

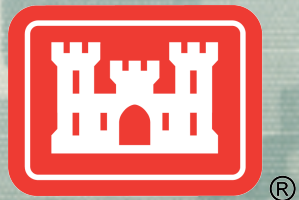
Munitions Remediation at RCRA Facilities

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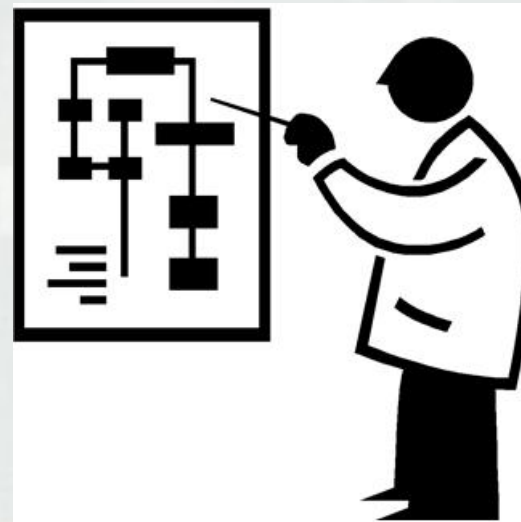


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Agenda

- Brief Overview of RCRA
- RCRA vs CERCLA
- SWMU/HWMU
- MRS



RCRA – What is it?

- RCRA is the Resource Conservation and Recovery Act [42 USC 6901 et seq.] , which was enacted by Congress in 1976. RCRA is the primary Federal statute regulating the generation, transportation, treatment, storage, and disposal of solid and hazardous waste. RCRA was enacted by Congress to require proper management of waste generated at existing facilities.

- EM1110-35-1 Chapter 9



RCRA – What is it?

- RCRA has kept in stride with current waste management issues and problems by way of Congressional amendments, the most notable being the Hazardous and Solid Waste Amendments (HSWA).

- EM1110-35-1 Chapter 9



RCRA – What is it?

- Under provisions of HSWA, Congress established the authority for corrective action requirements at permitted or interim status hazardous waste management facilities.
- Some states are RCRA-authorized states and have the authority to regulate the hazardous and solid waste within their state

- EM1110-35-1 Chapter 9



RCRA Permits

- Authorized RCRA States
 - ▶ Achieve *Primacy* by EPA Acceptance of State Legislation/Codes/Rules
 - Georgia EPD RCRA Guidance
 - ▷ Selecting Media Remediation Levels at RCRA SWMUs
 - Utah Administrative Code Title R315
 - ▷ Environmental Quality, Solid and Hazardous Waste



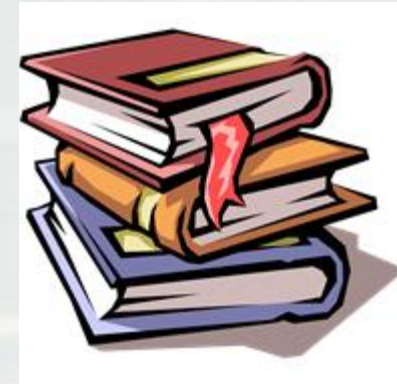
RCRA Permits

- RCRA Part A
 - ▶ Consists of EPA Form 8700-23 (includes both the RCRA Subtitle C Site Identification Form and the Hazardous Waste Permit Information Form), maps, drawings, and photographs, as required by 40 CFR 270.13
 - ▶ Or, State form that requires information not requested in the EPA form
 - ▶ May obtain interim status until Part B permit is issued



RCRA Permits

- RCRA Part B
 - ▶ Hazardous waste permit application contains detailed, site-specific information
 - ▶ Negotiations maybe required
 - ▶ Organized in Modules
 - Standard Permit Conditions
 - General Facility Conditions
 - Corrective Action
 - Post Closure Conditions
 - Attachments – Plans, Management requirements...



