

US EPA ARCHIVE DOCUMENT

**RCRA CORRECTIVE ACTION
TRAINING**
EPA Region 4 - Frankfort, KY
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Booz | Allen | Hamilton

- Good morning. Today we are going to discuss corrective action

SESSION 14

RCRA CORRECTIVE ACTION:

**HISTORY / INTRODUCTION /
MECHANISMS FOR IMPLEMENTATION**



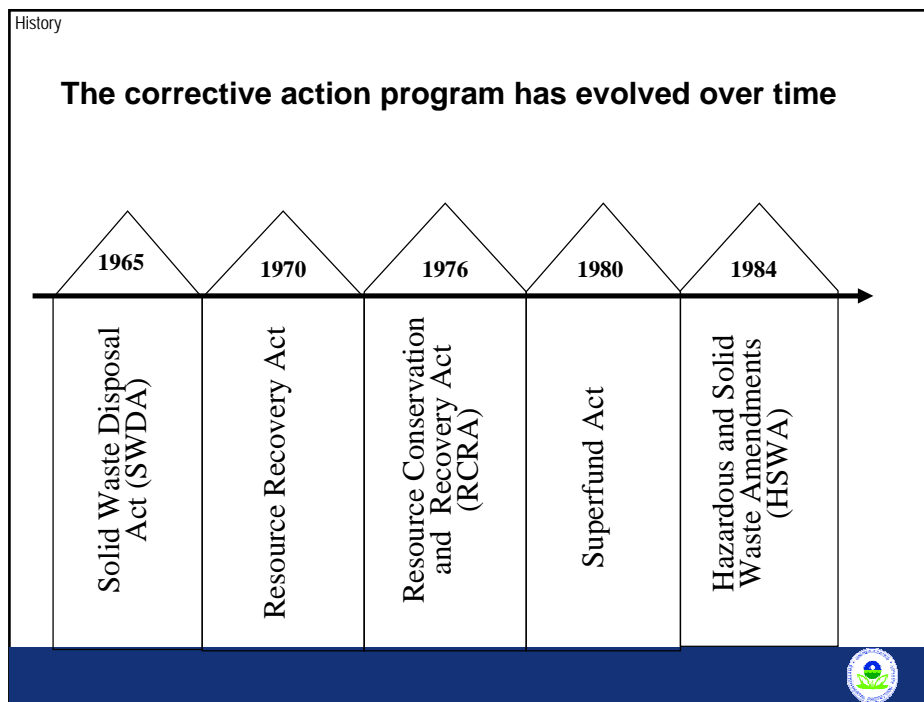
- Before we get into the nuts and bolts of corrective action lets just briefly discuss the history of the corrective action program.

Session 14 Agenda: History/ Introduction/Mechanisms for Implementation

- ▶ History
- ▶ Introduction to Corrective Action
- ▶ Mechanisms for Implementation



The CA program is a unique part of RCRA because there are no comprehensive cleanup regulations. Instead, EPA implements CA primarily through guidance, and enforces it largely through statutory authorities established by HSWA.



- **In 1965, the Solid Waste Disposal Act was passed**
 - This act provided technical assistance to the states and localities;
 - And provided general criteria for designing landfills
 - This act did not provide the authorities to regulate hazardous waste
- **In 1976 the RCRA was passed:**
 - This act basically added provisions for hazardous waste
 - It also provided inspection and enforcement authority and provided mechanisms for:
 - Citizen suits
 - Restraining orders for imminent hazards
 - Research and development
- **In 1980 in response to Love Canal the Superfund Act was passed**
- **In 1984 the HSWA amdmts were passed. HSWA** added sections for cleanup authority for those seeking a permit and interim status.
- **Prior to HSWA:**



EPA’s *statutory authority* to require clean up of hazardous releases was limited to situations where the contamination presented an “imminent and substantial endangerment to health or the environment.”

EPA’s *regulatory authority* was limited to releases identified during ground water monitoring at RCRA-regulated land-based HW units (landfills and surface impoundments)

History

HSWA authorized facility-wide corrective action

- ▶ Prior to HSWA, EPA could only require corrective action via two mechanisms
 - RCRA §7003 order
 - Groundwater monitoring provisions in §264.100, which govern releases from regulated units (e.g., landfills)
- ▶ HSWA added provisions for facility-wide corrective action
 - Specific cleanup authorities for permitted and interim status facilities
 - Codified corrective action for solid waste management units (SWMUs) in §264.101

Through HSWA, Congress substantially expanded EPA's CA authority:

