



# EPA's Role in the Site Remediation and Cleanup Program at SRS

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# Overview

- Introduce EPA
- Origin of Superfund
- How Superfund applies to SRS
- EPA's involvement in SRS remediation program



# United States Environmental Protection Agency (EPA)

mission:

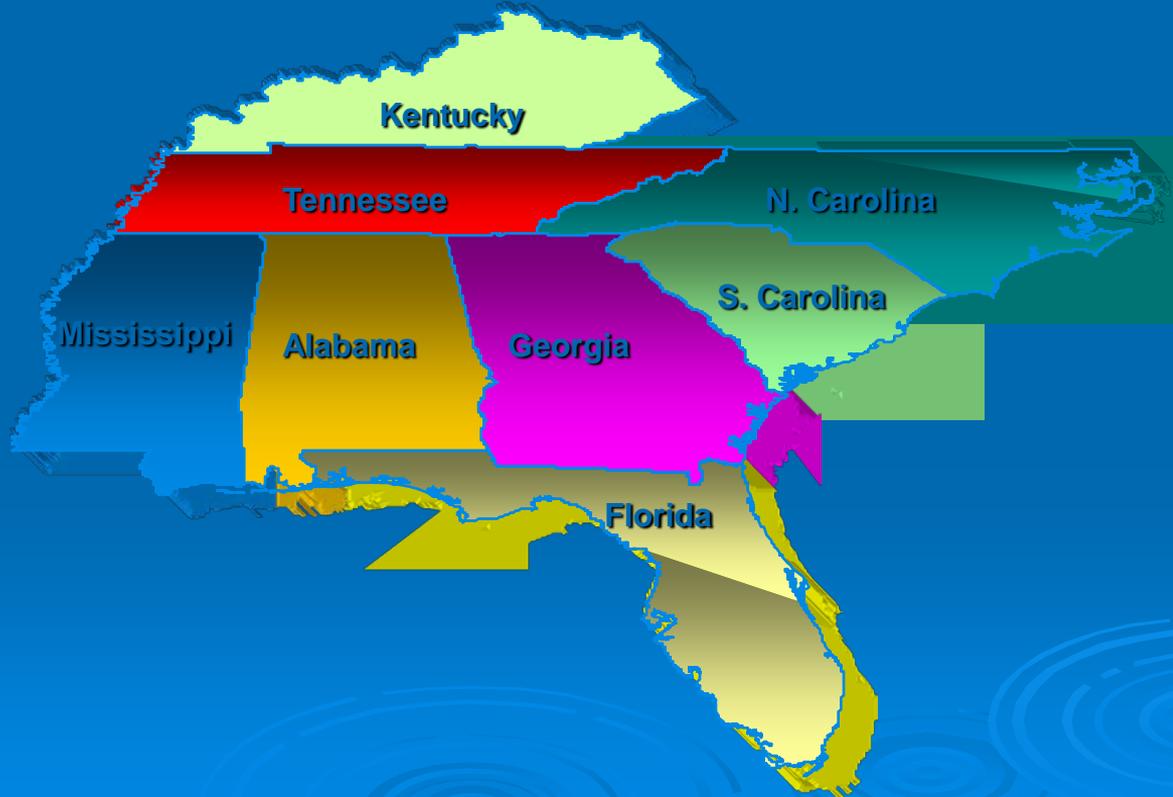
*To protect human health and  
the environment*

- Independent agency formed in 1970
- Congress writes environmental laws
- EPA writes regulations to implement laws
- EPA enforces regulations
- EPA sets national standards





# U.S. EPA Region 4





# Origins of Superfund

CERCLA: Comprehensive Environmental Response Compensation and Liability Act (Superfund)

Became law in 1980

Amended in 1986



# Origins of Superfund

- “Reactive” law, addressing previously contaminated sites
- Established in response to disasters like Love Canal, NY and Valley of the Drums, KY



# CERCLA

CERCLA provides authority for the federal government to respond to releases or threatened releases of hazardous substances



# National Contingency Plan

- National Contingency Plan (NCP) is the set of implementing regulations – “rules”
- Procedures for conducting CERCLA response actions
- Establishes the risk level that triggers clean up action



