



EPA's Role in the Site Remediation and Cleanup Program at SRS (and ARRA Accomplishments)

Rob Pope

Senior Remedial Project Manager

USEPA - Region 4

Superfund Division



Overview

- ◆ Introduce EPA
- ◆ Origin of Superfund
- ◆ How Superfund applies to SRS
- ◆ EPA's involvement in SRS remediation program
- ◆ Work done at SRS under ARRA
- ◆ Future Cleanup Work at SRS



United States Environmental Protection Agency (EPA)

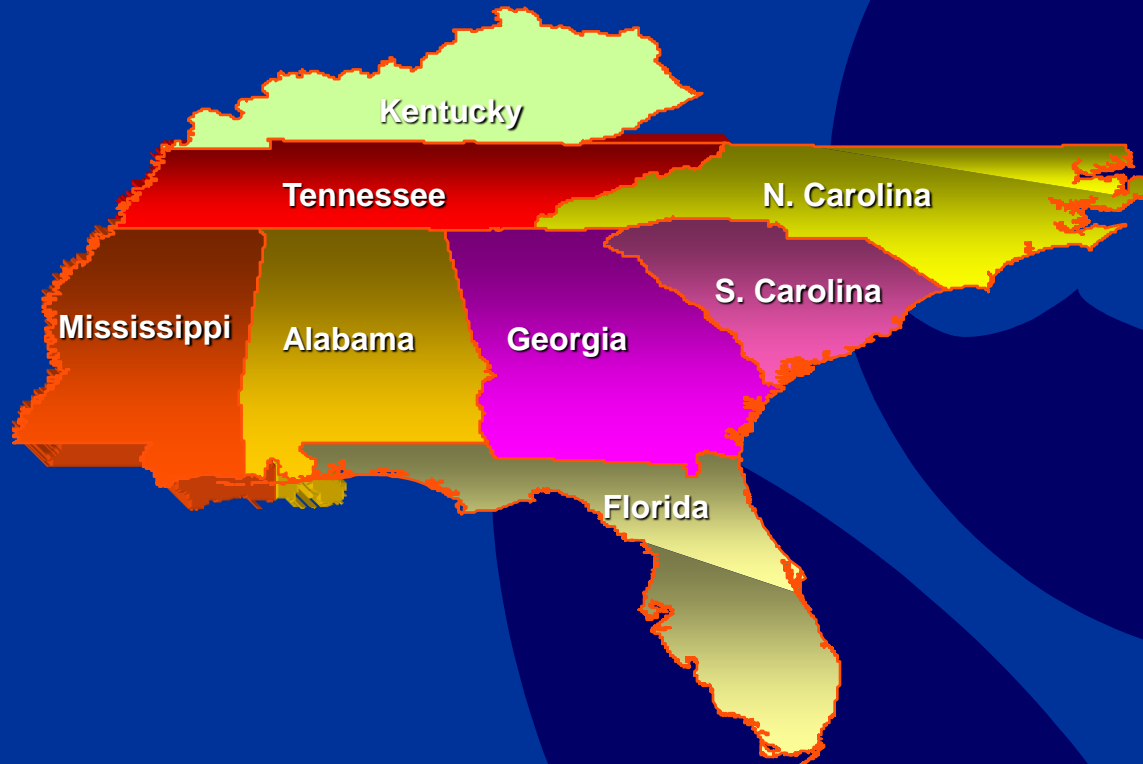
EPA mission:

*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





CERCLA (aka Superfund)

- ◆ CERCLA provides authority for the federal government to respond to releases or threatened releases of hazardous substances
- ◆ CERCLA at Federal Facilities –
 - » 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
 - » Federal Facilities (DoE, DoD, etc.) are subject to CERCLA requirements similar to private entities



