

Slide 1



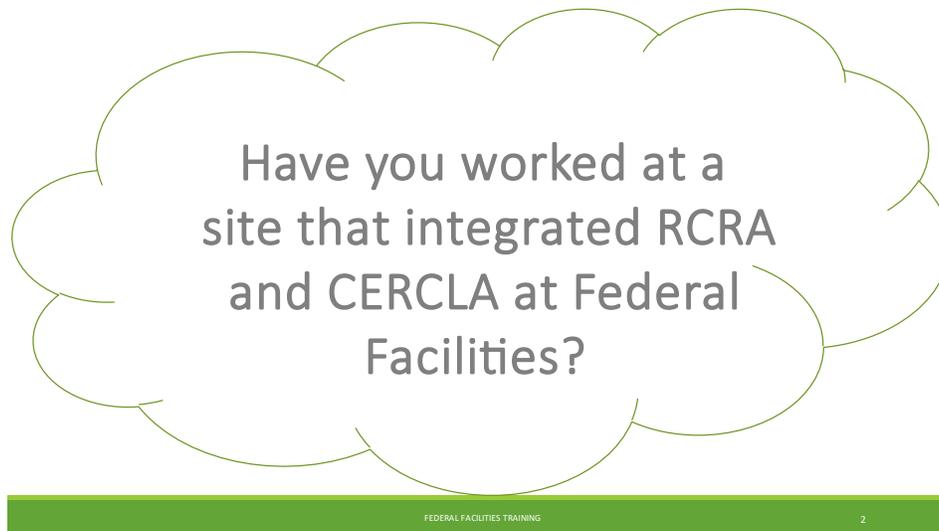
RCRA and CERCLA Integration at Federal Facilities

JULY 13, 2022
FEDERAL FACILITIES RESTORATION AND REUSE OFFICE

FEDERAL FACILITIES TRAINING 1

The purpose of this course is to discuss how the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) are used in tandem to achieve cleanup goals at Federal Facilities on the National Priorities List (NPL).

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Have you worked at a
site that integrated RCRA
and CERCLA at Federal
Facilities?

FEDERAL FACILITIES TRAINING 2

RCRA and CERCLA Integration at Federal Facilities
Federal Facilities Academy 2022

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Overview

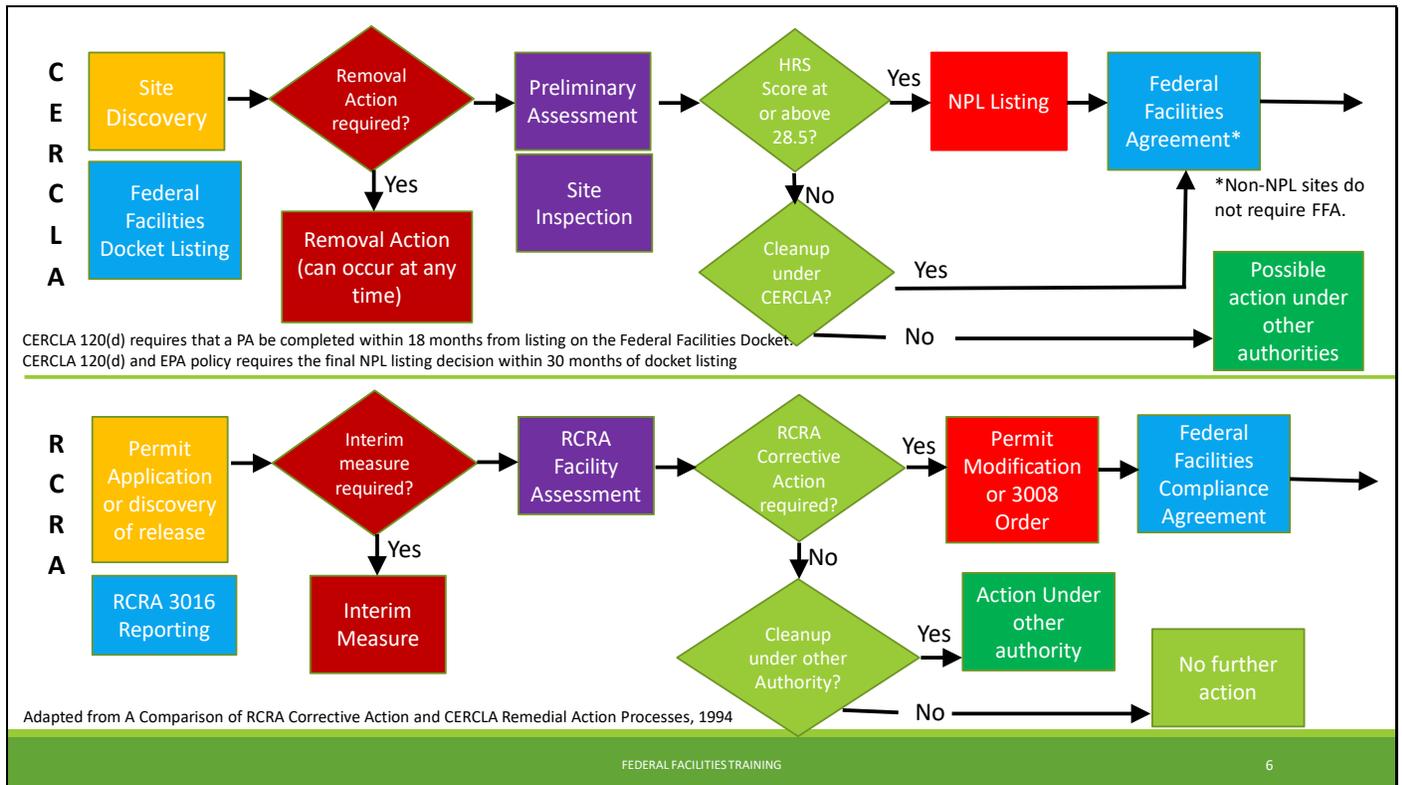
- Background information
- RCRA vs. CERCLA: A Legal Lesson
- Federal Facility Agreements (FFA) roles and responsibilities
- Existing Guidance on Coordination at Federal Facilities
- Case Studies



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FEDERAL FACILITIES TRAINING 3