- allowing EPA to address any releases of HW or hazardous constituents to all environmental media at both RCRA permitted and non-permitted facilities.
 - Addressing releases of hazardous wastes and/or hazardous constituents from all areas of the facility (**facility wide**), *not just permitted or interim status units*. Authorized EPA to promulgate **facility-wide CA** provisions.
 - On- and off-site enforcement authority
 - Releases at facilities seeking a permit - §3004(u)
 - Cleanup beyond facility boundary - §3004(v)
 - Interim Status auth - §3008(h)

Specifically some other things HSWA provided included :

- Land disposal requirements (LDR)
 - MTR for land based disposal units. Examples include the double liners with leak detection for landfills and surface impoundments.
 - Liquids in landfills – banning disposal of non-containerized liquid waste
 - Underground injection of HW within ¼ mile of an underground source of drinking water
- Waste minimization certification requirement on manifest
- It developed the initial UST programs by adding Subtitle I to RCRA

EPA continues to reform the corrective action program

- ▶ Congress, EPA, state agencies, and public believe progress of RCRA cleanups should be improved
- ▶ Regulatory flexibility for cleanups
 - Alternative permits at remediation waste sites (e.g., remedial action plan)
 - Alternative LDR soil and debris treatment standards
 - Special standards for remediation waste management units (e.g., temporary units (TUs), corrective action management units (CAMUs) and staging piles)
 - Area of contamination (AOC) policy
- ▶ Environmental indicators
 - Current Human Exposures Under Control (CA725)
 - Migration of Contaminated Groundwater Under Control (CA750)

www.epa.gov/epaoswer/hazwaste/ca/eis.htm



The goal of the CA program is to **stabilize and clean up facilities**. The program addresses risk-reduction and final cleanup at TSDFs.

Since 1984, EPA and authorized states have made considerable progress in implementing the Corrective Action requirements. Despite the progress made, Congress, public, EPA and the States believe the **pace and progress** of RCRA cleanups **must be increased**. Certain RCRA requirements can create impediments to cleanup (e.g., LDR, MTR, & permitting).

Because EPA agrees that significant improvements can be made, EPA is undertaking RCRA Cleanup Reforms which were announced in July 1999 and January 2001. The specific goals for these reform efforts include **Faster, Focused and More Flexible Cleanups, and Fostering Creative Solutions**. As a result, **RCRA reforms** have been developed.

- **1. Regulatory flexibility for cleanups which include:**

- Use of alternative permits at remediation waste mgmt sites. Remedial action plan (RAP) (11/30/98). A RAP is tailored to the needs of the remediation waste mgmt site, and the RAP process is more streamlined than a traditional permit.
- Alternative land disposal restrictions for contaminated soils. (5/26/98).
- Special standards for remediation waste mgmt units (TUs, CAMUs, and staging piles)
- Area of contamination policy – EPA allows certain discrete areas of generally dispersed contamination to be considered RCRA units (landfills). Since an AOC is equated to a RCRA land-based unit, consolidation and *in situ* treatment of HW within the AOC do not create a new POG and do not trigger the requirements of LDR or MTR. It only covers consolidation or other *in situ* waste mgmt within an AOC, not *ex situ* or transfer from one AOC to another AOC

- **2. Environmental indicators** - which are basically used to indicate progress or status of sites in the RCRA program. There are 2 CA EIs CA725 and CA750. EPA use these two to measure progress toward meeting national cleanup goals: 95% human exposures under control and 70% migration of groundwater under control

RCRA Cleanup Reforms continue to evolve

- ▶ July 1999, EPA announced the first set of RCRA Cleanup Reforms that focus on:
 - Providing new results-oriented cleanup guidance with clear objectives
 - Fostering maximum use of program flexibility and practical approaches through training, outreach, and new uses of enforcement tools
 - Enhancing community involvement including greater public access to information on cleanup progress

- ▶ January 2001, EPA announced the second set of RCRA Cleanup Reforms that emphasize:
 - Piloting innovative approaches
 - Accelerating changes in culture
 - Connecting communities to cleanups
 - Capitalizing on redevelopment potential



www.epa.gov/epaoswer/hazwaste/ca/reforms.htm



- **3. July 1999 RCRA Cleanup reforms**
 - Basically these are results oriented cleanup guidance
 - Enhance public involvement
 - Increase in regulatory flexibility and community involvement

- **4. January 2001 RCRA Cleanup reforms**

- We will discuss these things in more **detail later** on but I just wanted to give you a **brief summary** of how CA started and where it is headed.

