



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Integrating Regulatory Drivers

**Presentation for the Citizens Advisory Board
Facilities Disposition & Soil Remediation Sub Committee
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Angelia Adams, Acting Assistant Manager
Infrastructure & Environmental Stewardship
U.S. Department of Energy - Savannah River

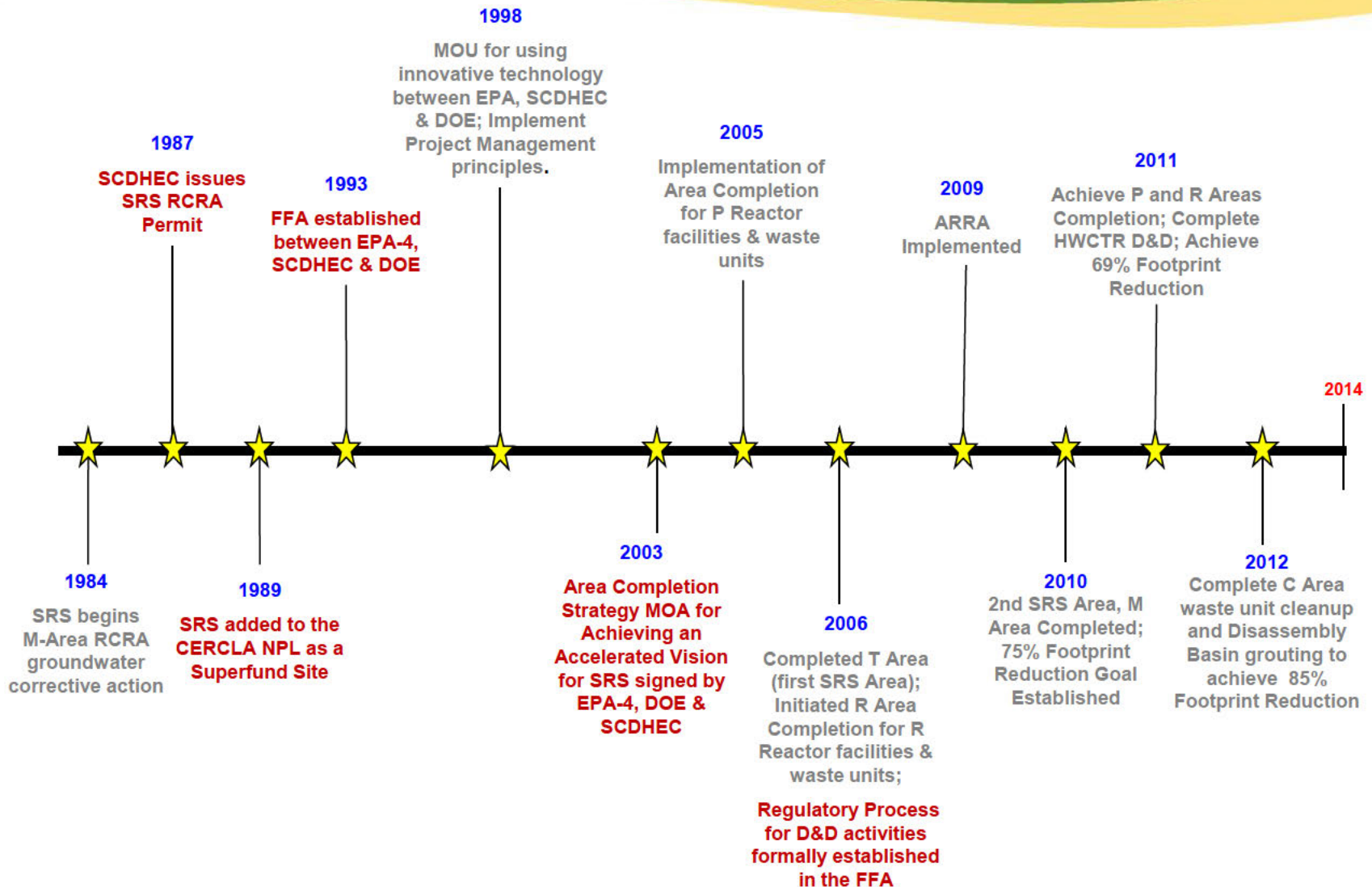
Mary Flora, Deputy Director
Environment, Security, Safety & Health
Savannah River Nuclear Solutions