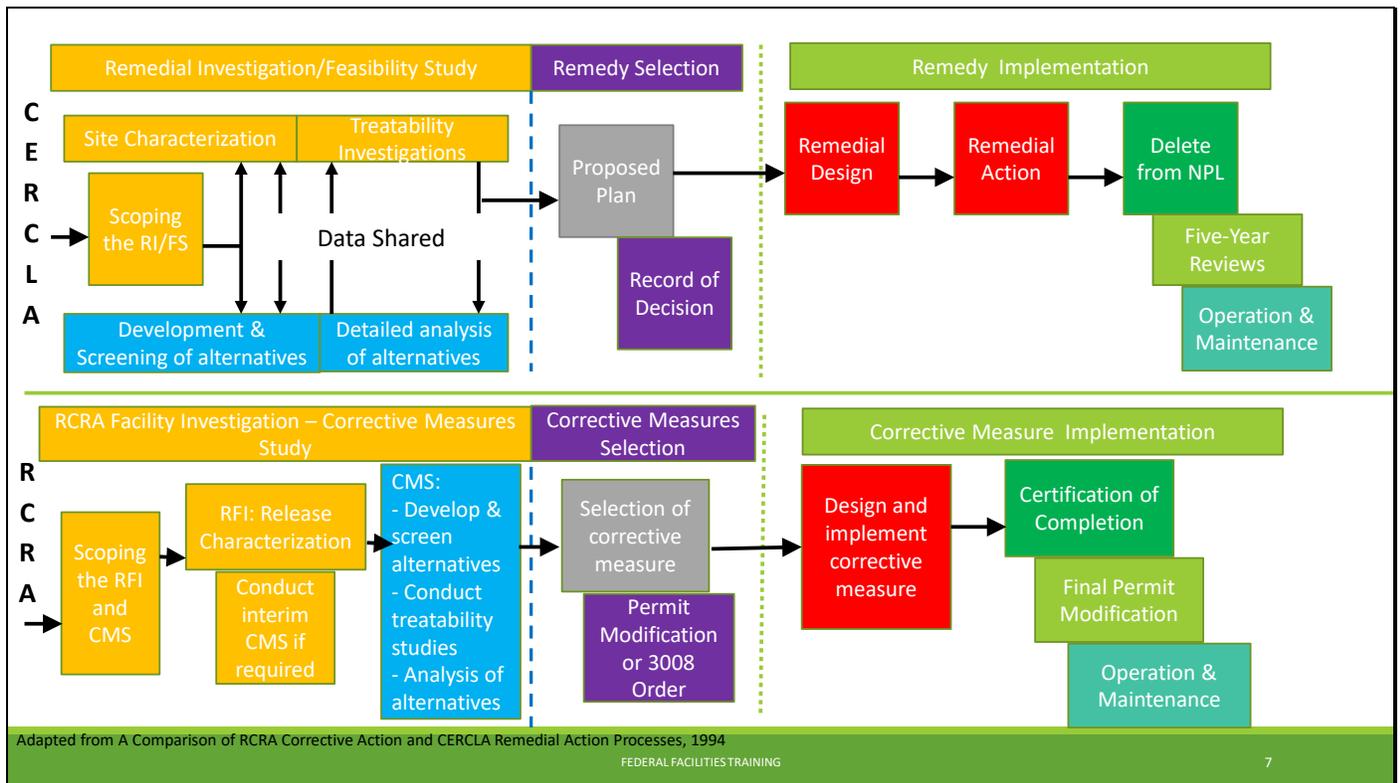
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This figure is adapted from the Department of Energy Guidance titled, “A Comparison of RCRA Corrective Action and CERCLA Remedial Action Processes” published in 1994. The figure presents an overview of RCRA Corrective Action and CERCLA Remedial Action.

Based on CERCLA, the NCP and E.O. No. 12580, Federal agencies, including Department of Defense (DOD) or Department of Energy (DOE), are the lead agency at their sites while EPA provides oversight in accordance with Federal Facility Agreements (FFAs). 40 CFR 300.5 states that the “lead agency” means the agency that provides the on-scene coordinator/remedial project manager (OSC/RPM) to plan and implement response actions under the NCP. In the case of a release of a hazardous substance, pollutant, or contaminant, where the release is on, or the sole release is from any facility or vessel under the jurisdiction, custody, or control of a Federal agency such as the Department of Defense (DOD) or Department of Energy (DOE), then DOD or DOE will be the lead agency.

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In addition to EPA, 44 states and territories are authorized to run the Corrective Action program. Rather than creating a rigid regulatory framework for corrective action, EPA developed guidance and policy documents to assist facilities conducting cleanups. Some of the resources are broad in scope, while others are more process or media specific. Corrective action is principally implemented through RCRA permits and orders. The corrective action program is a unique part of RCRA because there are no comprehensive cleanup regulations and it is primarily implemented through guidance. More information on corrective action programs is available at <https://www.epa.gov/hwcorrectiveactionsites/corrective-action-programs-around-nation>

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Apply Your Understanding

What is the main cause for disputes and a lack of integration between CERCLA and RCRA in determining how a site should be cleaned up?

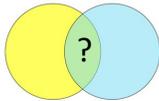
- A. CERCLA site managers are generally incorrect.
- B. CERCLA and RCRA are incompatible.
- C. Professional judgement.
- D. RCRA site managers are generally incorrect.



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RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)	COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)
<ul style="list-style-type: none"><input type="checkbox"/> Regulatory program<input type="checkbox"/> Approach to manage solid and hazardous waste at facilities that are currently in use<input type="checkbox"/> Includes corrective action for releases and past-practice sites<input type="checkbox"/> Regulates waste from "cradle-to-grave"	<ul style="list-style-type: none"><input type="checkbox"/> Response program<input type="checkbox"/> Focuses on the management and remediation of abandoned, non-operating sites with media contaminated with hazardous substances



What are some examples of overlap?

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RCRA was enacted in 1976 to address increasing problems from the United States' growing volume of municipal and industrial waste. It establishes a regulatory program, is relevant at existing and operating sites, and regulates waste from "cradle-to-grave" (i.e., generation, transportation, treatment, storage, and disposal of hazardous waste). It also allows for setting standards for groundwater monitoring, permitting, generator reporting, and permits. Corrective action is a program under RCRA that requires facilities that treat, store or dispose of hazardous wastes investigate and cleanup hazardous releases into soil, groundwater, surface water, and air. In 1984, Congress passed the Hazardous and Solid Waste Amendments, which

granted EPA expanded authority to require corrective action at permitted and non-permitted treatment, storage and disposal facilities (TSDFs).

CERCLA was established in 1980 in response to the threat of hazardous waste sites (Love Canal disaster in New York and Valley of the Drums in Kentucky). The Comprehensive Environmental Response, Compensation, and Liability Act -- otherwise known as CERCLA or Superfund -- provides a Federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. CERCLA as we know it now includes the Superfund Amendments and Reauthorization Act of 1986 (SARA).

Federal Facilities include sites listed on the NPL which have both operating facilities and past-practices sites. Operating facilities are regulated under RCRA while past-practice sites may be cleaned up under CERCLA or under RCRA corrective action.

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Examples of RCRA/CERCLA Overlap

- First step after discovery of a release, examine available data to see if emergency action is warranted.
- Allow for short-term measures to abate the immediate adverse effects of a release.
- Investigations and formal study of long-term cleanup options are conducted once an emergency has been addressed.
- Post-analyses, both provide the basis for the formal selection of a remedy.
- Common goal is to protect human health and the environment from hazardous waste.

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Other examples of overlap include:

- RCRA regulatory requirements are potential "Applicable or Relevant an Appropriate Requirements" (ARARs)
- CERCLA section 121(d)(3) states that all wastes shipped off-site for treatment, storage or disposal must be sent to an EPA "acceptable" facility. Acceptability requires a facility to be clear of violations of applicable federal or state requirements such as RCRA.
- Both have provisions allowing EPA to require persons contributing to an imminent hazard to take the necessary actions to cleanup releases.

