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

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U.S. EPA

What does the EPA do at SRS?

- Our job is to protect human health and the environment
- At SRS we are the federal regulator over the cleanup of hazardous waste sites
- We work with Department of Energy as the lead and South Carolina as a co-regulator
- We work to get SRS CLEANED UP!

EPA SRS Team

- Jon Richards – RPM & FFA Manager
- Jana Dawson – RPM
- Diedre Lloyd – RPM
- Rob Pope – RPM [former FFA]
- Angela Miller - Community Involvement

EPA SRS Team Support

- Hydrogeologists (Ben Bentokowski)
- Risk Assessor (Shanna Alexander)
- Radiation Risks (Jon Richards)
- Attorney (Rhelyn Finch)
- 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

CERCLA at Federal Facilities

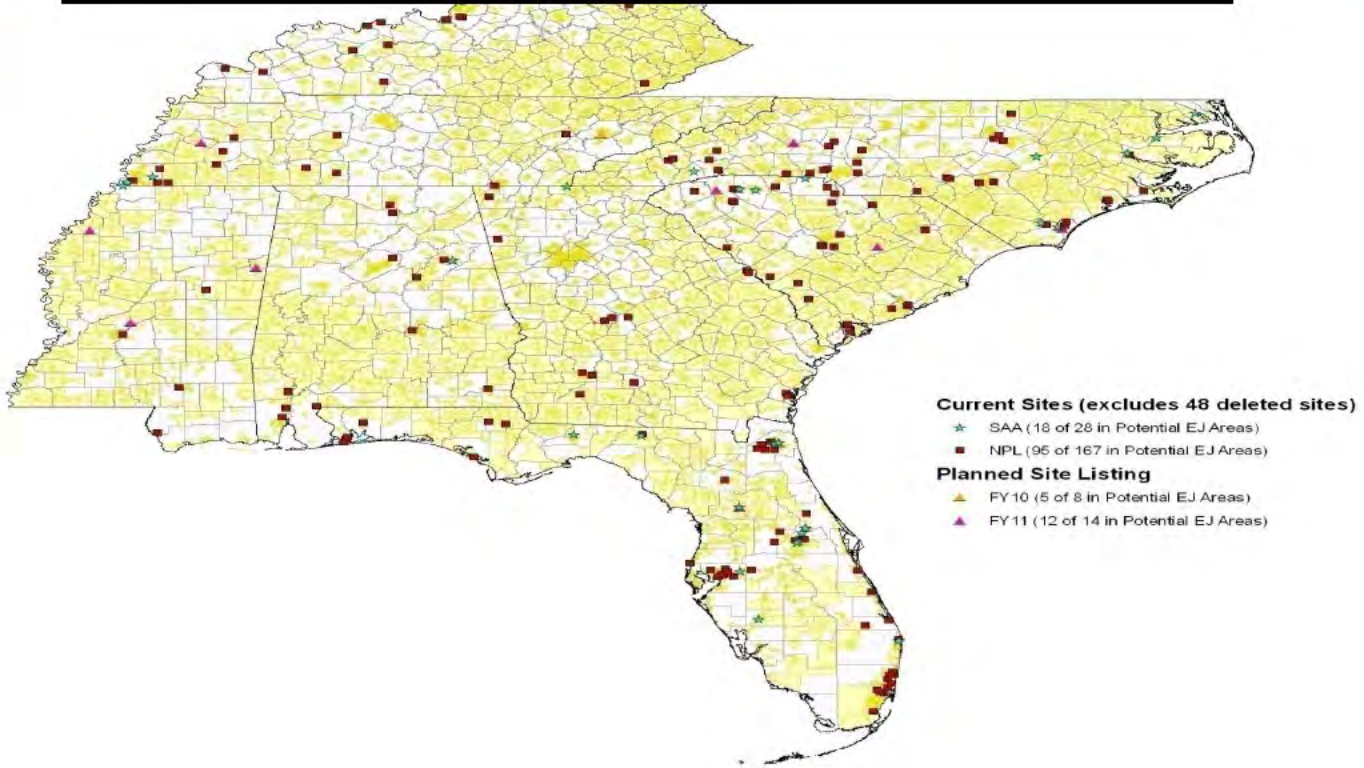
Executive Order 12580 (1987):