- **ARRA: American Recovery & Reinvestment Act**
- **CAP: Corrective Action Plan**
- **CAA: Clean Air Act of 1963** – Regulates ambient air quality and sets emission standards for hazardous air pollutants.
- **CWA: Clean Water Act of 1972** – Regulates water quality, wetlands, and wastewater discharges through the National Pollutant Discharge Elimination System (NPDES) permitting program.
- **CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980** (also known as the Superfund statute) – Provides for the cleanup of abandoned and uncontrolled waste sites and the response to releases of hazardous substances to the environment. SRS was added to the National Priorities List (NPL) in 1989.
- **D&D: Deactivation & Decommissioning**
- **DWPF: Defense Waste Processing Facility**
- **DOE & DOE-HQ: Department of Energy – Headquarters**
- **EPA: Environmental Protection Agency**
- **ETF: Effluent Treatment Facility**
- **FFA: Federal Facility Agreement** – A negotiated agreement between EPA, SCDHEC and DOE that is required by CERCLA and governs the cleanup of a federal facility. The FFA was effective in 1993.
- **FY: Fiscal Year**
- **GW: Groundwater**
- **HW/MW: Hazardous Waste / Mixed Waste**
- **HWMF: Hazardous Waste Management Facility**
- **HLW: High Level Waste**
- **MOA: Memorandum of Agreement**

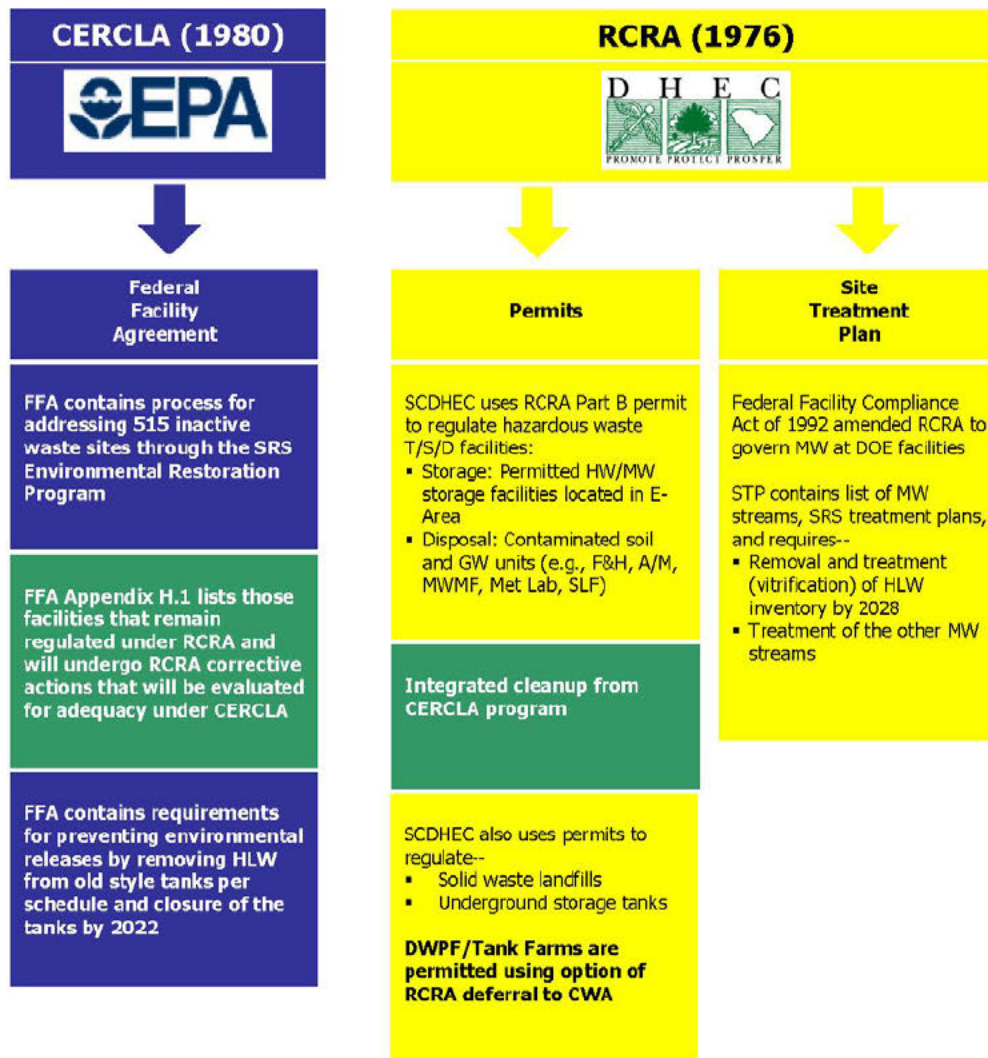
- **MWMF: Mixed Waste Management Facility**
- **NPL: National Priorities List**
- **NPDES: National Pollutant Discharge Elimination System**
- **PCB: Polychlorinated Biphenyl** – an organic chemical pollutant formerly used for cooling or heat transfer
- **RCRA: Resource Conservation and Recovery Act of 1976** – Regulates the management of solid waste (including the treatment, storage, and disposal of hazardous waste), and promotes the reduction of hazardous waste land disposal and cleanup of abandoned waste sites.
- **ROD: Record of Decision**
- **S&G: Soils & Groundwater**
- **SDWA: Safe Drinking Water Act of 1974** – Protects water supplies and regulates drinking water quality limits associated with health risks and color, taste, and odor.
- **SWMU: Solid Waste Management Facility**
- **SCDHEC: South Carolina Department of Health and Environmental Control**
- **SRS: Savannah River Site**
- **T/S/D: Treatment, Storage, Disposal**
- **TSCA: Toxic Substances Control Act of 1976** – Regulates the management of asbestos and PCBs, and the manufacture, use, and disposal of chemical substances and mixtures manufactured, processed, and distributed in commerce.
- **USACE: US Army Corps of Engineers**