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RCRA vs. CERCLA, A Legal Lesson

State of Colorado v. U.S. Dept. of the Army, 707 F. Supp. 1562 (D. Colo. 1989).

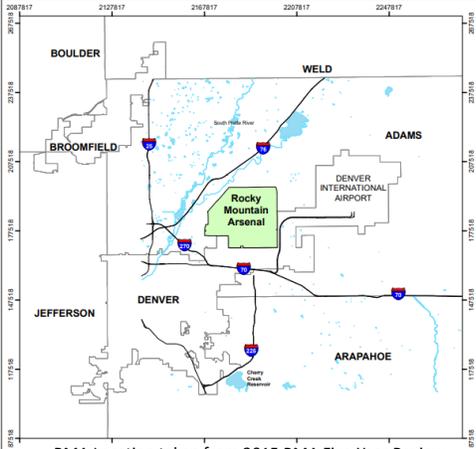
FEDERAL FACILITIES TRAINING 8

The following example is taken from the State of Colorado v. U.S. Dept. of the Army, 707 F. Supp. 1562 (D. Colo. 1989) case.

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Rocky Mountain Arsenal (RMA)

- 1942: RMA was established by the U.S. Army to manufacture chemical warfare agents and incendiary munitions for World War II
- 1987: RMA added to the NPL
 - As a RCRA-regulated land disposal unit, Basin F was not included
- 1989: FFA signed



RMA Location taken from 2015 RMA Five-Year Review

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EPA's RCRA policy when the RMA NPL listing was proposed in October 1984 was to exclude an area from an NPL site if it was a RCRA-regulated land disposal unit. Basin F is a lagoon identified as a regulated land disposal unit at RMA, so EPA excluded it from the NPL site listing.

On November 2, 1984, the EPA authorized the implementation of Colorado's hazardous waste management program in lieu of the federal RCRA program. This included corrective action

requirements at permitted hazardous waste facilities (Sections 264.100 – 264.100(h)). The laws governing the management of hazardous waste in this state are contained in the Colorado Hazardous Waste Act (C.R.S. 25-15-301 - 316) and the Colorado Hazardous Waste Regulations (6 CCR 1007-3). The regulations have been revised numerous times since that date, including the 1989 authorization to implement corrective action at facilities with releases of hazardous waste (see Colorado Department of Public Health and Environment Corrective Action Guidance Document, 2002).

On July 22, 1987, EPA placed RMA, excluding a lagoon known as "Basin F," on the NPL, proposed to expand the site to include Basin F, and solicited comment on the proposal. On February 17, 1989, an interagency agreement--the "Federal Facility Agreement for the Rocky Mountain Arsenal" (FFA)--formalizing the process framework for selection and implementation of cleanup remedies at the RMA/NPL Site, became effective. The FFA was signed by the Army, Shell Oil Company, EPA, U.S. Department of the Interior, U.S. Department of Justice, and the Agency for Toxic Substances and Disease Registry.

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Colorado v. U.S. Dept. of the Army (1989)

- ❑ Both Colorado and Army claimed jurisdiction and control over the cleanup of a toxic waste holding basin (Basin F).
- ❑ Colorado claimed jurisdiction over cleanup under RCRA. Army claimed that required cleanup under CERCLA should prevent Colorado from interfering.
- ❑ Decision: A federal facility being cleaned up under CERCLA is not immune to state enforcement actions under RCRA.

RCRA versus CERCLA: The Clash of the Titans in Colorado v. United States Dep't of the Army

FEDERAL FACILITIES TRAINING 10

In 1989, the State of Colorado sued the U.S. Department of the Army, both of which claimed jurisdiction and control over the cleanup of a toxic waste holding basin (Basin F) at the Rocky Mountain Arsenal.

Colorado claimed jurisdiction over the Basin F cleanup under RCRA (1976); however, the Army claimed sovereign immunity from the enforcement actions brought by Colorado. Because the Army claimed that they were required to do the cleanup under CERCLA, the Army argued that Colorado should not interfere with its cleanup actions. The U.S. District Court for the District of Colorado disagreed with the Army and held that a federal facility being cleaned up under EPA oversight under CERCLA was not unsusceptible to state enforcement action under RCRA.

U.S. v. State of Colorado, 990 F.2d 1565 (1993) also upheld the determination that CERCLA does not bar a state from exercising its EPA-delegated RCRA authority at a federal facility where a RI/FS has been initiated.

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MEMORANDUM OPINION AND ORDER
CARRIGAN, District Judge (Feb. 1989)

“Giving the words used their plain, ordinary meaning, it is difficult to imagine a clearer statement of legislative intent: federal facilities such as Basin F at the Rocky Mountain Arsenal are subject to state and local requirements respecting the treatment and disposal of hazardous waste provided that those state and local requirements set out specific and precise standards subject to uniform application. Having found that the Colorado regulations satisfy these standards, I conclude that the Army's motion to dismiss based on this argument must be denied.”

FEDERAL FACILITIES TRAINING 11

Information below taken from the Memorandum Opinion and Order (<https://law.justia.com/cases/federal/district-courts/FSupp/707/1562/1574594/>)

The area giving rise to the lawsuit is known as "Basin F." It is a hazardous waste disposal pond situated within the Rocky Mountain Arsenal ("the Arsenal"). The arsenal is a federally controlled site occupying about 27 square miles near Commerce City, a suburban area northeast of Denver, Colorado. The Arsenal was constructed in 1942 to manufacture and assemble chemical warfare agents, chemical products and incendiary munitions. It also has been used for detoxification and disposal of these toxic materials. Portions of the Arsenal have been leased to private operators, including Shell Oil Company ("Shell") for the manufacture of pesticides and herbicides. The United States owns and the Army operates the Arsenal.

As originally filed in the state court, the instant action concerns solely Basin F, which was not included in the NPL listing for RMA. The State's complaint asserted numerous claims against the Army based on Colorado's Ground Water Monitoring Regulations [Colorado Hazardous Waste Regulations, 6 CCR 1007-3, ("Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities, 6 CCR 1007-3, Part 265, Subpart F), issued pursuant to the Colorado Hazardous Waste Management Act ("the CHWMA"), Title 25-15, part 3, C.R.S. (1982)].

On January 14, 1987, the Army filed a motion to dismiss or, in the alternative, for summary judgment or partial summary judgment, regarding the claims set forth in the plaintiff's complaint. The issues raised in the motion were fully briefed by the parties.

On December 4, 1987, the plaintiff filed its First Amended Complaint setting forth new claims and allegations. The First Amended Complaint alleges that in June 1983, the Army submitted to the United States Environmental Protection Agency ("E.P.A.") a plan to close Basin F. It further alleges that, subsequent to E.P.A.'s authorization to the State of Colorado to operate the State's hazardous waste management program, the Colorado Department of Health ("CDH") issued a final plan to close Basin F, pursuant to State Closure Regulations (6 CCR 1007-3, Part 265, Subpart G). The Basin F Closure Plan ("the Plan") became effective October 2, 1986, as a final order of the CDH. Defendant did not appeal, or otherwise seek review of the Plan. Pursuant to the Plan's terms, it is alleged, the Army was required to complete certain remedial steps effecting Basin F's closure by October 2, 1987. Basin F was added to the RMA/NPL Site listing on March 13, 1989.

