

5.0 CERCLA/RCRA INTEGRATION

This site closeout guide lists separately the closeout requirements for sites addressed under RCRA (Section 4) and those addressed under CERCLA (Section 3). RCRA traditionally applies primarily to active waste management facilities whereas CERCLA was established by Congress to address inactive and abandoned sites. However, certain amendments added provisions to RCRA that enable inactive solid waste management units to be addressed through a “corrective action” program. In addition, CERCLA §120 and Executive Order 12580 establish certain unique requirements associated with hazardous waste cleanup of Federal facilities, including the requirements to conduct all Federal cleanups in a manner consistent with CERCLA. Due to the overlap between these two regulatory programs, integration and clarification of the implementation procedures are required. In addition, the lead regulatory authority can differ in the two programs, with authorized states taking the lead under RCRA and either the state or EPA (for NPL Sites) assuming the lead role under CERCLA.

In general, cleanups under RCRA corrective action or CERCLA can satisfy the requirements of both programs. However, since the Defense Environmental Restoration Program requires restoration activities to be conducted in a manner consistent with CERCLA, RCRA corrective action requirements will generally be satisfied under CERCLA, with RCRA an “applicable or relevant and appropriate requirement” (ARAR). In most situations, remediation project managers should be able to conduct cleanup activities for all or part of a site under one program with the expectation that no further cleanup will be required under the other program. For example, when investigations or studies have been completed under one program, there should be no need to review or repeat those investigations or studies under another program. Similarly, a remedy that is acceptable under one program should meet the standards of the other. Some cleanup agreements (e.g., Federal Facility Agreements, FFAs) may define the integration of RCRA and CERCLA requirements. In the case of NPL sites, all cleanup must be conducted under CERCLA and the NCP.

While consolidating all requirements under one program (CERCLA) is typically the most efficient and desirable way to address overlapping cleanup requirements, in some cases, complete consolidation will not be appropriate and coordination between programs will be required. The goal of any approach to coordination of remedial requirements should be to avoid duplication of effort (including oversight) and second-guessing of remedial decisions. Restoration project teams are encouraged to be creative and focus on the most efficient path to the desired environmental result as they craft strategies for coordination of cleanup requirements under RCRA and CERCLA, and between Federal and state/tribal cleanup programs.

To that end, Table 5.0 summarizes and compares the terminology used in the CERCLA and RCRA regulatory frameworks with the Defense Environmental Restoration Program phases and milestones. The intent of this table is to foster improved communication among practitioners within the two frameworks and to illustrate the specific parallels that exist between the two. With this information, and a close examination of the specific requirements at an installation, a restoration project team should be able to realize improved coordination and integration of remedial requirements.

In many cases there is not a straightforward relationship between the EPA and DoD terms. Much of EPA’s current guidance is not phrased in terminology applicable to a Federal facility (i.e., directed toward fund-lead and PRP sites). Therefore, it is important to exercise care in the application and usage of EPA’s terminology in the context of a DoD facility’s environmental restoration program.

Table 5.0 Comparison of DoD, RCRA, and CERCLA Phases, Milestones and Terminology

DoD IRP Phases/Milestones	EPA RCRA Phases/Milestones		EPA CERCLA Phases/Milestones
	Closure and Post- Closure Permits (Waste in Place)	Corrective Action	
<i>Source: Department of Defense Reporting Conventions (Restoration Management Information System; Management Guidance for DERP)</i>	<i>Source: 40 CFR Chapter I, Parts 260, 261, 262, 263, 264, 265 and 270</i> APPLIES TO REGULATED UNITS	<i>Source: RCRIS Data Element Dictionary, January 1995</i> APPLIES TO SOLID WASTE MANAGEMENT UNITS (COULD INCLUDE REGULATED UNITS)	<i>Sources: National Oil and Hazardous Substances Pollution Contingency Plan (NCP); EPA Reporting Guidance</i>
Site Discovery	Part A/Part B Permit Notification		Site Discovery
PA/SI Completion		RCRA Facility Assessment	Preliminary Assessment/Site Inspection Completion
		National Corrective Action Prioritization System (NCAPS)	Hazard Ranking System (HRS)
			National Priorities List (NPL)
Remedial Investigation (RI)	Closure Plan and Post-Closure Permit Application	RCRA Facility Investigation Imposed by Permit or Order	Remedial Investigation (RI)
Interim Remedial Action		Interim/Stabilization Measures	Interim Remedial Action (IRA)/ Early Action
Relative Risk Reduction			
Feasibility Study (FS)	Closure Plan	Corrective Action Plan (CAP), Corrective Measures Study (CMS)	Feasibility Study (FS)
			Public Comment
Record of Decision	Closure Plan Approval and Post Closure Permit Issuance	Statement of Basis/Corrective Action Decision (CAD)	Record of Decision
Remedial Design (RD)	Closure Plan Implementation and Groundwater Cleanup		Remedial Design (RD)
Remedial Action (RA)			Remedial Action Start
Remedial Action Construction (RA-C)		Corrective Measures Implementation Plan	Remedial Action Start through Completion
Remedy in Place (RIP)	Closure Certification	Certification of Remedy Completion or Construction Complete	Remedial Action Completion
Last Remedy in Place (LRIP)			NPL Site Construction Completion/ Preliminary Close Out Report [all OUs/entire installation]
Remedial Action Operation (RA-O)			Remedial Action (RA) or Operation & Maintenance (O&M) [depending on remedy]
Response Complete (RC)			Final RA Report [individual sites/OUs] or NPL Site Completion/Final Close Out Report [all OUs/entire installation]
			NPL Deletion
Long Term Monitoring	Post Closure Permit		Operation and Maintenance
	Terminate or Reissue 10 Year Post-Closure Permit		Five Year Review as needed
Site Closeout	Post-Closure Permit Expiration	Corrective Action Process Terminated	