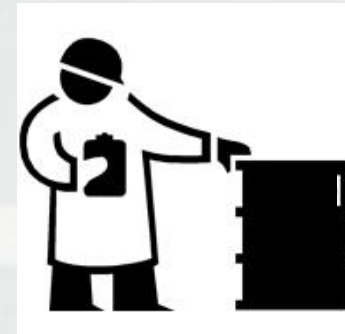
Permit/Management

- Other Requirements may include, as applicable
 - ▶ Air Modeling
 - ▶ Waste Analysis Plans
 - ▶ Inspection Plans
 - ▶ Contingency Plans
 - ▶ Closure Plans
 - ▶ Container Management
- Notice of Violation can come with Fines and Penalties

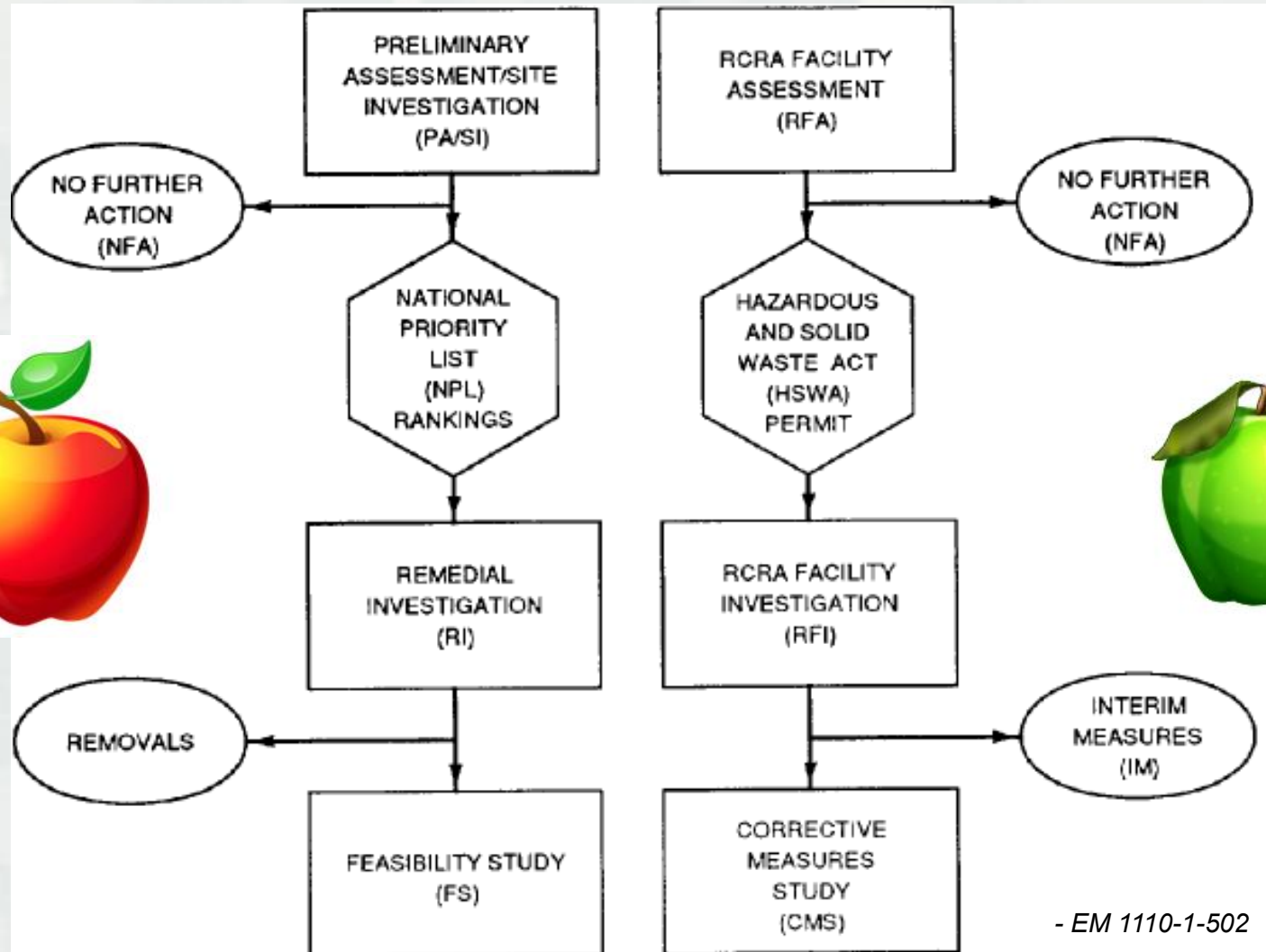


SWMU/HWMU

- Solid Waste Management Unit
- Hazardous Waste Management Unit
 - ▶ RCRA permitted
 - Regulator is Lead Agency
 - Environmental Remediation
 - ▷ Follows RCRA programmatic requirements
 - Facility specific requirements
- SWMU in the past called Operable Units



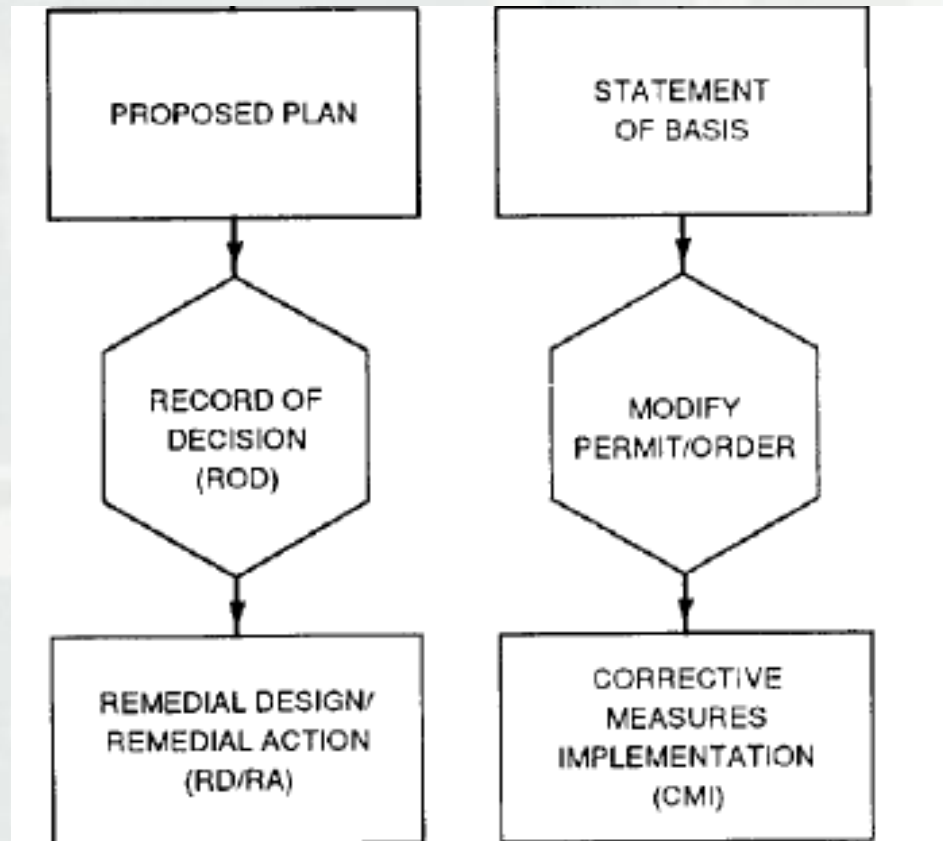
CERCLA vs RCRA



- EM 1110-1-502



CERCLA vs RCRA



- EM 1110-1-502



Project SWMUs

- Site Description
 - ▶ Multiple burial pits
 - Munitions
 - Drums
 - ▶ Open burning and/or dumping trenches,
 - ▶ Open burn/open demolition sites, including ash piles



Objectives

- **First SWMU**
 - ▶ **Perform surface stabilization**
 - Surface clearance for Kick-outs from OB/OD
 - Removal of materials from pits and trenches
 - Collect surface samples to determine presence/absence of contamination
 - ▶ **Surface items were removed from burial pits as long as no digging was required**
 - ▶ **Dispose of conventional munitions**