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Colorado v. U.S. Dept. of the Army, (cont.)

- ❑ States may enforce their day-to-day hazardous waste management laws at CERCLA sites.
- ❑ Placement on the National Priorities List (NPL) does not preempt state enforcement.
- ❑ RCRA is more than just an ARAR.

Memos and policies issued to further clarify how to integrate RCRA and CERCLA

RCRA/CERCLA Coordination at Contaminated Federal

FEDERAL FACILITIES TRAINING 12

In essence, the ruling stated that the States may enforce their hazardous waste laws at CERCLA sites; that placement on the National Priorities List (NPL) does not preempt state enforcement; and that RCRA is more than just an ARAR.

The lesson learned from this case is that both RCRA and CERCLA can be applied at a site. However, the case did not go further into how this integration would occur. A series of memos and policies to further clarify methods of integrating both regulations at sites were developed and we will discuss these further in the upcoming slides.

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Apply Your Understanding

When implementing a CERCLA response action at a Federal Facility (select all that apply):

- A. RCRA can be considered as an ARAR
- B. State hazardous waste laws do not apply
- C. CERCLA overrides State hazardous waste laws
- D. State hazardous waste laws are enforceable at CERCLA sites



FEDERAL FACILITIES TRAINING 13

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Federal Facility
Agreements:
Roles and Responsibilities

FEDERAL FACILITIES TRAINING 14

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Federal Facility Agreements

- ❑ CERCLA Section 120 requires federal agencies to enter an IAG (commonly referred to as an FFA) with EPA for the remedial action at federal facility sites on the NPL
 - Provide the technical, legal, and management framework under which the response at the Federal Facility is conducted;
 - Specify who is responsible for what and when;
 - Includes the Federal Facility's responsibilities as lead agency.
- ❑ Clarify how CERCLA and RCRA corrective action will be implemented

FEDERAL FACILITIES TRAINING 15

The FFA provides the technical, legal and management framework under which the response at the Federal Facility is conducted. The FFA/IAG specifies who is responsible for what and when. The FFA/IAG lists the Federal Facility's responsibilities as lead agency. 40 CFR 300.5 defines "lead agency" as the agency that plans and implements response actions under the NCP, and provides lead agency authorities for federal facilities. However, EPA retains authority over CERCLA remedy selection.

FFAs are based upon model language developed in 1988 with the Department of Defense (DoD) and the Department of Energy (DOE) and again with DoD in 1999. FFAs also ensure the public is informed about, and has the opportunity to participate in, the cleanup process to ensure safety and protectiveness.

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Federal Facility Agreements

- ❑ Enforceable and authorized to impose civil penalties for refusal to comply through CERCLA.
- ❑ Per CERCLA, should be entered into within 180 days of EPA's review of the Remedial Investigation/Feasibility Study (RI/FS).
- ❑ General EPA policy is to enter an FFA before the RI/FS
- ❑ Two- or three-party FFAs can be established
 - States typically sign FFAs



FEDERAL FACILITIES TRAINING 16

FFAs are enforceable through CERCLA's section 310 citizen suit provision. In addition, section 122(l) specifically authorizes imposition of civil penalties for failure or refusal to comply with an FFA. According to CERCLA, the FFA is to be entered into within 180 days of EPA's review of the RI/FS. Many times, the negotiations are conducted when the Federal Facility is promulgated to the NPL.

EPA policy, reflected in the model FFA language, is to enter into an FFA before, rather than after, the RI/FS is conducted. This provides for early input by EPA and the State into the RI/FS and remedy selection process. EPA policy is to try to have three-party FFAs, with the State joining EPA and the Federal Facility as an active partner and signatory. However, if the State is not amenable to participating in the FFA, a two-party FFA may be established between EPA and the Federal Facility.

DOE changed almost all of its FFA's to identify EPA as the lead regulator to resolve dueling requirements with State RCRA corrective action with the exception of the Hanford Site.

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FFAs and Defining CERCLA/RCRA Roles

- ❑ 1988 Model FFA language between EPA and DOE includes a section titled “Statutory Compliance/RCRA-CERCLA Integration.”
 - Also, in 2009 EPA and DoD model language in Fort Eustis FFA
- ❑ This section was designed to identify requirements of each program that are applicable to a facility and minimize duplication.
- ❑ Day-to-day waste management requirements are excluded from integration. They are independent and outside of the cleanup.

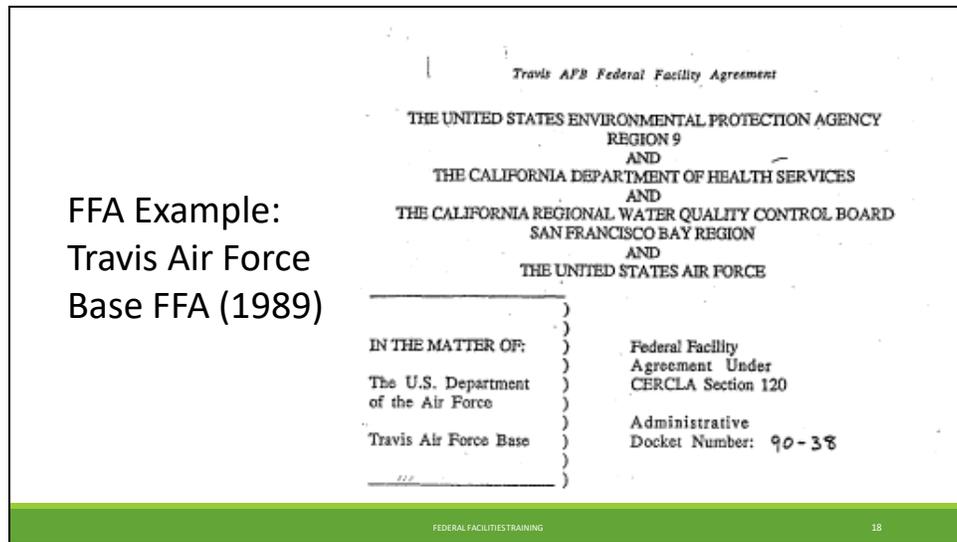
FEDERAL FACILITIES TRAINING 17

The 1988 EPA memo on the Agreement with the Department of Energy -- Model Provisions for CERCLA Federal Facility Agreements includes a section titled “Statutory Compliance/RCRA-CERCLA Integration.” In 2009, EPA and the Department of Defense (DoD) agreed that the Fort Eustis FFA would serve as the model for all future EPA/DoD FFAs which also includes a RCRA-CERCLA Integration section.

