

Moreover, Section 10 of the Rivers and Harbors Act prohibits “the creation of any obstruction” to navigation in Waters of the United States. The New Sediment Guidance notes that remedies for sediment remediation, such as caps, may violate Section 10 by obstructing navigation. To address this, “[i]n developing and evaluating remedial alternatives...for a waterway with an authorized navigation channel, [EPA will] determine whether a Superfund response action within the boundaries of a federal navigation channel may create an obstruction...” That means caps may have to be modified or perhaps not used.

These six key items are now final guidance at EPA. Regional offices are to consider them in the preparation of Remedial Investigation/Feasibility Studies and Records of Decision.

Remediating Contaminated Sediments Sites – Clarification of Several Key Remedial Investigation/Feasibility Study and Risk Management Recommendations, and Updated Contaminated Sediment Technical Advisory Group Operating Procedures, Office of Land and Emergency Management, Directive No. 9200.1-130 (Jan. 9, 2017).

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