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MEMORANDUM

SUBJECT: Use of Early Actions at Superfund National Priorities List Sites and Sites with Superfund Alternative Approach Agreements

FROM: *for* James E. Woolford, Director *James E. Woolford*
Office of Superfund Remediation and Technology Innovation

TO: Superfund National Program Managers, Regions 1-10
Superfund Branch Chiefs, Region 1-10
Regional Superfund and Technology Liaisons, Regions 1-10
Regional Counsels, Region 1-10

PURPOSE

The purpose of this memorandum is to further the use of early actions at sites on the Superfund National Priorities List (NPL) and at sites with Superfund Alternative Approach (SAA) agreements consistent with the expectations in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).¹ Early actions include non-time-critical removal actions and early remedial actions (either interim or final) selected before completion of a remedial investigation (RI) and feasibility study (FS) for a given operable unit (OU). Such actions facilitate site cleanup by addressing immediate risks to human health and the environment or by controlling migration of contaminated media. Emergency or time-critical removal actions may also be appropriate as "early actions;" however, this memorandum does not address their use.

This memorandum also encourages the consideration of early action as part of an overall site strategy. The Superfund program has long encouraged the use of "strategic planning to identify the optimal set and sequence of actions necessary to address the site problems."² Such actions may include, as appropriate, early actions.

¹ "Sites should generally be remediated in operable units when early actions are necessary or appropriate to achieve significant risk reduction quickly, when phased analysis and response is necessary or appropriate given the size or complexity of the site, or to expedite the completion of total site cleanup." NCP §300.430(a)(1)(ii)(A)

² Preamble to the NCP, 55 Fed. Reg. 8706, March 8, 1990

While this memorandum focuses on early actions (i.e., before RI/FS completion), we continue to support appropriate use of interim actions after RI/FS completion. The memo also encourages applying the principle of early action – taking actions at the point that sufficient information is available to support a response to mitigate risk or limit contaminant migration – to other remedial phases.

In its July 2017 report, the U.S. Environmental Protection Agency (EPA) Superfund Task Force recommended the use of early actions to improve and to accelerate the Superfund cleanup process.³ Adaptive management⁴ and smart scoping⁵ are related and complementary practices to early actions.

This document does not substitute or supersede NCP regulations, and it is not a regulation itself. Thus, it does not impose legally binding requirements on EPA, states or the regulated community and may not apply to a specific situation. EPA decisions will be based on appropriate statutory and regulatory requirements, and EPA decision-makers retain the discretion to adopt differing approaches on a case-by-case basis.

BACKGROUND

Early actions are expected to achieve significant risk reduction,⁶ to address immediate risks to human health and the environment,⁷ or to control migration of contamination and are, by definition, selected before the RI/FS for the site or OU is completed.⁸ Early actions can also support reuse of a portion of the site. An early action using remedial authority may be interim or final. For the purpose of this memorandum, a non-time critical removal action (NTCRA) would generally be considered an early action under removal authority.

To support an early remedial action (interim or final), the response decision should be documented with sufficient supporting information to demonstrate the potential for risk and the need to take action (the “basis for action”).⁹ The interim action generally should not preclude the implementation of the subsequent final action.¹⁰ An interim or final record of decision (ROD) for an early remedial action typically uses data from a focused FS or an ongoing RI/FS. The ROD documents the problem warranting action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and concisely analyzes remedial alternatives. An

³ Superfund Task Force Recommendations, July 25, 2017 [<https://semspub.epa.gov/src/document/HQ/100000339>]

⁴ Superfund Task Force Recommendation #3: Broaden the Use of Adaptive Management, OLEM 9200.3-120, July 3, 2018 [<https://semspub.epa.gov/src/document/11/100001630>]

⁵ Smart Scoping for Environmental Investigations Technical Guide, November 2018 [<https://semspub.epa.gov/src/document/11/100001799>]

⁶ NCP §300.430(a)(1)(ii)(A)

⁷ NCP §300.415(b)(5)(i)

⁸ USEPA, A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents, July 1999 [<https://semspub.epa.gov/src/document/HQ/500009392>]

⁹ USEPA, Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions, April 22, 1991 [<https://www.epa.gov/sites/production/files/2015-11/documents/baseline.pdf>]

¹⁰ NCP §300.430(a)(1)(ii)(B)

interim remedial action is typically followed by a final action that fully addresses the scope of the risks posed by the releases.¹¹

EPA may also take early action using NTCRA authority. Under CERCLA, removal actions include:

...the cleanup or removal of released hazardous substances from the environment, such actions as may be necessary . . . in the event of the threat of release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release.¹²

When a planning period of at least six months is available, an engineering evaluation/cost analysis (EE/CA) should be conducted¹³ and authorized with an approval memorandum. The approval decision is documented in an action memorandum, which also explains how the NTCRA contributes to, or is at least consistent with, the permanent remedy. A NTCRA is typically followed by a final ROD at an NPL site and at sites with SAA agreements.