As discussed in EPA's September 1996 memorandum, "**Coordination between RCRA Corrective Action and Closure and CERCLA Site Activities**" (available at the Site Closeout Web site, www.afbca.hq.af.mil/closeout), several approaches for coordination between programs at facilities subject to both RCRA and CERCLA are currently in use. It is important to note that options for coordination at Federal facilities subject to CERCLA §120 may differ from those at non-Federal facilities because of certain prescriptive requirements under §120. Current approaches that are in use include:

- *Craft CERCLA or RCRA decision documents so that cleanup responsibilities are clear.* CERCLA and RCRA decision documents do not have to require that the entire facility be cleaned up under one or the other program. For example, at some facilities being cleaned up under CERCLA, the RCRA units (regulated or solid waste) are physically distinct and could be addressed under RCRA. In these cases, the CERCLA decision documents can focus CERCLA activities on certain units or areas, and designate others for action under RCRA. When units or areas are deferred from RCRA to CERCLA, RCRA permits or orders can reference the CERCLA cleanup process and state that complying with the terms of the CERCLA requirements would satisfy the requirements of RCRA.
- *Establish timing sequences in RCRA and CERCLA decision documents.* RCRA and CERCLA decision documents can establish schedules, which allow the requirements for cleanup at all or part of a facility under one authority to be determined only after completion of an action under the other authority. For example, RCRA permits/orders can establish schedules of compliance which allow decisions on the necessity of corrective action to be made after completion of a CERCLA cleanup or a cleanup under a state/tribal authority. After the state or CERCLA response is carried out, there should be no need for further cleanup under RCRA and the RCRA permit/order could simply make that finding. Similarly, CERCLA or state/tribal cleanup program decision documents could delay review of units or areas that are being addressed under RCRA, with the expectation that no additional cleanup will need to be undertaken pending successful completion of the RCRA activities.

A disadvantage of this approach is that it contemplates subsequent review of cleanup by the deferring program, and creates uncertainty by raising the possibility that a second round of cleanup may be necessary. Therefore, EPA recommends that program implementers look first to approaches that divide responsibilities, as described above. A timing approach, however, may be most appropriate in certain circumstances, for example, where two different regulatory agencies are involved. Whenever a timing approach is used, the final review by the second program will generally be very streamlined. In conducting this review, there should be a strong presumption that the cleanup under the other program is adequate and that reconsidering the remedy should rarely be necessary. Note that under the Defense Environmental Restoration Program, all remedies must be consistent with CERCLA; as a result, it will generally be the case that RCRA corrective action requirements will be satisfied by a cleanup under CERCLA.

Agreements on coordination of cleanup programs should be fashioned to prevent revisiting of decisions and should be clearly incorporated and cross-referenced into existing or new agreements, permits or orders. This up-front coordination can require significant resources. Over the long-term, duplicative regulatory agency oversight will be reduced and cleanup efficiency will be enhanced.

Some of the most significant RCRA/CERCLA integration issues are associated with coordination of requirements for closure of RCRA regulated units with other cleanup activities. Currently, there are regulatory distinctions between requirements for closure of RCRA regulated units and other cleanup requirements (e.g., RCRA corrective action requirements). RCRA regulated units are subject to specific standards for operation, characterization of releases, groundwater corrective action and closure. Coordination of these standards with other remedial activities can be challenging.

There are several approaches program implementers can use to reduce inconsistency and duplication of effort when implementing RCRA closure requirements during CERCLA cleanups or RCRA corrective actions. These approaches are analogous to the options discussed above for coordination between cleanup programs. For

example, a cleanup plan for a CERCLA operable unit that physically encompasses a RCRA regulated unit could be structured to provide for concurrent compliance with CERCLA and the RCRA closure and post-closure requirements. In this example, the RCRA permit/order could cite the ongoing CERCLA cleanup, and incorporate the CERCLA requirements by reference. RCRA public participation requirements would have to be met for the permit/order to be issued; however, at many installations it may be possible to use a single process to meet this need under RCRA and CERCLA.

At some installations, inconsistent cleanup levels have been applied for removal and decontamination (“clean closure”) of regulated units and for installation-wide remediation under CERCLA or RCRA corrective action. Where this has happened, clean closure levels have been generally set at background levels while, at the same site, cleanup levels have been at higher, risk-based concentrations. To avoid inconsistency and to better coordinate between different regulatory programs, EPA encourages use of risk-based levels when developing clean closure standards (see Section 4.7).

