State Involvement in Five-Year Reviews at Federal Facilities

FINAL REPORT

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Remediation and Reuse Focus Group
Federal Facilities Research Center

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ASTSWMO is an organization supporting the environmental agencies of the States and Territories (States). ASTSWMO’s mission is to enhance and promote effective State and Territorial programs and to affect relevant national policies for waste and materials management, environmentally sustainable practices, and environmental restoration. The mission of the Remediation and Reuse Focus Group is to identify and investigate issues arising from the remediation, reuse, and long-term management of federal facilities. This includes researching and developing resource documents, issue papers, and other tools on the implementation of alternative or innovative remediation policies and strategies; site closeout and transfer; reuse and redevelopment of federal facilities; and long-term stewardship.

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I. INTRODUCTION

As more federal facility cleanups reach Records of Decision (RODs) there will be an increase in five-year reviews. At National Priority List (NPL) sites, there is typically a Federal Facilities Agreement (FFA) or other agreement governing the States’ role in reviewing documents related to the cleanup, including the five-year review. At non-NPL federal facilities the States’ role in the five-year review process can be limited to reviewing and commenting on the five-year review document because no site-specific agreements have been made with the lead federal agency in charge of the remedial work. Without a site-specific agreement State comments and recommendations on five-year reviews may not be considered by the lead federal agency. This paper highlights States’ involvement with five-year reviews and steps States can take to ensure their comments and recommendations are addressed.

II. BACKGROUND

Five-year reviews are required by statute if a remedy is chosen that “results in any hazardous substance, pollutants or contaminants remaining at the site”, pursuant to section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986, and by regulation in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). According to the U.S. Environmental Protection Agency (EPA), the purpose of the five-year review is to evaluate the implementation and performance of the remedy to determine if the remedy is or will be protective of human health and the environment.

At NPL federal facilities, the federal facility, the EPA, and, usually, the State enter into a FFA. The FFA designates responsibilities of all parties. CERCLA section 121(c) provides that the President makes the five-year review determination if the President selects a remedial action. At NPL and non-NPL federal facilities, Executive Order 12580 delegates to the heads of executive departments and agencies the lead in five-year review determinations at facilities under their jurisdiction or control, or where the federal facility is the sole source of the release.

EPA has developed several policies and guidance documents on the subject of five-year reviews that are available on their website at: https://www.epa.gov/superfund/writing-five-year-reviews-superfund-sites. Several of these resources are included in Appendix A.

III. ASSESSING THE PROTECTIVENESS OF THE REMEDY

The goal of the five-year review is to evaluate the implementation and performance of the selected remedy and to ensure that the remedy chosen for a site remains protective of human health and the environment. EPA guidance suggests that the five-year review include a technical assessment of the remedy that answers the following three questions:
1. Is the remedy functioning as intended?
2. Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives still valid?
3. Has any other information come to light that could call into question the protectiveness of the remedy?

There are several common issues that arise during the States’ reviews of each question.

Question A. Is the remedy functioning as intended?

To determine whether a remedy is functioning as intended, three items need to be evaluated: remedial action performance; system operations/operations and maintenance of the system; and implementation of institutional controls (ICs) and land use controls (LUCs).

CERCLA requires the President (lead federal agency) to review the protectiveness of a remedial action five-years after the initiation of remedial action. In some circumstances, the remedy will not be fully implemented at this point, and thus a State concern is how to address this situation in the five-year review. If only part of the remedy has been implemented, then the remedy as a whole should be identified as will be protective or protectiveness deferred. Most often this arises when ICs or LUCs are a required component of the selected remedy but they have not been implemented.

Question B. Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives still valid?