How facilities become subject to corrective action

- ▶ Voluntary corrective action
 - Expedites the corrective action process
 - Allows the facility to be viewed more favorably by the public
 - Owners and operators should work closely with EPA or state to obtain sufficient oversight during voluntary cleanup activities
 - Corrective action order still needed for the final remedy
- ▶ Permitted corrective action
- ▶ Corrective action orders





- Okay, now that we know the history of corrective action let's talk a little bit about **how do we get a facility to initiate corrective action.**
- One of the keys to understanding the RCRA corrective action program is knowing how a facility becomes subject to corrective action. Facilities are generally brought into the process when there is an identified release of hazardous waste or hazardous constituents.
- **Voluntary** – Corrective action need not always involve permit requirements or an enforcement order. Owners and operators of RCRA-regulated facilities may also volunteer to perform corrective action.
- Why might they do this?
 - Liability
 - Cut their losses (i.e., if mess will be discovered eventually, they should fix early to avoid costlier bills)
 - Good PR
 - Expedite the process - voluntary corrective action often entails less oversight
 - Coordinate cleanup levels with EPA, so that the facility is not wasting its time or resources remediating to an unacceptable level.
- EPA, therefore encourages owners and operators to work closely with EPA or state agencies to obtain sufficient oversight during voluntary cleanup activities. Facilities and regulatory agency may not always agree on the completeness of cleanup.
- **An order is still necessary for the final remedy. Even if a facility conducts CA without an order, they will have to have an order at the end of the process.**
- **Typically, if they do not do CA voluntarily they will end up having to do it under an order**

Mechanisms for Implementation

EPA can use the following statutory authorities to require corrective action

- ▶ Permitted corrective action
 - RCRA §3004(u) - Releases from SWMUs
 - RCRA §3004(v) - Releases beyond facility boundary
 - RCRA §3005(c)(3) - Omnibus provision
- ▶ Corrective action orders
 - RCRA §3008(a) - Compliance orders
 - RCRA §3008(h) - Releases at interim status facilities
 - RCRA §7003 - Imminent and substantial endangerment

- EPA can incorporate corrective action into a facility's permit or if the release occurs at a non-permitted facility, EPA can use its authority to issue a corrective action order.
- **EPA can incorporate CA into the permit requirements of a facility.** The HSWA statutory provisions for addressing CA in permits are:

Section 3004(u) - EPA requires corrective action for releases of hazardous waste or hazardous constituents from SWMUs in a facility's permit.

Section 3004(v) : requires corrective action through permit requirements for releases migrating beyond the facility boundary. This corrective action provision can be complementary to 3004(u), but it is not expressly limited to releases from SWMU.
- **3005(c)(3)** (a.k.a. omnibus permitting authority) allows EPA or an authorized state to include any requirements deemed necessary in a permit, including the requirement to perform corrective action. This authority is particularly useful at permitted facilities when there is a release not associated with any particular SWMU.

EPA also possesses authorities to order CA that are not contingent upon a permit. They are:

Section 3008(a) : EPA may issue **compliance orders** requiring compliance

Section 3008(h) : authorizes EPA to require corrective action or other necessary measures through an **administrative enforcement order** or lawsuit, whenever there is or has been a release of hazardous waste or constituents from an **interim status facility**.

Section 7003 allows EPA upon evidence of past or present handling of solid or hazardous waste, to require any action necessary when a situation may present an **imminent and substantial endangerment to health or the environment** (i.e., poses significant threat or harm). This authority applies to all facilities, whether or not they have a RCRA permit.

Pursuant to RCRA §3004(u), EPA can require corrective action:

- ▶ At permitted facilities
- ▶ For releases of hazardous waste or hazardous constituents
- ▶ From Solid Waste Management Units (SWMUs)



- Since we have already discussed permits yesterday afternoon I am not going to spend a lot of time here. Basically 3004 u is a hswa permit
- Section 3004(u) . requires facilities seeking a RCRA permit to conduct corrective action as necessary for solid waste management units;
- ONLY applies to PERMITTED facilities
- Hazardous Waste or Hazardous Constituents
- From SWMU
- OTHER points:

Mechanisms for Implementation

Pursuant to RCRA §3004(v), EPA can require corrective action:

- ▶ Beyond the facility boundary
- ▶ Coming from permitted facilities
- ▶ Where necessary to protect human health and the environment

Goal is to protect the surrounding human health and environment



- A 3004 v is a permit that basically provides EPA with the authorization or requirement to cleanup beyond the property boundaries.
- **READ SLIDE**
- **What are some examples of contamination that would come from a permitted facility and go beyond the facility boundary?** Groundwater plumes migrating.