Since almost all states oversee the closure/post-closure process and more than half implement RCRA corrective action, coordination of RCRA corrective action and closure will often be solely a state issue. However, if a state is not authorized for corrective action, or if a facility is subject to CERCLA as well as RCRA corrective action, close coordination between Federal and state agencies will be necessary. As discussed above, actual approaches to coordination or consolidation at any installation should be developed in consideration of installation-specific and community concerns.

5.1 Lead Regulatory Role

Under the Defense Environmental Restoration Program, CERCLA, the NCP, and Executive Order 12580, DoD is the lead agency for cleanup at its installations. For purposes of effective restoration program management, it is also important to identify a lead *regulatory* agency in order to streamline regulator oversight and coordination.

As stated in its **“Lead Regulator Policy for Cleanup Activities at Federal Facilities on the National Priorities List” (November 6, 1997)** (available at the Site Closeout Web site, www.afbca.hq.af.mil/closeout), EPA expects that for the foreseeable future, the resources for Federal and state oversight of cleanup at Federal facilities will remain relatively constant. The total workload for overseeing the work at contaminated Federal facility sites, however, is expected to increase. Therefore, it is becoming increasingly important to ensure that EPA and states maximize the impact of their respective limited resources. Because the states will increasingly play an important part in the cleanup program, it is essential that EPA and the states minimize their duplicative oversight efforts. Complex CERCLA/RCRA integration issues and concerns can be impacted by EPA’s “Lead Regulator Policy.” Therefore, the preceding guidance on CERCLA/RCRA integration should be consulted.

EPA endorses and encourages the identification of a single lead regulator to oversee the cleanup of Federal facility sites on the NPL. Through identification of a lead regulator, overseeing agencies should minimize, within the constraints of existing laws, multiple regulator review and comment, thereby reducing the number of redundant or competing oversight processes, such as reviewing response actions, that occur during cleanup. For purposes of EPA’s policy, a lead regulator is defined as the primary regulatory agency (i.e., EPA or the state) that oversees cleanup work at an operable unit, an area of contamination, or an NPL installation under the applicable regulatory framework. For instance, this approach would enable states to oversee sites on a Federal facility using a state program authorized under RCRA or other state cleanup authority provided that: (1) at a minimum the CERCLA process is integrated with the applicable RCRA or other state law process to satisfy the requirements of both statutes; and (2) the results are protective of human health and the environment (i.e., a remedy that can be approved by EPA for eventual deletion from the NPL).

To the extent permitted by law, possible streamlined oversight arrangements for cleanup may include, but need not be limited to: state-lead for appropriate portions of the installation using the state program authorized under RCRA, or the appropriate state hazardous waste cleanup law as oversight authority, or EPA-lead under CERCLA. At installations where the lead regulator policy is applied, if the state acts as the lead regulator, EPA's involvement is expected to be minimal. Except as otherwise required by CERCLA, EPA will rely on the state to do all regulator oversight work necessary to develop a recommended remedial alternative with which EPA can concur under CERCLA with minimal review. Where EPA is lead, state involvement would be expected to be minimal. For either scenario, the timing and extent of involvement is expected to be tailored to the installation-specific situation.

EPA, the state, and the DoD should discuss how the lead regulator policy would be applied at particular NPL Federal facilities. EPA and the state, in consultation with the Federal agency, should enter into a "lead regulator agreement." This agreement, and any funding allocation between EPA and the state, should be documented in a manner that the Region and state find most appropriate (i.e., Memorandum of Understanding (MOU), partnership agreement, consensus statement, interagency agreement, letter between agencies, etc.). The agreement can cover an arrangement that suits the Region's and state's particular needs, such as: statewide; facility by facility; or even operable unit by operable unit. It is important to keep in mind that some contamination, such as certain radioactive contaminants, cannot be addressed under RCRA authorities. Likewise, certain contaminants, such as petroleum, cannot be addressed under CERCLA authorities.

States are generally in a better position to assume a lead regulator role if the state has RCRA program authorization including corrective action or otherwise has authorities under a state law to oversee cleanup activities. For a state to be eligible to assume the lead regulator role, the state hazardous waste management or remedial program should meet certain general criteria regarding statutory and administrative authority, and program capability.

Additionally, while the Federal lead cleanup agency (DoD) has responsibility for providing community involvement under CERCLA, states, where they are the designated lead regulator, should work to promote input from communities in a manner that fosters community participation in decisions regarding response actions at installations. The state should take appropriate steps to ensure that the affected community and other affected parties (e.g., communities downstream from the installation, Natural Resource Trustees, etc.), as appropriate, are kept informed of any differences in timetables or criteria that may result from integrating the Federal CERCLA process with a state program authorized under RCRA or other state cleanup law process, and other information relating to the cleanup. Where EPA, the state, and DoD are entering into a lead regulator agreement that is not currently captured in an existing IAG, adequate public notice must be provided concerning the lead regulator agreement.