# CERCLA at Federal Facilities

## Executive Order 12580 (1987):

- Delegates to DOE and DoD the responsibility to implement certain provisions of CERCLA
- Makes DOE and DoD the “lead agency”
- Federal facilities must follow policies and procedures as spelled out in the NCP
- EPA either concurs with remedies proposed by lead agencies or picks another appropriate remedy

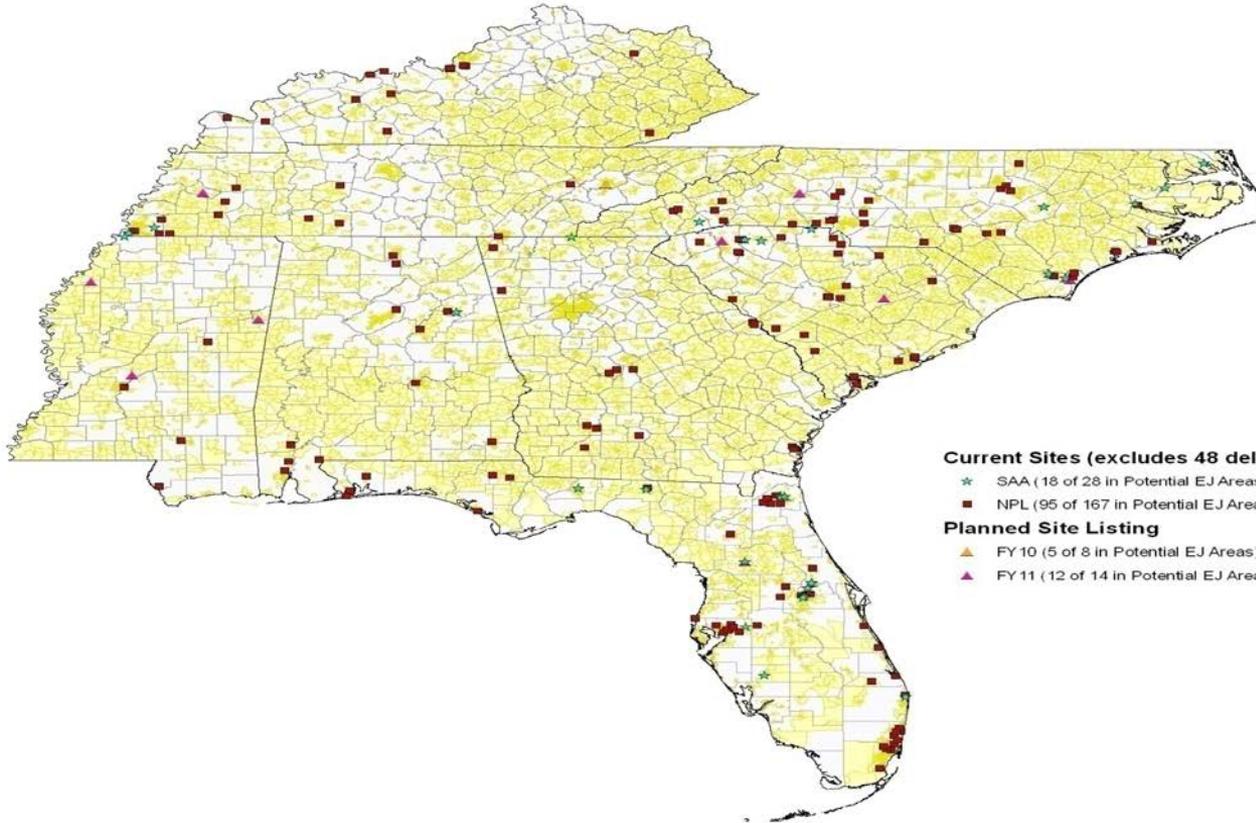


# CERCLA at Federal Facilities

Federal Facilities (DoE, DoD, etc.) are subject to CERCLA requirements similar to private entities