Specifics to the RCRA Permit

- Air Modeling required for burning of incendiaries
 - ▶ Resulted in Modification of the Permit
- Unacceptable to move items BIP'd
 - ▶ Required Emergency Permit
- Staging of Hazardous Waste
 - ▶ No Hazardous Waste left the SMWU until properly manifested and ready for shipment



Objectives

- Second SWMU
 - ▶ Perform Interim Removal
 - ▶ Achieve Response Complete
 - Sampling to confirm presence/absence
 - Remove contaminated soil
 - Resample
 - Prepare required closure Documents
- HWMU
 - ▶ Achieve Closure



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Specifics to the RCRA Permit

- Air Modeling
- Unacceptable to move items BIP'd
- Closure Plan part of RCRA Permit
 - ▶ Required to use EPA Regional Screening Levels
 - ▶ RCRA Facility Quality Assurance Project Plan
 - ▶ RCRA Facility Risk Assumptions Document



Specifics to the RCRA Permit

- Federal government is exempted from the financial requirements of:
 - ▶ 40 CFR § 270.14(b)(15)
 - Closure Cost Estimate
 - Financial Assurance Mechanism for Closure
 - ▶ 40 CFR § 270.14(b)(16)
 - Post-Closure Cost Estimate
 - Financial Assurance Mechanism for Post-Closure Care
 - ▶ 40 CFR § 270.14(b)(17)
 - Liability Requirements
 - ▶ 40 CFR § 270.14(b)(18)
 - State Financial Mechanism



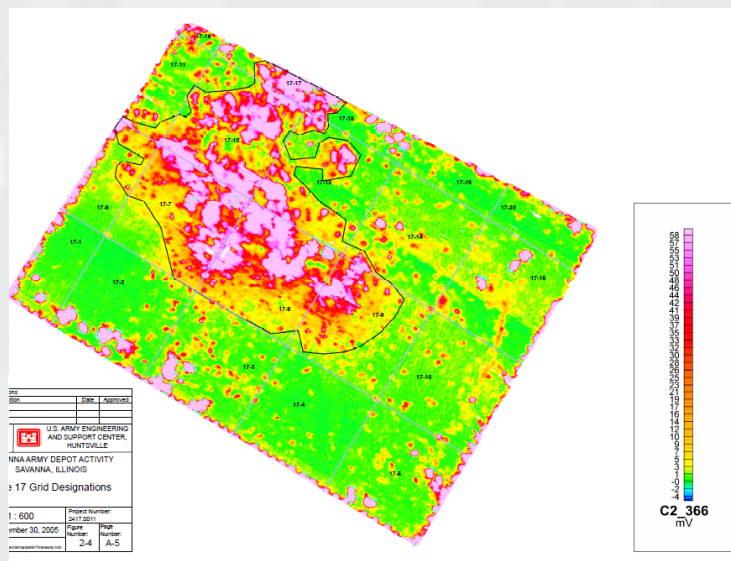
MRS

- Munitions Response Site
 - ▶ RCRA or CERCLA
 - ▶ Regulator may allow CERCLA
 - Must still meet the substantive requirements of the RCRA Permit
 - ▶ RCRA Facility risk assessment may be more streamlined than required in CERCLA



Project MRS

- Site Description
 - ▶ Potential for multiple munitions burial pits
 - ▶ Open burning and/or dumping trenches,
 - ▶ Barracks



Objectives

- Perform RCRA Facility Investigation
 - ▶ Reacquire/Resolve anomalies
 - ▶ Collect samples for Risk Assessment
 - ▶ Prepare RFI Report
 - ▶ If required, perform Corrective Measures Study



Specifics to the RCRA Permit

- Little difference from CERCLA
- Disposal of DMM and Unacceptable to move items
 - ▶ Required Emergency Permit
- Followed RCRA Facility Risk Assessment Protocols





Questions?