- 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



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 –

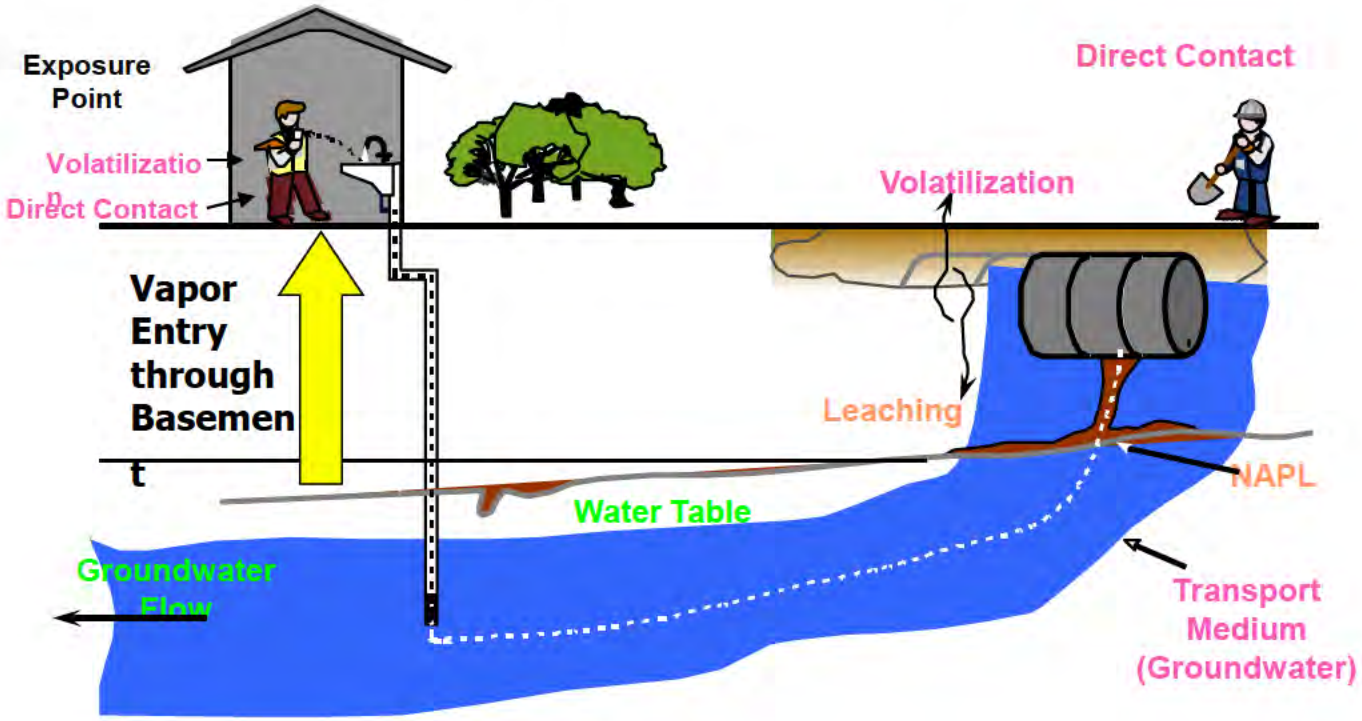
- Process leading up to selecting remedies
- Designing and installing remedies
- Monitoring and evaluating effectiveness of remedies

Investigation Process

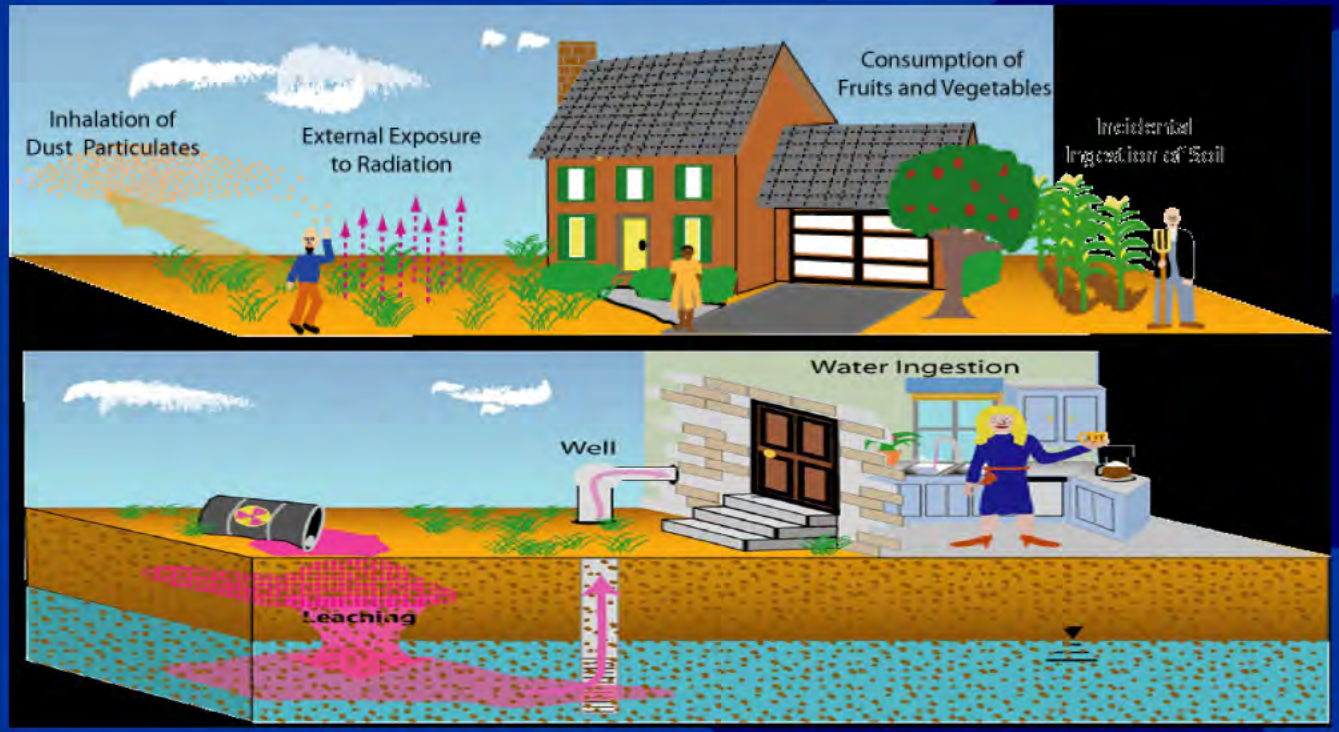
- Begins with site discovery
- Investigate the site
- Soil, sediment, groundwater, air, & surface water sampling
- A Risk Assessment determines the danger the to the public
- We decide how to clean up the site