# National Priorities List

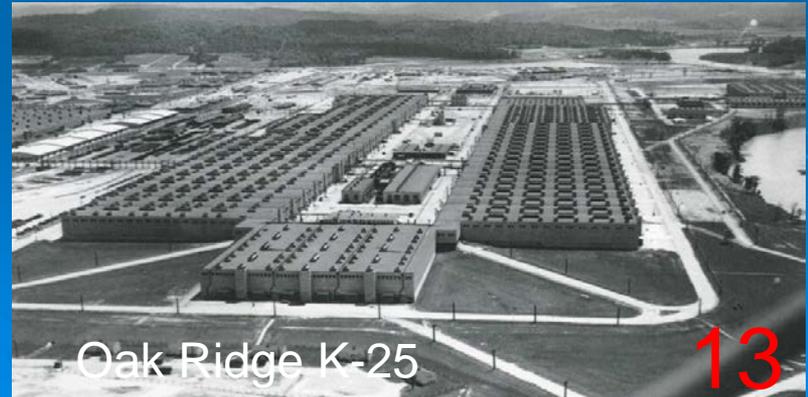
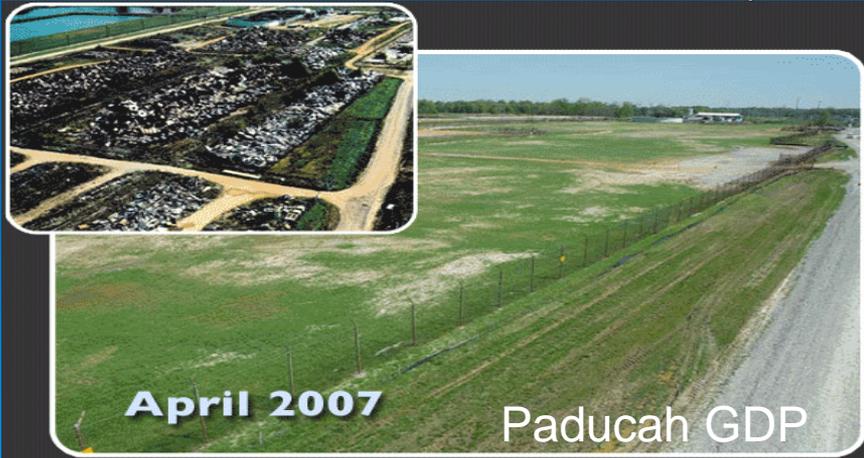


- Current Sites (excludes 48 deleted sites)**
- ★ SAA (18 of 28 in Potential EJ Areas)
  - NPL (95 of 167 in Potential EJ Areas)
- Planned Site Listing**
- ▲ FY10 (5 of 8 in Potential EJ Areas)
  - ▲ FY11 (12 of 14 in Potential EJ Areas)



# Department of Energy Facilities in EPA Region 4

- Savannah River Site – South Carolina
- Paducah Gaseous Diffusion Plant - Kentucky
- Oak Ridge Reservation – Tennessee
- Pinellas Plant – FL (RCRA FDEP lead)





# EPA Region 4 Department of Defense Facilities



34 NPL or BRAC facilities – Army, Navy, Air Force,  
Marines, NASA



# Savannah River Site

- Added to the Superfund National Priorities List – December 1989
- SRS required to have a Federal Facilities Agreement (agreement with State & EPA)



# Federal Statutes for Cleanup of Federal Facilities

- CERCLA
- RCRA
- Oil Pollution Control Act
- Safe Drinking Water Act
- Clean Water Act
- Clean Air Act



# SRS - Federal Facility Agreement

## August 1993

Three party agreement (DOE, EPA, SCHEC)

- Governs investigation and remediation program
- Roles and responsibilities of each party
- Schedules and deadlines
- Enforceable milestones, penalties
- Procedures to working together
- Dispute resolution



# EPA's Role

- Oversight of remedial actions at SRS
- Ensure adherence to the NCP, CERCLA, FFA, guidance
- Technical and procedural assistance
- Information, guidance, training



# EPA's Role

EPA and SCDHEC concurrence required:

- Select of remedies (Record of Decision)
- Implement remedies
- Operate remedies
- Determine success of remedies

Involvement – early & often –

- Process leading up to selecting remedies
- Designing and installing remedies
- Monitoring and evaluating effectiveness of remedies



