



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

May 2019 CAB meeting

Jon Richards
Acting FFA RPM
U.S. EPA



EPA SRS Team

- Jon Richards – RPM & Acting FFA Manager
- Jennifer Tufts – RPM
- Diedre Lloyd – RPM
- Rob Pope – RPM
- Kyle Bryant - Community Involvement



EPA SRS Team Support

- Hydrogeologist (Ben Bentokowski)
- Risk Assessors (Tim Frederick & Brett Thomas)
- Radiation Risks (Jon Richards)
- Attorney (Rhelyn Finch)
- Contractor: TechLaw – Regional Oversight Contract
 - Document Review, Field Oversight, Meeting Support



Overview

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



United States Environmental Protection Agency (EPA)

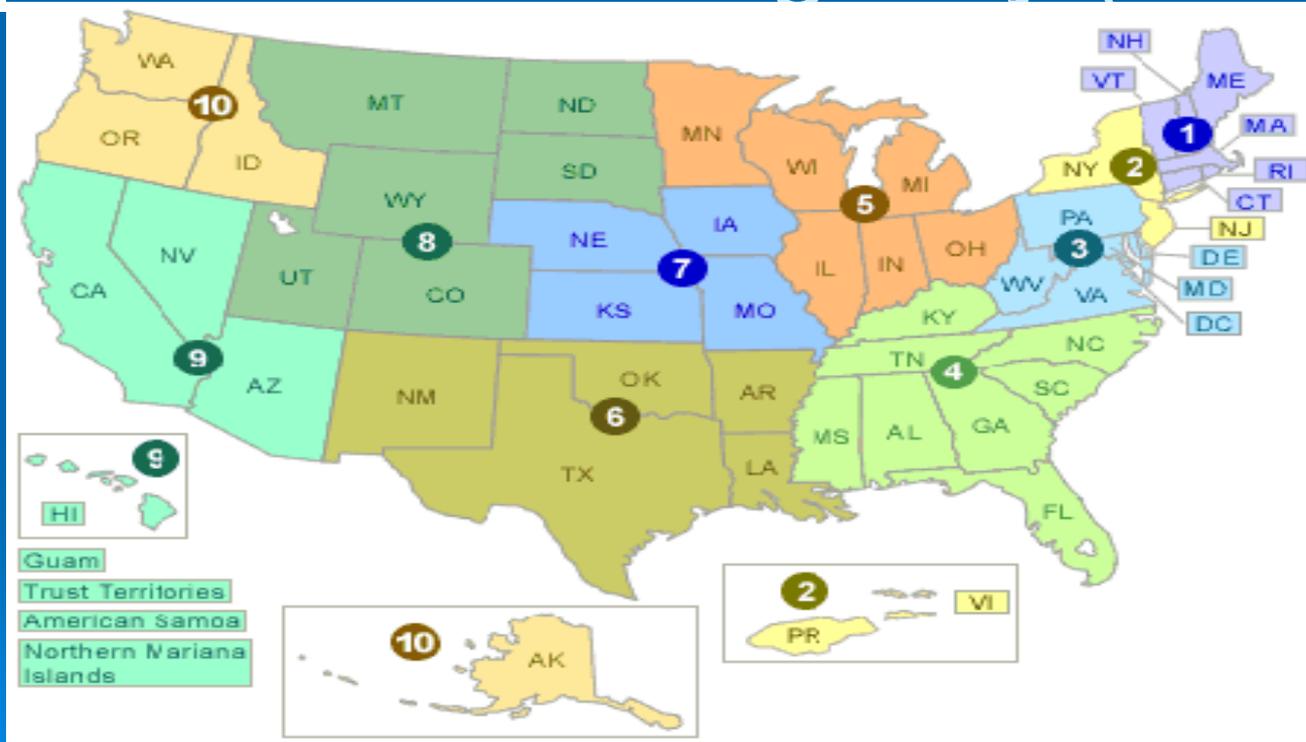
mission:

*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

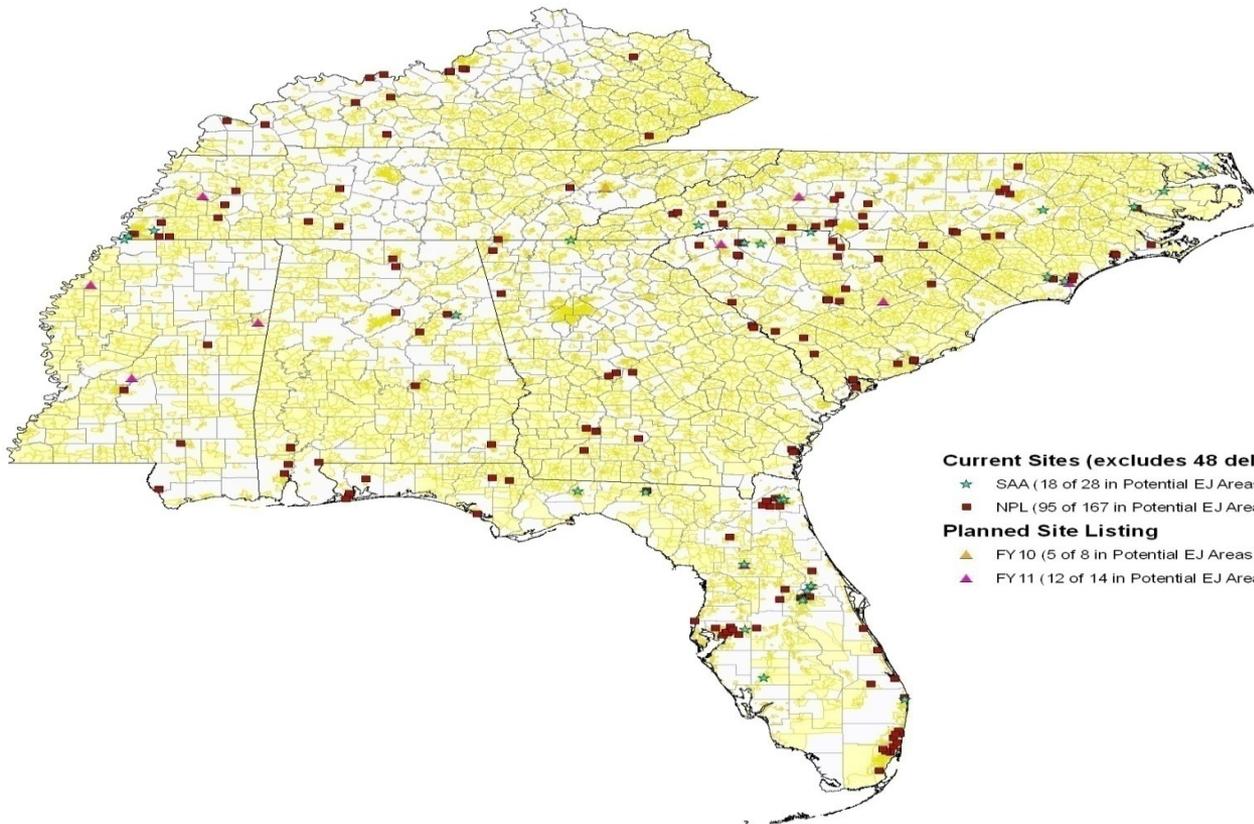


National Contingency Plan

- 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



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

- ▲ FY 10 (5 of 8 in Potential EJ Areas)
- ▲ FY 11 (12 of 14 in Potential EJ Areas)



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



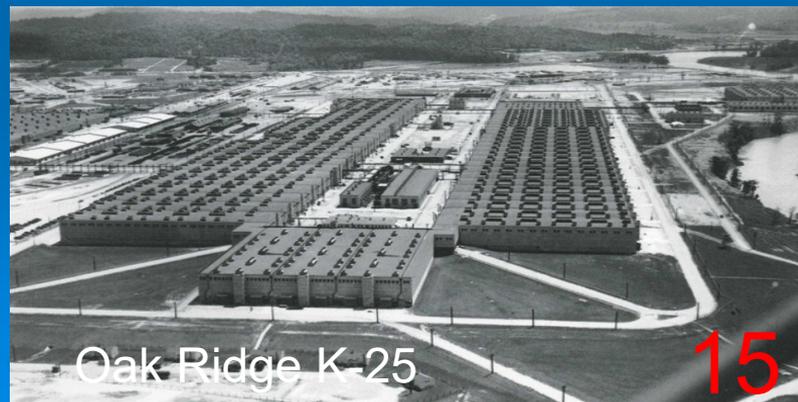
CERCLA at Federal Facilities

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



Department of Energy Facilities in EPA Region 4

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





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 Decision Process:

RPM level (Jennifer, 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 by DOE (approved by EPA and SCDHEC)
- 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: *every year a FYR is conducted due to the large #*



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 (EPA/SCDHEC/DOE)
 - Scoping meetings (Core Team+Contractors)
 - Design teams – special topics
- Requires dedication and commitment from each of the three parties



Current Activities and Projects

- FFA commitments
- High Level Waste Tanks
- D Area (coal ash & gw)
- C Area (groundwater)
- P Area (groundwater)
- T Area (TNX groundwater)
- R Area (groundwater)
- A Area Units (vapor extraction)
- LLWD Facility (E Area)
- Lower Three Runs/PAR Pond
- Steel Creek–Dunbarton Bay
- CMP Pits (groundwater)
- G Area Oil Seepage Basin
- 5 year remedy reviews (ongoing)
- Field oversight
- CAB



High Level Waste Tanks

- 22 non-compliant tanks to be closed by 2033[?]
- 8 tanks currently closed
- **Milestones exist for the remaining tank closures and tank bulk waste removal efforts – all awaiting the new contract [~2021]**
- **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 (2)

- DOE prepared a Performance Assessment for each tank farm - EPA, SCDHEC, NRC comments
- Each tank farm also has 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 (3)

- A Proposed Plan and Interim ROD have been done 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
- EPA has been concerned that the Salt Waste Processing Facility is not operational [later this year hot ops]; & now contract issues are delaying the emptying and closing the HLWTs



HLWT (4)

- As a result of an earlier dispute resolution, SRS has constructed the Tank Closure Cesium Removal system to address waste “at tank”
- EPA is hopeful the TCCR system will assist in bulk waste removal and ultimately in tank closure that is delayed due to SWPF not being operational
- 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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