Groundwater Sampling

How people can be impacted

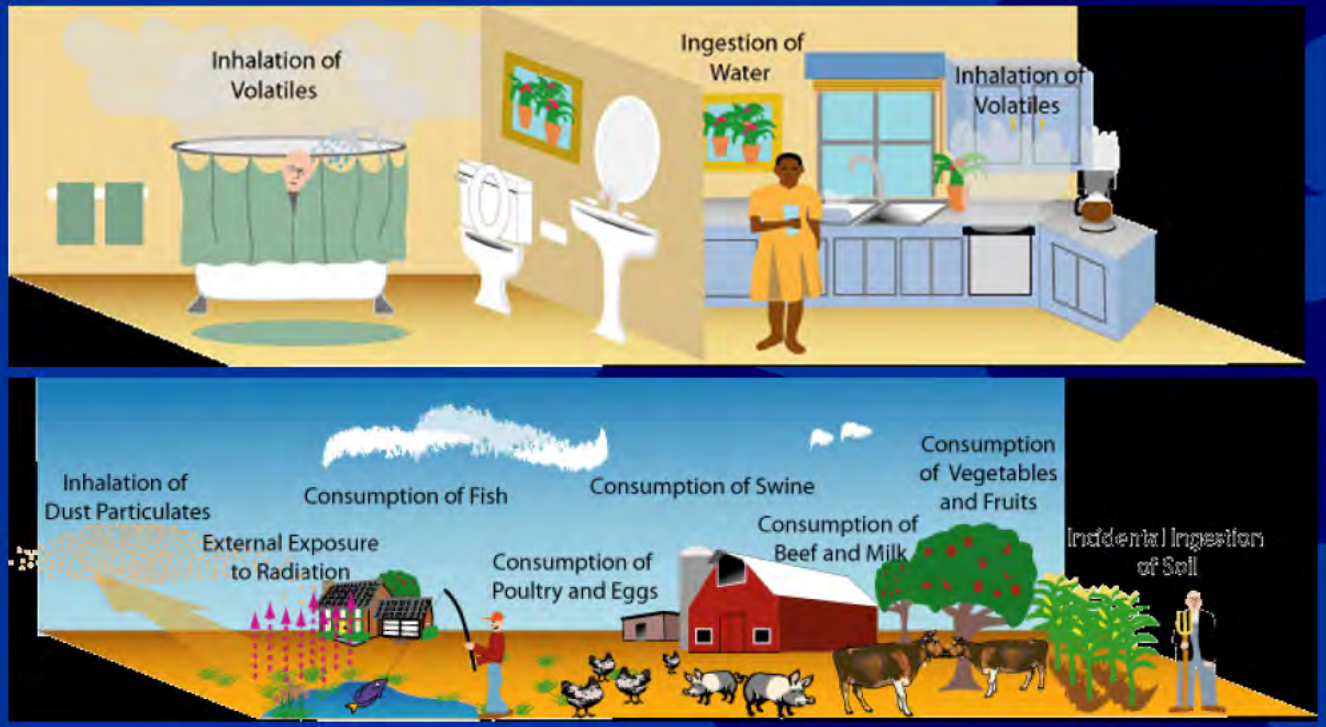


How People Can be Impacted from Radiation Releases



EPA

How People Can be Impacted from Radiation Releases



EPA

EPA Decision Process:

RPM level (Jennifer, Diedre, Jon, Rob, Craig)

- 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

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

The Cleanup at SRS

- It's been going on since the 1980s
- It will continue another 30+ years
- SRS employees 1000's of people
- Cleanup involves not just radiation and chemicals
  - There is office work, maintenance, etc.
- Jobs that require college and jobs that require only high school
- All require a clean record

How Can I Get Information?

- EPA Website – www.epa.gov/superfund
- SRS Website – www.srs.gov
- EPA Community Involvement Coordinator for SRS
  - Angela Miller (404) 562-9073

Questions

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