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

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Rob Pope FFA Manager U.S. EPA



#### 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



# United States Environmental Protection Agency (EPA)





# 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

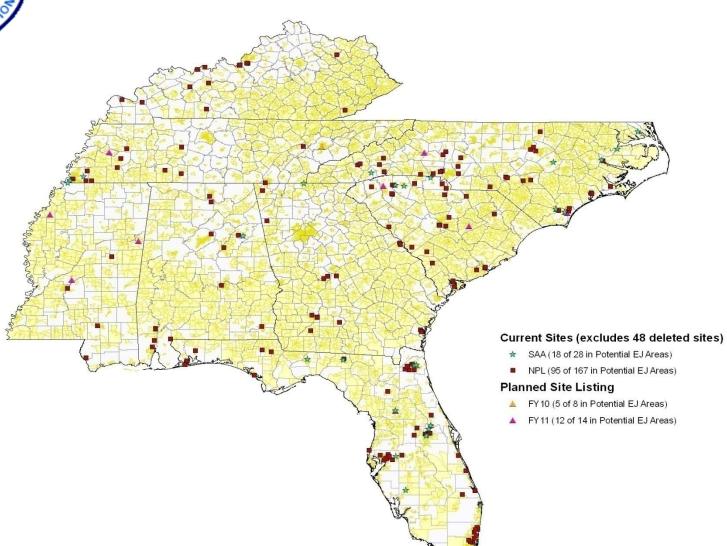


### **CERCLA at Federal Facilities**

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

# THE STATES LONG VICENTAL PROTECTION

### National Priorities List





# 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**

- James Barksdale RPM
- 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)
- SJTI, 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 (Jim, 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



- 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
- Design team & Protocols
- M Area
- P Area (groundwater)
- > D Area
- T Area (TNX groundwater)
- R Area (groundwater)
- Gun Sites
- A Area Units
- High Level Waste Tanks
- LLWD Facility (E Area)

- Integrator Operable Units
  - Lower Three Runs Tail
  - Steel Creek–Dunbarton Bay
- B Area (HWCTR)
- > CMP Pits
- 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 scheduled to close 12/31/2012
- 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



# 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
- 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

#### Superfund Job Training Initiative



The United States Environmental Protection, Agency Headquarters funded the SRS-SuperJTI through the TASC Award. EPA Region 4 provided meeting support to the SRS-SuperJTI by funding contractor support under ROC.

The United States Department of Energy, supported the SRS-SuperJTI though assisting in the development and implementation of the program and overseeing the participation of DOE contractors.





SRS, the facility at which the SRS-SuperJTI was developed for and where the graduates would work.



Parsons, a DOE contractor, provided support throughout the entire SRS-SuperJTI. Mock interviews were also conducted by Parsons during Phase 3 of the program.



**SRR**, a DOE contractor, committed to 42 full-time, permanent radiological control inspector and operators



OAI, Inc., a sub-contractor to E', provided the backbone to the program initiative and lessons learned from previous job trainings that were developed and implemented through their curriculum.





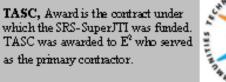
**DSS** Provided support to the initiative by educating and recruiting community partners and candidates from the Allendale County area.



SRNS, a DOE contractor, committed to 20 full-time, permanent material handler and operator positions.



E<sup>2</sup>, Inc., a contractor to EPA Headquarters, established and implemented the SRS-SuperJTI model.







**Denmark Technical College**, provided the facility for the technical portion of the program.



The Imani Group, served as the community partner and was sub-contracted by  $E^2$ .



### Questions

Rob Pope USEPA - Region 4 Superfund Division 61 Forsyth Street Atlanta, GA 30303 (404)562-8506 pope.robert@epa.gov