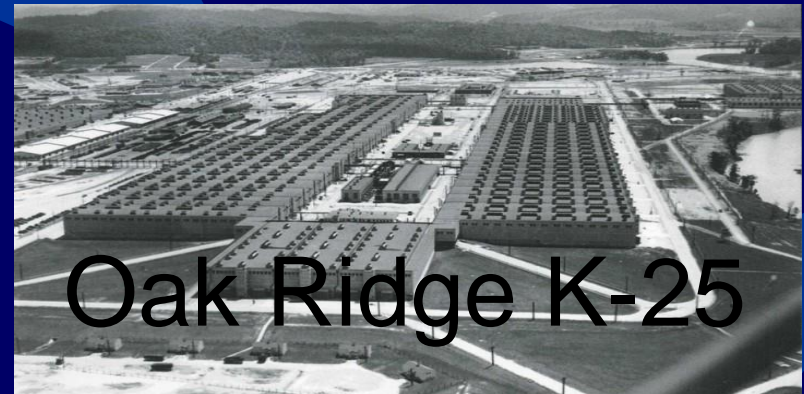
Federal Statutes for Cleanup of Federal Facilities

- ◆ CERCLA
- ◆ Most are delegated to SCDHEC to administer
 - » RCRA
 - » Oil Pollution Control Act
 - » Safe Drinking Water Act
 - » Clean Water Act
 - » Clean Air Act



Department of Energy Facilities in EPA Region 4

- ◆ Savannah River Site – South Carolina
- ◆ Paducah Gaseous Diffusion Plant - Kentucky
- ◆ Oak Ridge Reservation – Tennessee





EPA Region 4 Department of Defense Facilities



- ◆ 34 NPL or BRAC facilities – Army, Navy, Air Force, Marines, NASA
- ◆ MCRD Parris Island



Savannah River Site

- ◆ Added to the Superfund National Priorities List – December 1989
- ◆ SRS required to have a Federal Facilities Agreement (agreement with State & EPA on how to do the cleanup)
- ◆ SRS - Federal Facility Agreement signed 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



EPA's Role

- ◆ Oversight of remedial actions at SRS with SCDHEC through the FFA
- ◆ Ensure adherence to the NCP, CERCLA, FFA, guidance
- ◆ Technical and procedural assistance
- ◆ Information, guidance, training
- ◆ EPA and SCDHEC concurrence required:
 - » Selection of remedies (Record of Decision) 10



American Recovery and Reinvestment Act Work at DOE Sites in Region 4

- ◆ Region 4 DOE Sites Total ARRA \$
 - » \$2.4 Billion
 - » 40% of all DOE-EM (\$6 Billion)
- ◆ SRS - \$1.615 Billion
- ◆ Oak Ridge - \$755 Million
- ◆ Paducah - \$79 Million