EPA can use the omnibus permitting authority §3005(c)(3) at permitted TSDFs

- ▶ Require any permit provision necessary, including corrective action
- ▶ Catch-all provision used to where necessary to protect human health and the environment
- ▶ May be used to address an Area of Concern
 - Site-specific definition
 - “Areal extent of releases that warrant further investigation or remediation, regardless of whether associated with a SWMU”
- ▶ Codified in §270.32(b)



- **3005(c)(3)** (a.k.a. omnibus permitting authority) allows EPA or an authorized state to include any requirements deemed necessary in a permit, including the requirement to perform corrective action. This authority is particularly useful at permitted facilities when there is a release not associated with any particular SWMU.
- This omnibus authority is often used when release is not associated with a SWMU
- For example, a regulator notices a spill that was not cleaned up at a loading area. It does not meet the definition of a SWMU (remember, one time spills do not meet the definition) but EPA has authority to require cleanup under provisions like these.
- A term frequently used to describe this type of contamination is Area of Concern (AOC): **READ SLIDE**. Instead of focusing on the SWMU debate, the area of concern has been used.
- Like SWMUs, it is important not to get bogged with the AOC designation!

EPA may issue consent orders requiring corrective action

- ▶ Orders based on information that a release to the environment has occurred
- ▶ Also known as interim status corrective action orders
- ▶ Consent orders are negotiated settlements between regulatory authority and facility
- ▶ Orders are site-wide, not SWMU specific
- ▶ Corrective action orders may have attachments with areas to be investigated rather than listing individual SWMUs
- ▶ Incorporated into subsequent HSWA permit when possible
- ▶ Once HSWA permit is effective, consent order is terminated



- There are several types of orders:
 - Specifically the consent order is for facilities that may not have or have had a RCRA permit. These may be interim status facilities that are no longer a haz. Waste facility but still have cleanup forms when they did operate as haz waste before permits were required.
- These orders may be incorporated into a HSWA permit if hswa permit issued. Hswa permit over rides the order.

RCRA provisions grant EPA the authority to issue orders, revoke permits and commence civil actions

- ▶ Pursuant to RCRA §§3008(a) and 3008(h)(2), EPA may
 - Issue an order
 - Revoke a permit
 - Commence a civil action in a U.S. district court

- ▶ When necessary to protect human health or the environment



- The 3008 (a) and (h) 2 primarily gives the authority to take legal action and begin court proceeding

RCRA §3008(h) applies to interim status facilities

- ▶ EPA can order corrective action
- ▶ For any release of hazardous waste or hazardous constituents
- ▶ From interim status facilities



- Okay, let's turn to Section 3008(h) of the statute.
- Remember, these facilities do not have permits, so EPA uses another enforcement document, an order, to force corrective action.
- 3008(h) applies to facilities which have interim status (i.s.), had interim status, or should have had interim status.
- So, for example, you have a facility that has never heard of RCRA and has had a spill. They are not going to be a RCRA permitted facility, among all the other things they have done wrong. They are a facility that should at least have been under interim status. In that case, 3008(h) may be an appropriate authority to use for corrective action.
- One thing to keep in mind is that the issuance of a permit requiring corrective action to a facility does not absolve an owner/operator of any responsibility to comply with an order for corrective action previously issued to the facility. The facility owner/operator must comply with both the permit and an existing order. Of course, a 3008(h) order cannot be issued to a facility after final disposition of the permit application.
- EPA can use 3008(h) orders for releases that migrate beyond interim status facility boundary.

Pursuant to §7003, EPA can order corrective action

- ▶ Upon evidence of **past or present handling** of solid or hazardous waste
- ▶ When a situation presents an **imminent and substantial endangerment** to human health or the environment
- ▶ EPA can require **any action necessary**
- ▶ Applies to all types of facilities
 - Generators
 - Permitted TSDFs
 - Interim Status TSDFs



- **READ SLIDE.** Again, we have very broad authority. Note that the language “past or present”; it can require cleanup for actions before 1976. Also, 7003 applies to all groups. It can even be used even if not subject to any other RCRA provision or other environmental law.
- This is the imminent threat or imminent and substantial endangerment order. If EPA believes a site poses an imminent threat, EPA can require a facility to initiate immediate cleanups.
- **Example:** Generator of hazardous waste has a leaky container or it gets knocked over by an employee and spills onto the ground. An EPA inspector finds the leak or evidence of the spill and determines that it might contaminate drinking water. Thus, he orders a cleanup.