To answer this question, the following needs to be evaluated to determine if the remedy is still protective: changes in applicable or relevant and appropriate requirements (ARARs) and TBCs (to-be-considered); changes in toxicity and other contaminant characteristics; changes in risk assessment methods; and changes in exposure pathways. If the ARARs, TBCs, toxicity/contaminant characteristics, or risk assessment methods have changed since the ROD was finalized or the last five-year review was completed, the five-year review should include discussion and justification as to why the remedy remains protective (or is no longer protective) in light of these changes. This discussion may conclude with the decision that the risk assessment needs to be re-done to determine whether the remedial goals are still protective.

The evaluation of changes in exposure pathways should also consider routes of exposure to receptors that have been newly identified or not evaluated previously, such as vapor intrusion. If vapor intrusion was not considered in the original risk assessment, but site conditions indicate that there may be a potential for vapor intrusion, then the five-year review should analyze if the vapor intrusion pathway affects remedy protectiveness. Ideally, such issues would be identified well in advance of the five-year review and they could be addressed in the report. If, on the other hand, issues are identified at the time the report is being written, they should be included in the “Issues and Recommendations” section of the report along with a target date for resolving the issue and designation of the agency responsible for implementation.
Sites should also be analyzed to determine whether newly identified contaminants, such as emerging contaminants, exist and whether there is the possibility for complete exposure pathways to the contaminant(s) at the site. If there is the possibility for exposure to newly identified contaminants, the five-year review may include a recommendation for further investigation depending on the site circumstances.

**Question C. Has any other information come to light that could call into question the protectiveness of the remedy?**

Question C is intended to capture any other information, not addressed in questions A and B, that may affect the protectiveness of the remedy. Considerations for answering question C include impacts not apparent during remedy selection (e.g., more frequent flooding) and ecological risks that have not been adequately addressed and there are no plans to address them in a subsequent remedial action.

Note that deficiencies or issues related to Questions A, B, and C are often addressed in the “Recommendations” section of the five-year review, which lists a recommended action and provides a milestone for its achievement. A major issue that often arises from the State’s review is that recommendations contained in previous five-year reviews are not addressed. As a result, the current five-year review has the same unresolved issues and recommendations being carried forward in addition to possible new ones.

**IV. RESOLUTION OF STATE CONCERNS WITH THE FIVE-YEAR REVIEW**

States are encouraged to maintain productive working relationships with lead federal agencies and identify concerns with the five-year reviews as early as possible. If State comments and recommendations are not addressed by lead federal agency, the State should first attempt to resolve any disagreements informally at the project level. There are times, however, where the parties cannot reach consensus and States may choose other resolutions. Paths to resolution of State concerns with the five-year review are provided below.

**A. NPL Federal Facility Sites**

For NPL sites, EPA retains responsibility for determining the protectiveness of the remedy. When reviewing five-year reviews at NPL federal facility sites, EPA can either concur with the other federal agency’s “protectiveness determination”, or EPA may make an independent finding. If EPA chooses to make an independent finding, efforts should be made to notify the state and other federal agencies as early as possible. Once the independent finding is completed, EPA will then issue a letter deferring the protectiveness statement until further information is obtained or issue a “short-term protectiveness” or “not protectiveness” statement to the other federal agency. When a protectiveness deferred determination is made,

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1 It is important to make a distinction between issues that affect current or future protectiveness, and issues that should be documented and tracked but that do not affect protectiveness.
the issues and recommendations and the protectiveness statement generally provide the actions needed to collect the missing information and the timeframe anticipated to complete these actions. Once the actions have been completed, a Five-Year Review Addendum is filed. As a party to the FFA, the State will want to work with the federal facility through this process to address State comments.

A protectiveness determination of “not protective” is generally used when the answers to Questions A, B, and C conclude that the human and/or ecological risks are not under control. Should EPA make an independent finding where EPA is not able to concur with the Protectiveness Statement of the five-year review, EPA will issue a letter of “non-concurrence” to the other federal agency and request next steps and response from the federal agency. Again, as an FFA party, the State should be engaged with EPA in this process to address State concerns with the protectiveness determination or any other part of the five-year review.¹

Depending on the FFA requirements, EPA and/or the State may initiate the FFA dispute resolution process if the FFA parties cannot reach agreement on issues such as data gap information, the recommendations, or follow-up actions scheduled to correct deficiencies in the five-year review.