# EPA SRS Team

- Martha Berry – RPM
- Diedre Lloyd – RPM
- Jon Richards – RPM (shared)
- Rob Pope – RPM & FFA Manager



# EPA SRS Team Support

- Hydrogeologists (Ben Bentokowski, Kay Wischkaemper)
- Risk Assessor (Tim Frederick)
- Attorney (Rhelyn Finch)
- Database/Tracking (Carolyn Haugabook)
- Community Involvement (Kyle Bryant)
- Health Physics (U.S. Army Corps of Engineers)
- TechLaw – Regional Oversight Contract
  - Document Review, Field Oversight, Meeting Support



# EPA Decision Process:

## *RPM level (Martha, Diedre, Jon, Rob)*

- EPA RPM involved in remedial process === via the Core Team and Scoping process
  - Collaborate sampling and monitoring plans
  - Conduct site visits and inspections, field oversight
  - Review data
  - Review documents
  - Comment on documents and resolving issues
  - Ensure adherence to NCP, EPA guidance
  - Participate in meetings, teleconferences, team work
  - Consider public input
  
- EPA RPM integral in identifying preferred remedy(ies)



# EPA Decision Process:

## *EPA Management Level*

- EPA Management and EPA HQ:
  - consider proposed remedies
  - ensure national consistency and adherence to NCP, national guidance
  - ensure that plan has State concurrence
  - give approval to proceed with Proposed Plan
- EPA RPM represents the SRS Core Team's decisions



# EPA Decision Process:

## *Superfund Division Director*

- Proposed Plan issued to the public
- DOE writes the Record of Decision, considering public comments (core team participation)
- DOE signs the Record of Decision
- EPA signs the ROD
- SCDHEC signs the ROD



# EPA Involvement Continues

- Ensure remedy is:
  - designed and constructed according to plan
  - achieving the objectives outlined in the ROD
  - protective of human health & environment
- Regular effectiveness monitoring
- 5 Year Remedy Reviews
  - EPA management and HQ involved in findings, and follow-up to 5-year reviews



# Three Party Decisions

Decision Documents “belong” to DOE,  
SCDHEC and EPA

EPA must sign a ROD for it to be final  
per the requirements of the NCP



# Collaboration

- Team work approach employed to ensure meeting all FFA requirements while streamlining and accelerating process
  - Core Team
  - Scoping meetings
  - Design teams – special topics
- Requires dedication and commitment from each of the three parties



# Current Activities and Projects

- FFA commitments
- C Area
- P Area (groundwater)
- D Area
- T Area (TNX groundwater)
- R Area (groundwater)
- A Area Units
- High Level Waste Tanks
- LLWD Facility (E Area)
- EJ Meetings
- Integrator Operable Units
  - Lower Three Runs - Tail
  - Steel Creek–Dunbarton Bay
- B Area (HWCTR)
- CMP Pits (groundwater)
- L Area Groundwater
- Land use controls
- D&D
- 5 year remedy reviews
- Field oversight
- CAB



# High Level Waste Tanks

- 22 non-compliant tanks to be closed by 2022
- 2 tanks were closed in 1997
- Tanks 18 & 19 closed 2012
- Two more tanks must achieve bulk waste removal by 9/30/10 (Achieved)
- **Individual tank closure per South Carolina regulations using Closure Modules**
- Tank Farms are CERCLA OUs – that will have RODs
- Tank closure milestones in FFA – subject to dispute if missed



# HLWT (continued)

- DOE prepares a Performance Assessment for each tank farm - EPA, SCDHEC, NRC comment
- Each tank farm also will have a General Closure Plan under the State WW permit
- SCDHEC is the lead for tanks up to the PP/ROD
- EPA reviews and issues comments to SC on tank documents up to PP/ROD
- After tanks exit permit, oversight is done by SCDHEC and EPA per the FFA
- NRC also has a monitoring role



# HLWT (continued)

- A Proposed Plan and Interim ROD is planned for each tank farm - individual tanks will be added to Interim ROD via an ESD as the tanks close and exit the SC WW Permit – F Tank Farm IROD is complete
- Regulation of the tanks is complex
- EPA is committed along with DOE and SCDHEC to close the tanks and eliminate the threats associated with the liquid waste



# Questions



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