1998 EPA Memo: <https://www.epa.gov/fedfac/agreement-department-energy-model-provisions-cercla-federal-facility-agreements>

Ft. Eustis FFA: <https://denix.osd.mil/references/dod/policy-guidance/epa-and-department-of-the-army-agreement/>

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Travis Air Force Base (AFB) is located in California. Activities at landfills, fire training areas, a radioactive burial site, and solvent spill areas contaminated groundwater, soil and Union Creek with volatile organic compounds (VOCs), metals, and polycyclic aromatic hydrocarbons (PAHs). In 1989, Travis AFB signed an FFA. This document establishes the role that Travis AFB, the EPA, the California Department of Toxic Substances Control (DTSC) and the San Francisco Bay Regional Water Quality Control Board (RWQCB) each play in the restoration of Travis AFB and the formal mechanisms of this process.

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Travis Air Force Base FFA Clauses

- 17.1: Both CERCLA and RCRA regulatory requirements will be satisfied
- 17.2: Remedial actions will be protective and no additional corrective action under RCRA will be necessary
- 17.3: Permits for actions under the Agreement are not required as provided for in CERCLA and the NCP

17. STATUTORY COMPLIANCE/RCRA-CERCLA INTEGRATION

17.1 The Parties intend to integrate the Air Force's CERCLA response obligations and RCRA corrective action obligations which relate to the release(s) of hazardous substances, hazardous wastes, pollutants or contaminants covered by this Agreement into this comprehensive Agreement. Therefore, the Parties intend that activities covered by this Agreement will achieve compliance with CERCLA, 42 U.S.C. § 9601 et. seq.; to satisfy the corrective action requirements of RCRA section 3004(a) & (v), 42 U.S.C. § 6924(a) & (v), for a RCRA permit, and RCRA section 3008(b), 42 U.S.C. § 6928 (b), for interim status facilities; and to meet or exceed all applicable or relevant and appropriate federal and State laws and regulations, to the extent required by CERCLA section 121, 42 U.S.C. § 9621.

17.2 Based upon the foregoing, the Parties intend that any remedial action selected, implemented and completed under this Agreement will be protective of human health and the environment such that remediation of releases covered by this Agreement shall obviate the need for further corrective action under RCRA (i.e., no further corrective action shall be required). The Parties agree that with respect to releases of hazardous waste covered by this Agreement, RCRA shall be considered an applicable or relevant and appropriate requirement pursuant to CERCLA section 121, 42 U.S.C. § 9621.

17.3 The Parties recognize that the requirement to obtain permits for response actions undertaken pursuant to this Agreement shall be as provided for in CERCLA and the NCP. The Parties recognize that ongoing activities outside the scope of this Agreement at Travis AFB may require the issuance of permits under federal and State laws. This Agreement does not affect the requirements, if any, to obtain such permits. However, if a permit is issued to the Air Force for ongoing hazardous waste management activities at the Site, the issuing party shall reference and incorporate in a permit condition any appropriate provision, including appropriate schedules (and the provision for extension of such schedules), of this Agreement into such permit. The Parties intend that any judicial review of any permit condition which references this Agreement shall, to the extent authorized by law, only be reviewed under the provisions of CERCLA.

RCRA and CERCLA Integration at Federal Facilities
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The specific Travis Air Force Base Federal Facility Agreement section for RCRA-CERCLA Integration is presented in the current slide. In three clauses, the document discusses how the parties intend to integrate both RCRA and CERCLA throughout the cleanup of the site.

Clause 17.1 states that both CERCLA and RCRA regulatory requirements will be satisfied in relation to the release of hazardous substances, wastes, pollutants, or contaminants.

Clause 17.2 states that the remedial action chosen and enacted upon will be protective of human health and the environment and that no additional corrective action under RCRA will be necessary.

Clause 17.3 states that requirements to obtain permits for response actions taken under the Agreement shall be as provided for in CERCLA and the NCP. However, if required activities are required outside of the scope of work, permits will be required. These permits will only be reviewed under the provision of CERCLA.

Throughout the document, Clause 17 is referenced to indicate that activities will be conducted in a manner to support the intent and objectives of this clause. This emphasizes that all the associated parties are in coordination with each other and have established the framework for the work to be conducted onsite.

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Apply Your Understanding

Which of the following are true regarding FFAs (select all that apply)?

- A. Provide the technical, legal, and management framework under which the response at the Federal Facility is conducted
- B. Require State signature
- C. Enforceable and authorized to impose civil penalties for refusal to comply through CERCLA
- D. Must follow the model language provided in the 1988 Model FFA language between EPA and DOE and the 2009 EPA and DoD model language in Fort Eustis FFA

TRUE

FALSE

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FEDERAL FACILITIES TRAINING

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Key Guidance Documents

- ❑ Coordination between RCRA Corrective Action and Closure and CERCLA Site Activities, 1996
 - Eliminate duplication of effort
- ❑ Lead Regulator Policy for Cleanup Activities at Federal Facilities on the National Priorities List, 1997
 - Specifies the need for a lead regulator
- ❑ Improving RCRA/CERCLA Coordination at Federal Facilities, 2005
 - Acknowledges that unless efforts are made to identify all requirements of RCRA and CERCLA, there is potential to add time and cost to the response

Coordination between RCRA Corrective Action and Closure and CERCLA Site Activities, 1996
<https://www.epa.gov/sites/default/files/2013-10/documents/rcracorrection-mem.pdf>

Lead Regulator Policy for Cleanup Activities at Federal Facilities on the National Priorities List, 1997
<https://www.epa.gov/fedfac/lead-regulator-policy-cleanup-activities-federal-facilities-national-priorities-list>

Improving RCRA/CERCLA Coordination at Federal Facilities, 2005
<https://www.epa.gov/fedfac/improving-rcracercla-coordination-federal-facilities>

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Coordination Between RCRA Corrective Action and Closure and CERCLA Site Activities (1996)

- ❑ Aims to eliminate the duplication of effort, streamline cleanup processes, and build effective relationships. Includes:
 1. acceptance of decisions made by other remedial programs;
 2. deferral of activities and coordination among RCRA, CERCLA and state/tribal cleanup programs; and,
 3. coordination of specific standards and administrative requirements for closure.

FEDERAL FACILITIES TRAINING 22

The 1996 Coordination between RCRA Corrective Action and Closure and CERCLA Site Activities Memo aims to eliminate the duplication of effort, streamline cleanup processes, and build effective relationships with the states and tribes. Available at <https://www.epa.gov/sites/default/files/2013-10/documents/rcracorrection-mem.pdf>

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Program Deferral

- ❑ Program deferral can be a very efficient way for both CERCLA and RCRA to address overlapping cleanup requirements.
- ❑ RCRA and CERCLA site managers can defer cleanup activities for all or part of a site to the other, understanding that cleanup is not required by the deferring program.
- ❑ Example: If a CERCLA cleanup has been completed at a RCRA facility, the RCRA program can state the CERCLA cleanup is sufficient corrective action

DEFERRED

FEDERAL FACILITIES TRAINING 23

The 1996 memo states that, generally, cleanups under RCRA corrective action or CERCLA will substantively satisfy the requirements of both programs. RCRA and CERCLA site managers can defer cleanup activities for all or part of a site from one program to another with the expectation that no further cleanup will be required under the deferring 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 be presumed to meet the standards of the other.