Dispute Resolution

FFAs designate a list of primary and secondary documents for regulatory review. Primary documents include documents such as the remedial investigation/feasibility study (RI/FS), ROD, or remedial design/remedial action (RD/RA). Secondary documents include documents that are often discrete portions of the primary documents and are typically feeder documents. Only the primary documents identified in the FFA are subject to the dispute resolution provisions. A secondary document may only be disputed at the time the corresponding draft final primary document is issued. In older FFAs, five-year reviews are often referred to as “Periodic Reviews” and are almost universally either classified as secondary documents or are not listed as either primary or secondary documents. In the model FFA³, while five-year reviews are not listed as a primary document, it states that disputes regarding the need for additional action or modification to a remedial action is subject to dispute.

Despite limitations in non-model FFAs, there may be a few ways to bring a five-year review into dispute even if it is not listed as a primary or secondary document. First, five-year review reports are frequently a term or condition of the FFA which may make them subject to dispute because most FFAs have a specific section dedicated to periodic (or five-year) reviews. Second, it may be possible to link the five-year review results to a primary document for dispute resolution purposes. For example, if a ROD has as a part of the remedy a requirement for a

¹ Program Priorities for Federal Facility Five-Year Review, EPA Memorandum dated August 1, 2011, provides additional information on EPA’s role on NPL federal facility five-year reviews, including a road map to completing five-year reviews, scenario flowcharts, and a checklist of information that should be included in concurrence and non-concurrence letters.

³ The Model FFA is available at: https://www.denix.osd.mil/references/dod/policy-guidance/epa-and-department-of-the-army-agreement/
five-year review, States could dispute the adequacy of the five-year review through the ROD (failure to adequately implement a part of the remedy in the ROD). As another example, RODs, which are primary documents under the FFAs, contain Remedial Action Objectives (RAOs) that detail the goals of the remedy to protect human health and the environment. If there is an aspect of the five-year review that calls into question the protectiveness of the remedy as it relates to meeting RAOs, under the FFA the State could seek a modification to the ROD, a final primary document, to ensure the remedy is protective. Below are some examples based on the results of a five-year review where the current remedy may not be meeting the RAOs of a primary document under the FFA:

- Vapor intrusion concerns resulting from plume migration;
- New contaminant of concern not previously addressed by the ROD;
- Evaluation for multiple contaminants of concern or multiple exposure pathways;
- A change in clean-up standards where the former cleanup standard is no longer protective based on new toxicity information; and
- The failure to implement institutional controls required by the ROD.

Resolutions to the examples above may include the following additions to the five-year review:

- Conduct a vapor intrusion study;
- Develop a Focused RI/FS for an emerging/new contaminant of concern;
- Rerun risk model to account for multiple contaminants or exposure pathways;
- Develop an Explanation of Significant Differences document; and
- Amend the ROD to address the findings of the five-year review.

The resolution path for many of these examples is going to be based on site specific information and different State requirements, so there is no one size fits all approach. Whatever the resolution is, it should be added to the five-year review recommendation table with a target date for completing if it affects protectiveness.