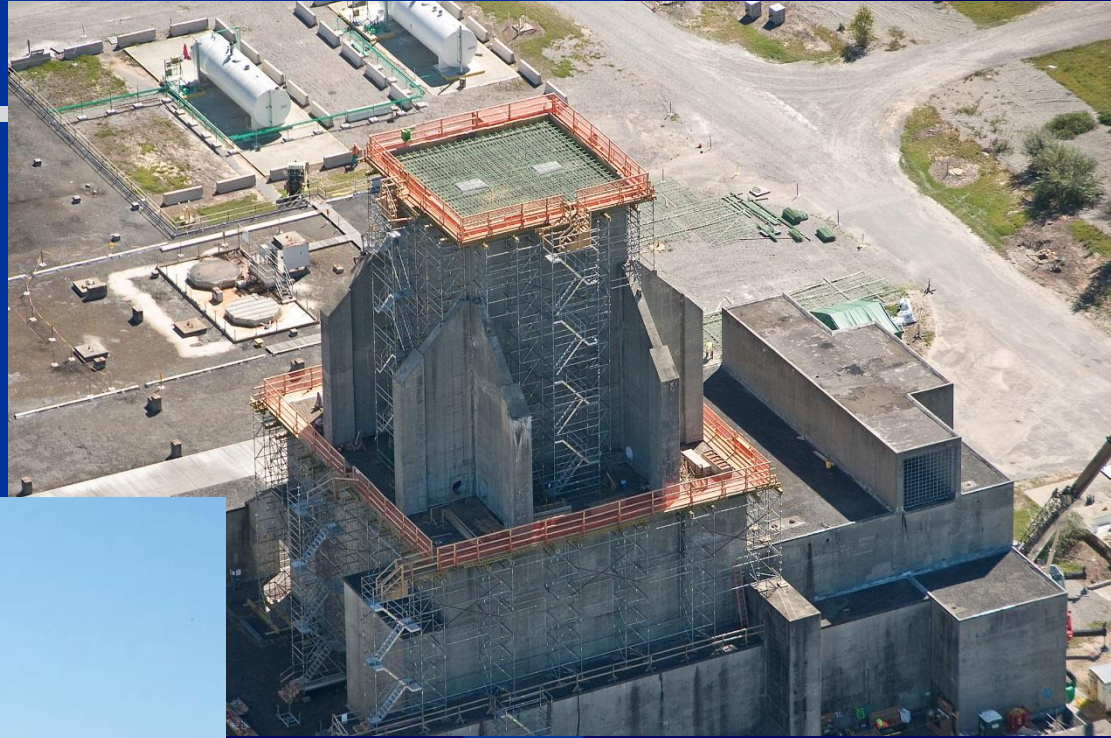
DOE Savannah River Site ARRA Scope

- \$1.615 Billion
- ◆ Over 30 Building Demolitions (D & D)
- ◆ 2 Reactor Areas Completely Addressed (P and R), 1 Partial (C Reactor)
- ◆ Over 20 Non-Time Critical Removal Actions (EE/CAs, Action Memos, Removal Reports)
- ◆ Actions at 14 Operable Units Accelerated by 2 to 20+ Years
 - » 2 Reactor buildings and vessels grouted/cleaned up/sealed off/closed
 - » Landfill Caps, Excavations, Soil Vapor Extraction systems installed, GW Source actions taken, and monitoring systems initiated
- ◆ Still finishing follow on RODs that cover polishing steps and Institutional Controls

Actions at Reactors - Before



Actions at Reactors - During



Actions at Reactors - During



Actions at P Reactor – After





Collaboration and Three Party Decisions

- ◆ Team work approach employed to ensure meeting all FFA requirements while streamlining and accelerating process
- ◆ Requires dedication and commitment from each of the three parties
- ◆ Decision Documents “belong” to DOE, SCDHEC and EPA
- ◆ EPA must sign a ROD for it to be final - per the requirements of the NCP



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
 - » No end to the 5 Year Review Process



Current Activities and Projects

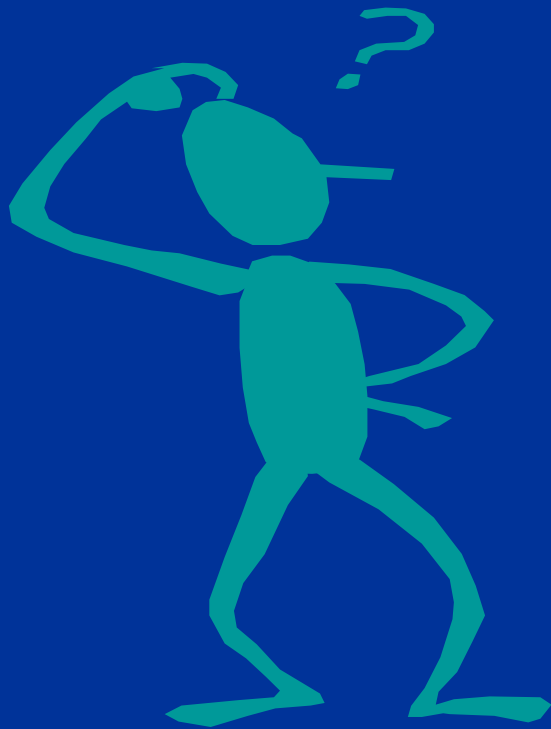
- ◆ FFA commitments
- ◆ C Area
- ◆ P Area (groundwater)
- ◆ D Area (coal ash & gw)
- ◆ T Area (TNX groundwater)
- ◆ R Area (groundwater)
- ◆ A Area Units (ash & vadose)
- ◆ High Level Waste Tanks
- ◆ LLWD Facility (E Area)
- ◆ EJ Meetings
- ◆ Integrator Operable Units
 - » Lower Three Runs - Tail
 -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

There is a Great Deal Left to do!

- ◆ High Level Waste Tank Farms
- ◆ Ash Piles
- ◆ C Reactor
- ◆ K Reactor
- ◆ L Reactor
- ◆ F Canyon
- ◆ H Canyon
- ◆ L Lake
- ◆ PAR Pond
- ◆ Multiple streams
- ◆ E Area
- ◆ Multiple Groundwater Plumes
 - » Tritium
 - » Chlorinated Solvents



Questions



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