The concept of deferral from one program to another has already been actively used at EPA. For example, program implementers for facilities subject to both CERCLA and RCRA could agree to have a site be cleaned up under CERCLA but would require a RCRA permit or order to defer corrective action to the CERCLA cleanup program. Similarly, where program priorities differ and the CERCLA cleanup is already completed or underway at a RCRA facility, corrective action conditions in the RCRA permit/order could state that existence of a CERCLA action makes separate RCRA action unnecessary.

Coordination Between Programs

- ❑ Coordination between programs will be required in scenarios where cleanup requirements are not overlapping.
- ❑ FFAs are often crafted so that cleanup responsibilities are divided.
 - Clearly identify which parts of a site are conducted under CERCLA or RCRA.
- ❑ Establish timing sequences in CERCLA or RCRA decision documents.
 - CERCLA decision documents could delay review of units addressed under RCRA, expecting that no additional cleanup will be needed.

FEDERAL FACILITIES TRAINING 24

At times, deferral is not possible as a result of fundamental program differences. For example, CERCLA does not address petroleum releases. RCRA does not address certain contaminants, such as radionuclides, so in these instances, it is appropriate to use CERCLA authority. Despite these program differences, remedial programs should coordinate to minimize any duplication of effort and second-guessing of remedial decisions. The most efficient path to the desired environmental result should be kept in mind.

EPA recommends that program implementers look for approaches that divide responsibilities first. When this is not possible and the timing sequences approach is used, the final review by the second program should generally be 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. For example, review by the second program could be streamlined if the FFA provides the State with co-regulator review authority so that State representatives are familiar and up to date with site cleanup activities.

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RCRA Closure and Post-Closure

- ❑ Some RCRA/CERCLA integration issues are associated with coordination of requirements for closure of RCRA-regulated units with other cleanup activities.
- ❑ A CERCLA cleanup plan that includes a RCRA-regulated unit could be structured to comply with both CERCLA and RCRA closure and post-closure requirements.
 - E.g., RCRA permit/order could cite ongoing CERCLA cleanup and incorporate CERCLA requirements by reference.

FEDERAL FACILITIES TRAINING 25

The 1996 Memo states “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). Dual regulatory structure for RCRA closure and other cleanup activities remains in place. A cleanup plan for a CERCLA unit that encompasses a RCRA regulated unit could be structured to provide for concurrent compliance with CERCLA and RCRA closure & post-closure requirements. The RCRA permit or order could cite ongoing CERCLA cleanup and incorporate CERCLA requirements by reference.

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RCRA Closure and Cleanup Levels

- ❑ Inconsistent cleanup levels for removal and decontamination could be resolved by using risk-based levels only.
 - Some clean closure levels have been set at background while a CERCLA-related cleanup level has been set at higher risk-based concentrations. Use of risk-based levels is encouraged for clean closure.
 - States have insisted that their closure requirements be addressed outside of cleanup because closure requirements did NOT arise due to cleanup which means they do not come under the CERCLA 121(e)(1) permit exemption.

FEDERAL FACILITIES TRAINING 26

Sometimes, inconsistent cleanup levels have been applied for removal and decontamination (“clean closure”) of regulated units and for site-wide remediation under CERCLA or RCRA corrective action. For example, clean closure levels have been set at background while cleanup levels have been set to higher risk-based concentrations. EPA encourages the use of risk-based levels when developing clean closure standards. If no Agency-approved health-based levels exist, then background concentrations can be used or the site owner can submit data on toxicity to allow EPA to determine what health-based level should be.

However, states have insisted that their closure requirements be addressed outside of CERCLA cleanup because closure requirements did NOT arise due to cleanup which means they do not come under the CERCLA 121(e)(1) permit exemption. They arose outside of the cleanup and are underlying requirements of the facility’s day-to-day hazardous waste management program.

40 CFR 264.110(c) deals with Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities and states that “The Regional Administrator may replace all or part of the requirements of this subpart (and the unit-specific standards referenced in § 264.111(c) applying to a regulated unit), with alternative requirements set out in a permit or in an enforceable document (as defined in 40 CFR 270.1(c)(7)), where the Regional Administrator determines that:

- (1) The regulated unit is situated among solid waste management units (or areas of concern), a release has occurred, and both the regulated unit and one or more solid waste management unit(s) (or areas of concern) are likely to have contributed to the release; and
- (2) It is not necessary to apply the closure requirements of this subpart (and those referenced herein) because the alternative requirements will protect human health and the environment and will satisfy the closure performance standard of § 264.111 (a) and (b).”

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<p>Lead Regulator Policy for Cleanup Activities at Federal Facilities on the National Priorities List (1997)</p>	<ul style="list-style-type: none">❑ Aims to eliminate the duplication and streamline cleanup processes through appointing a lead regulator.❑ Geared towards Federal Facilities<ul style="list-style-type: none">▪ Most states sign the FFA as equal partners and▪ Some states expressed an interest in being the lead oversight agency of certain parts of the cleanup.❑ Lead Regulator: “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 site under the applicable regulatory framework.” <p>FEDERAL FACILITIES TRAINING 27</p>
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The 1997 Lead Regulator Policy acts as an extension of the 1996 Coordination Memo but specifies the need for a lead regulator at each site to eliminate overlap and duplication. This policy is also geared towards Federal Facilities because of the special requirements CERCLA Section 120 imposes on Federal Facilities. For example, a CERCLA remedy will still need to be approved and issued by EPA for sites on the NPL. The 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 site under the applicable regulatory framework.

The 1997 Lead Regulator Policy Memo is available at <https://www.epa.gov/fedfac/lead-regulator-policy-cleanup-activities-federal-facilities-national-priorities-list>

Slide 29

Lead Regulators

- ❑ The identification of a lead regulator should minimize multiple regulator review and comment, reducing the number of redundant/competing oversight processes.
- ❑ Enables states to oversee sites on a Federal Facility using a state program authorized under RCRA or other state cleanup authority.



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FEDERAL FACILITIES TRAINING28

The 1997 memo also states that 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. This approach would enable states to oversee sites on a Federal Facility using a state program authorized under RCRA or other state cleanup authority once the site was deferred to that program.

Streamlined Oversight Arrangements

- State-led cleanups for portions of the site using RCRA-authorized state program or other appropriate authorities
 - Minimal EPA involvement
 - Rely on state to do oversight work to develop a remedial alternative that EPA can agree on with minimal review
 - Still requires EPA to list site on NPL, make final deletion decisions, and adhere to CERCLA 120(g) and (h)
- EPA-led under CERCLA
 - Minimal state involvement

FEDERAL FACILITIES TRAINING 29

A possible streamlined oversight arrangements for Federal Facilities include state-led cleanups for appropriate portions of the site using the state program authorized under RCRA, or the appropriate hazardous waste cleanup law as oversight authority.

- EPA involvement in this scenario is expected to be minimal.
- EPA will rely on the state to do oversight work that will eventually develop a recommended remedial alternative. This recommended remedial alternative will still be submitted for CERCLA concurrence but with minimal review.