B. Non-NPL Federal Facility Sites

For non-NPL federal facilities, there is no CERCLA requirement for an FFA, and most States do not have a site-specific agreement with the lead federal agency in charge of the remedial actions. The lead federal agency is encouraged to seek EPA, State, and/or tribal participation and comment throughout the five-year review process to ensure regulatory requirements are being met, and any discrepancies can be discussed and addressed as early as possible. Because there is no FFA, there are no primary documents subject to dispute resolution, such as the RI/FS or the ROD. For DoD facilities, if the State does not agree with the findings and protectiveness determinations made in the five-year review and the State’s comments cannot be resolved
informally, the State may be able to invoke dispute resolution as provided in the Defense and State Memorandum of Agreement (DSMOA). The DSMOA dispute resolution process is meant to provide a mechanism to settle disagreements between DoD Components and the State without the need for regulatory enforcement or litigation which can be costly, delay remedial activities, and damage working relationships. Typically, DSMOA disputes are focused on cost reimbursement issues; however, if no separate site-specific agreement exists, the dispute resolution procedures in the DSMOA will govern for disputes arising from any issues for services specifically listed within the DSMOA. This includes technical review, comments and recommendations on all documents or data required to be submitted to the State, along with ARARs, public participation, and activities associated with the facilitation of environmentally sound reuse of closing bases.

It is important to note that a threshold requirement for triggering dispute resolution under DSMOA is making sure that the site is included on Attachment A and in the Cooperative Agreement Joint Execution Plans (JEPs), which are developed by both the State and each federal facility. The five-year review must be included in the JEP to be subject to the terms of the DSMOA formal dispute resolution process.

The DSMOA contains a three-tiered approach to dispute resolution, which attempts to settle disagreements between the State and federal facility at the lowest possible level (Figure 1). If the dispute cannot be resolved at lower levels, it progresses through a tiered process,

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4 The DSMOA provides states with a mechanism for getting reimbursed for their review of documents and other services provided during cleanup activities at federal facilities for both NPL and non-NPL sites, as long as those sites are listed on attachment a of the DSMOA cooperative agreement.
concluding at the Governor and Secretary of the Service Component/Secretary of Defense level. After conferring with the Governor, the Service Secretary will provide final resolution to the dispute.\(^5\)

When a five-year review is conducted on a non-DoD site and there is no federal or State site-specific agreement with a formal dispute resolution mechanism, or formal dispute resolution does not lead to agreement, then methods of disputing the protectiveness findings of a five-year review are more limited. The first course of action should be to attempt to resolve comments through a comment resolution meeting. In the event the parties are unable to resolve comments through discussion and no other cooperative course of action can be initiated, the State could explore initiating a CERCLA citizens suit under §310 (42 U.S.C. §9659) if there is a CERCLA violation.

V. CONCLUSION

As federal facility cleanups progress to closure, five-year review reports will become a more prevalent component of document reviews conducted by States. At NPL sites, the parties typically enter into a three-party FFA for the consideration of State comments on five-year reviews. At non-NPL federal facilities the States’ role in the five-year review process can be limited to reviewing and commenting on the five-year review document because no site-specific agreements have been made with the lead federal agency.

States are encouraged to maintain a productive working relationship with lead federal agencies and identify issues with protectiveness of a remedy as early as possible. States should first attempt to resolve any disagreements informally at the project level if their comments and recommendations are not addressed by the lead federal agency. If States and lead federal agencies disagree on protectiveness determinations and follow up actions at federal facility sites, States may utilize the established dispute resolution processes identified in this report. If dispute resolution is not possible, consider turning to citizens’ suits to ensure the remedy remains protective of human health and the environment.

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\(^5\) For more information about DSMOAs and the DSMOA dispute resolution process, please see the DSMOA Cooperative Agreement Program Guide, "Working Together to Achieve Cleanup: A Guide to the Cooperative Agreement Process.”
APPENDIX A: RESOURCES

U.S. EPA


• Five-Year Review of Federal Facility Cleanups – Community Training Tools. 

• FFRRO Five Year Review Tools, Archived Training, March 30, 2017. Hosted by CLU-IN: 
  https://clu-in.org/conf/tio/FYRTools_033017/

Department of Defense

• DoD Instruction 4715.07, Defense Environmental Restoration Program. May 21, 2013. 


• U.S. Navy: 
  
  o Department of Navy and Marine Corps Policy for Conducting CERCLA Five-Year Reviews. June 7, 2011.