Remedial project managers (and on-scene coordinators, as appropriate) are encouraged to consider opportunities for early action as part of an overall sitewide cleanup strategy using the NCP's site management planning principles. [See Box.¹⁴] A sitewide cleanup strategy is a dynamic plan that guides overall prioritization for taking actions at a site. Actions are to be implemented as soon as site data and information make it possible to do so.¹⁵ The strategy is developed at the beginning of the remedial process for each NPL site or site using SAA and updated to account for site progress, new information and changing site conditions. A sitewide cleanup strategy also ensures that OU remedies, including interim actions, are consistent with and support implementation of the expected final remedy. The Office of Superfund Remediation and Technology Innovation (OSRTI) plans to pilot a template for a sitewide cleanup strategy.

Site management planning is a dynamic, ongoing, and informal strategic planning effort that generally starts as soon as sites are proposed for inclusion on the NPL and continues through the RI/FS and remedy selection process and the remedial design and remedial action phases, to deletion from the NPL.

IMPLEMENTATION

To ensure that the Agency considers and implements, as appropriate, early actions at Superfund sites as part of the overall site cleanup approach, EPA remedial project managers (and on-scene

¹¹ USEPA, A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents, July 1999 [<https://semispub.epa.gov/src/document/HQ/500009392>]

¹² CERCLA, as amended by SARA, §101(23)

¹³ NCP §300.415(b)(4)

¹⁴ Preamble to the NCP, 55 Fed. Reg. 8706, March 8, 1990

¹⁵ NCP §300.415(a)(1)

coordinators, as appropriate) should include an evaluation of the opportunity for early action in: (1) the sitewide cleanup strategy; (2) adaptive management plans; and (3) smart scoping activities for both fund-lead and enforcement-lead RI/FSSs.

In particular, EPA expects to consider early actions to provide expeditious risk reduction and limit contaminant migration. In general, these actions can be used to:

- Address current exposure (e.g., alternative water supplies, mitigation of vapor intrusion);
- Take advantage of an opportunity to significantly reduce risk and threats quickly (e.g., removing hot spots of contamination, drums and tanks);
- Prevent further migration of contamination (e.g., source remediation or hydraulic containment of a plume while a final groundwater remedy is developed); or
- Facilitate re-use or all or portions of the site by identifying and addressing related risks quickly.

Early actions are particularly advantageous for complex sites, such as sediment, mining and some groundwater sites, where EPA anticipates a lengthy timeframe for what is typically multiple RI/FS, RD and RAs. EPA also expects the appropriate use of interim actions and application of the principle of early action in other remedial phases. For example, during remedial design, response actions may be appropriate for certain media or areas, even while the overall design is ongoing.

EPA bases site-specific decisions concerning the use of removal or remedial authority on the NCP criteria, time sensitivity, complexity and cost (e.g., the statutory time and cost limitations on removal actions and the criteria for waiving those limitations; and availability of resources).¹⁶ Early actions at enforcement-lead sites may use removal or remedial authority, as appropriate. For fund-financed NPL sites, early actions are usually implemented under remedial authority and documented in a ROD. While early actions may also be appropriate at federal facility sites, their usage should be consistent with authority provided the lead agency under CERCLA and Executive Order 12580, as well as CERCLA section 120 federal facility agreements.

NEXT STEPS

Regional offices are expected to evaluate opportunities for early actions as an element of sitewide planning activities. To support regional staff, OSRTI intends to draft a template for a sitewide cleanup strategy. OSRTI also plans to publish case studies and conduct webinars documenting successful early actions, as well as enhance training under the CERCLA Education Center.

If there are any questions concerning the use of early actions, please contact your regional coordinator in OSRTI and the Office of Site Remediation and Enforcement for private sites and in the Federal Facilities Restoration and Reuse Office for federal facilities.

¹⁶ Preamble to the NCP, 55 Fed. Reg. 8704, March 8, 1990

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