While EPA involvement is expected to be minimal, EPA still has its responsibility for NPL site listing, deletion decisions, and responsibilities under CERCLA 120(g) (EPA authority cannot be delegated) and (h) (any federal property transfer outside the federal government needs to include required deed transfer language – e.g., the type and quantity of hazardous materials and the time these materials were stored, released or disposed of on the property if any activity occurred for over a year, a covenant warranting that all remedial action has been taken prior to the transfer, and access provisions for the U.S. to enter the property to take remedial or corrective action necessary post-transfer).

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Community Involvement

- ❑ Federal-led sites require the Federal lead cleanup agency to be responsible for providing community involvement under CERCLA.
- ❑ State-led sites should work to promote input from communities to foster community participation in decisions regarding response actions.
 - Ensure affected community is informed of any differences in timetables/criteria resulting from integrating
- ❑ Where EPA, state, and other Federal Facility are entering into a lead regulator agreement not captured in an existing FFA, public notice must be provided.



FEDERAL FACILITIES TRAINING 30

The 1997 Lead Regulator Policy memo states that while the Federal-led cleanup agency 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. As stated in the 1996 Memo, where EPA, the state, and a Federal Facility are entering into a lead regulator agreement that is not currently captured in an existing IAG or FFA, adequate public notice must be provided concerning the lead regulator agreement.

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Apply Your Understanding

Benefits of identifying a lead regulator include which of the following (select all that apply):

- A. Minimizing multiple regulator review and comment,
- B. Reducing the number of redundant/competing oversight processes
- C. Enables states to oversee sites on a Federal Facility using a state program authorized under RCRA or other state cleanup authority
- D. Allows the state to: list sites on the NPL; make final deletion decisions; and adhere to CERCLA 120(g) and (h)



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FEDERAL FACILITIES TRAINING 31

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Improving RCRA/CERCLA Coordination at Federal Facilities (2005)



- ❑ Reiterates the points of the previous policies (i.e., avoiding duplication of work, deferral, early coordination).
- ❑ Aims to address issues at Federal Facilities where overlapping RCRA and CERCLA procedural requirements and regulatory regimes are applicable.

FEDERAL FACILITIES TRAINING 32

The 2005 Coordination Policy reemphasizes the points made in previous policies and memos about integration and coordination between CERCLA and RCRA. While there have been reforms aimed at improving CERCLA and streamlining the RCRA corrective action program, issues have arisen related to duplicative RCRA and CERCLA procedural requirements at Federal Facilities where both regulatory regimes are applicable. The 2005 memo states that unless efforts are made to identify all requirements of RCRA and CERCLA that are applicable to a facility and to minimize duplication, the process requirements of both programs have the potential to add time and costs to the response. RCRA/CERCLA integration clauses for FFAs and similar state-federal agreements were crafted specifically to address this potential problem.

2005 Coordination memo is available at <https://www.epa.gov/fedfac/improving-rcracercla-coordination-federal-facilities>

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Exit Strategies

- ❑ RCRA-CERCLA integration clauses for FFAs were designed to identify requirements of each program that are applicable to a facility and minimize duplication.
- ❑ Some states sought to require corrective action closeout steps in addition to those under CERCLA.
 - Opinion that their state RCRA process allows for more public involvement in the context of property transfer.



FEDERAL FACILITIES TRAINING 33

In regard to RCRA permit obligations, the 2005 memo states that the facility and the EPA Region or authorized State should agree early on an exit strategy in the cleanup process that allows a facility where appropriate, to be released from the RCRA permit once the cleanup is completed. Although this applies to all federal properties, it is especially critical for federal properties that may be subject to property transfer. If a final remedy will be selected that will leave some contamination in place, any issues about how this might affect property transfer after corrective action is complete should also be addressed up front in the planning process.

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Federal Facility Property Transfer



- ❑ Some states requested their RCRA permits be modified and RCRA corrective actions be closed out in accordance with state and EPA guidance approaches, even when activities were under CERCLA.
 - Can delay property transfer due to uncertainty of the RCRA permit status.
- ❑ Integrating a facility's RCRA closeout process with the property transfer process under CERCLA can minimize additional delays and costs

FEDERAL FACILITIES TRAINING 34

Integration can be especially important in the property transfer context, especially when a state's involvement is limited under CERCLA. For example, some states have asked that RCRA permits be modified and RCRA corrective actions be closed out in accordance with approaches recommended in state and EPA guidance, even where the response actions were conducted under CERCLA. This has the potential to delay planned property transfers because of the uncertainty related to the RCRA permit status.

However, if a facility's RCRA closeout process is identified and integrated with the facility's site closeout and property transfer processes under CERCLA (e.g., Finding of Suitability to Transfer), concerns about potential added costs and delays (e.g., separate review, separate public notification) can be minimized.

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Case Study Examples of FFAs with CERCLA-RCRA Integration

Hanford Site

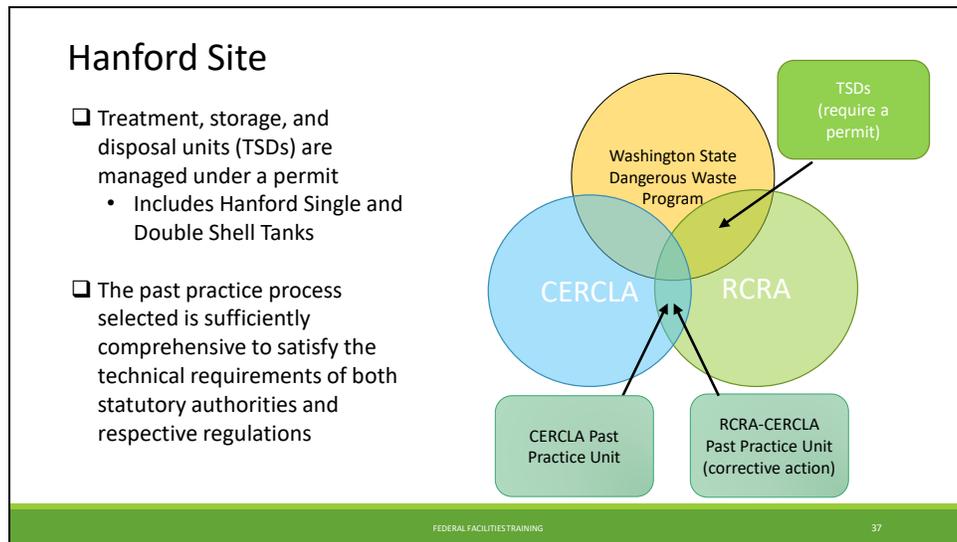
- ❑ 1989: FFA between EPA, the Department of Energy (DOE), and the Washington State Department of Ecology
- ❑ FFA identifies RCRA, CERCLA, and State Dangerous Waste Program overlap and describes how each program will interface to achieve an efficient regulatory program

Geographic location and principal facilities at the Hanford Site.

FEDERAL FACILITIES TRAINING 36

The Hanford Site is 586-square-miles and was created in 1943 as part of the Manhattan Project to produce plutonium for nuclear weapons. More than 40 years of plutonium production led to hundreds of square miles of contaminated soil and groundwater and millions of gallons of highly radioactive waste stored in underground tanks. The U.S. Department of Energy (DOE), the U.S. EPA, and the Washington Department of Energy signed the Hanford Federal Facility Agreement and Consent Order (HFFACO), also known as the Tri-Party Agreement (TPA), in 1989. This agreement provides the legal framework for Hanford cleanup and cleanup schedules. Today, waste management and environmental cleanup are the main missions at the Hanford Site. DOE facilities are located throughout the Hanford Site. The site is divided into four National Priorities List (NPL) sites known as the 100, 200, 300, and 1100 Areas. The 100 Area includes nine deactivated nuclear production reactors along the northern stretch of the Columbia River, often referred to as the River Corridor. The 200 Area, located in Hanford's Central Plateau, contain 56 million gallons of high-level radioactive waste in 177 aging underground tanks, the principal nuclear chemical processing and waste management facilities, several large waste disposal areas, and many other facilities. The 300 Area, approximately three miles north of Richland, contains research and development laboratories and former reactor fuel manufacturing facilities. The land surrounding the majority of the Hanford Site are part of the Hanford Reach National Monument managed by the U.S. Fish and Wildlife Service.

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Since the Hanford Site was placed on the NPL, the FFA parties agreed that regardless of a unit's designation as CERCLA or RCRA-CERCLA past practice unit, all CERCLA hazardous substances and all of the wastes regulated under the State Dangerous Waste Program shall be addressed as part of any CERCLA or RCRA-CERCLA response action. (FFA available at <https://www.hanford.gov/page.cfm/TriParty/TheAgreement>)

Mixed Radioactive/Hazardous waste being stored in double shell and single shell tanks are regulated under State-equivalent RCRA and under DOE's authority managed by DOE O 435.1. All tanks will be closed under State-equivalent RCRA and DOE O 435.1 closure plans which will include closure and post closure care. Releases from Hanford Single shell tanks are being investigated under an RFI/CMS process intended to also meet all requirements for a CERCLA RI/FS. Non-RCRA regulated constituents (radionuclides) have migrated into the soils both near and deep from tanks, and into the groundwater are being regulated under CERCLA. The Hanford Site provides a good example of true RCRA/CERCLA integration from the Hanford Federal Facility Agreement and Consent Order (HFFACO) Action Plan Section 5.4 through 5.6, along with a specific Appendix I process.

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Management of
CERCLA
Remediation
Wastes under
RCRA (1998)

- Under CERCLA Section 121(e), no Federal, state or local permit is required for on-site CERCLA response.
- EPA has interpreted CERCLA Section 121(e) to waive the requirement to obtain a permit and associated administrative and procedural requirements of permits, but not the substantive requirements that would be applied through permits.

FEDERAL FACILITIES TRAINING 38

Under CERCLA Section 121(e), no Federal, state, or local permit is required for on-site CERCLA response actions. However, the substantive requirements that would be applied through permits still apply. Note that, under certain circumstances, substantive requirements may be waived using CERCLA. See the ARAR waiver provisions at 40 CFR 300.430(f)(1)(ii)(C).

On a case-by-case basis, where there may be an imminent and substantial endangerment to human health or the environment, EPA has broad authority to require cleanup and other appropriate actions under RCRA Section 7003. However, where the need for a permit arises outside the cleanup context, the CERCLA 121(e) permit exemption would not apply.

In 1987, EPA issued guidance indicating that RCRA-authorized states with state waiver authorities comparable to CERCLA 121(e) could use those state waiver authorities to waive RCRA requirements as long as the state did so in a manner no less stringent than that allowed under the corresponding Federal authorities.

This information is from the EPA 1998 Management of Remediation Waste under RCRA Memo. <https://www.epa.gov/sites/production/files/2013-10/documents/remediawaste-rpt.pdf>

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Offsite Rule

- ❑ CERCLA Section 121(d)(3) applies to any CERCLA response action involving off-site transfer of any hazardous substance, pollutant or contaminant (CERCLA wastes)
- ❑ May only be placed in a facility operating in compliance with RCRA or other applicable Federal or State requirements.
- ❑ Are prohibited to transfer to a land disposal facility that is releasing contaminants into the environment as defined by the Offsite Rule.

FEDERAL FACILITIES TRAINING 39

The purpose of the Offsite Rule (OSR) is to avoid having CERCLA wastes from response actions contribute to present or future environmental problems by directing these wastes to management units determined to be environmentally sound (preamble to final OSR, 58 FR 49200, 49201, Sept. 22, 1993).

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Area of Contamination (AOC)

- ❑ RCRA allows certain discrete areas of generally dispersed contamination to be considered a RCRA units (usually landfills).
- ❑ AOC is equated to a RCRA land-based unit
 - ❑ Consolidation and *in situ* treatment of hazardous waste within the AOC do not create a new point of hazardous waste generation for purposes of RCRA.
- ❑ Avoids triggering Land Disposal Restrictions (LDR).

FEDERAL FACILITIES TRAINING 40

This interpretation allows wastes to be consolidated or treated *in situ* within an AOC without triggering land disposal restrictions or minimum technology requirements. The AOC interpretation may be applied to any hazardous remediation waste (including non-media wastes) that is in or on the land. Note that the AOC policy only covers consolidation and other *in situ* waste management techniques carried out within an AOC. For *ex situ* waste management or transfer of wastes from one area of contamination to another, see discussion of corrective

action management units. For ex situ waste management or transfer of wastes from one area of contamination to another, see discussion of corrective action management units on following slide.

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Corrective Action Management Unit (CAMU)

- ❑ CAMU does not have to meet LDR treatment standards.
- ❑ CAMU differs from AOC in that waste may be treated *ex-situ* and then placed in a CAMU.
- ❑ CAMUs may be located in an uncontaminated area at the facility, and wastes may be consolidated into a CAMU from areas that are not contiguously contaminated.
- ❑ CAMUs must be approved by EPA or an authorized state and designated in a permit or corrective action order.

FEDERAL FACILITIES TRAINING 41

The 1998 Management of Remediation Waste under RCRA guidance also provides information on Corrective Action Management Unit or CAMU-- specifically intended for treatment, storage, and disposal of hazardous remediation waste. Under the CAMU rule, EPA and authorized states may develop and impose site-specific design, operating, closure, and post-closure requirements for CAMUs in lieu of minimum technology requirements (MTRs) for land-based units. Although there is a strong preference for use of CAMUs to facilitate treatment, remediation waste placed in approved CAMUs does not have to meet land disposal restrictions (LDR) treatment standards.

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Summary

- ❑ Federal facilities with both operating facilities are subject to RCRA and past-practice sites may be subject to both CERCLA and RCRA Corrective Action
- ❑ Placement on the NPL does not preempt state enforcement and States may enforce their hazardous waste laws at CERCLA sites
- ❑ Remedial programs should coordinate to minimize any duplication of effort and second-guessing of remedial decisions.
- ❑ Program deferral can be a very efficient way for both CERCLA and RCRA to address overlapping cleanup requirements Case Studies

FEDERAL FACILITIES TRAINING 42

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