Groups involved in SRS Cleanup

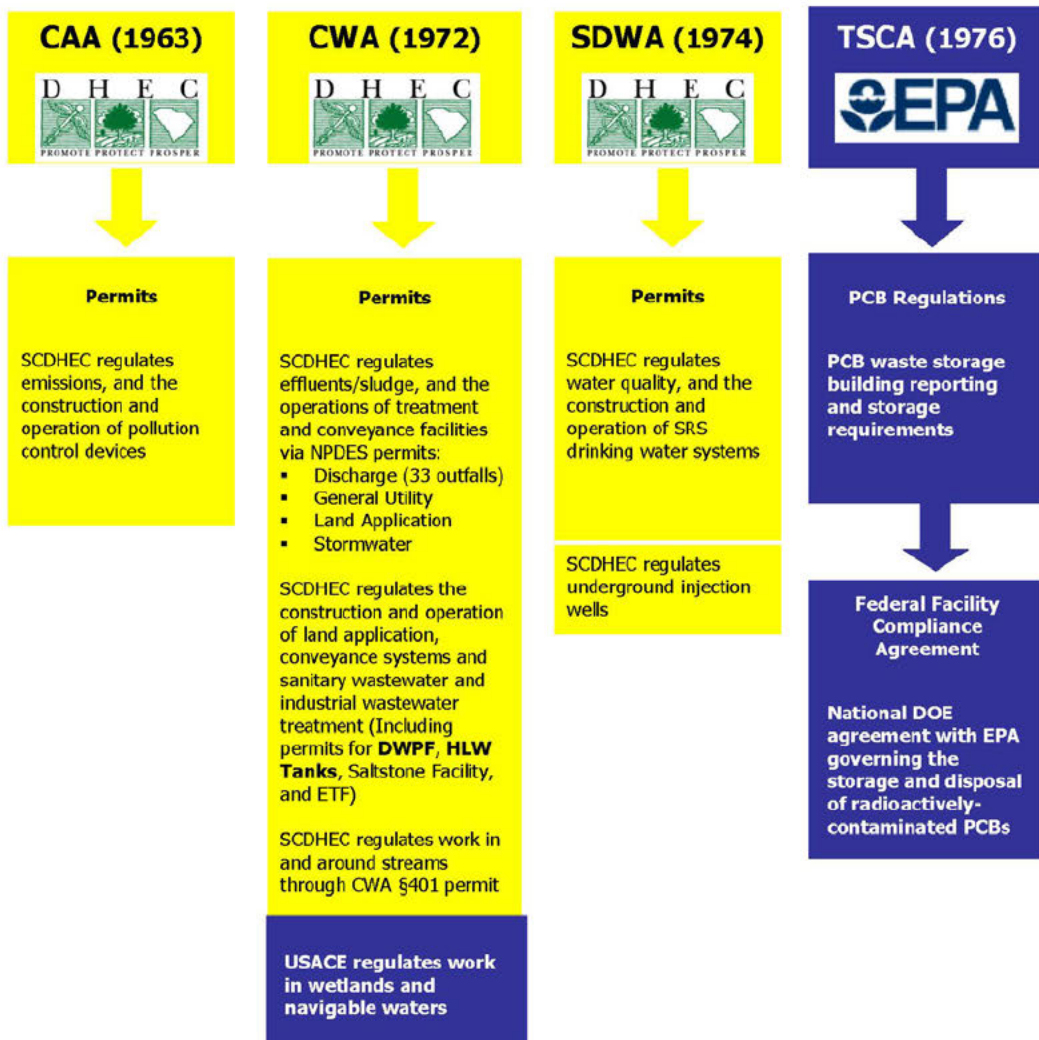




Major Environmental Laws



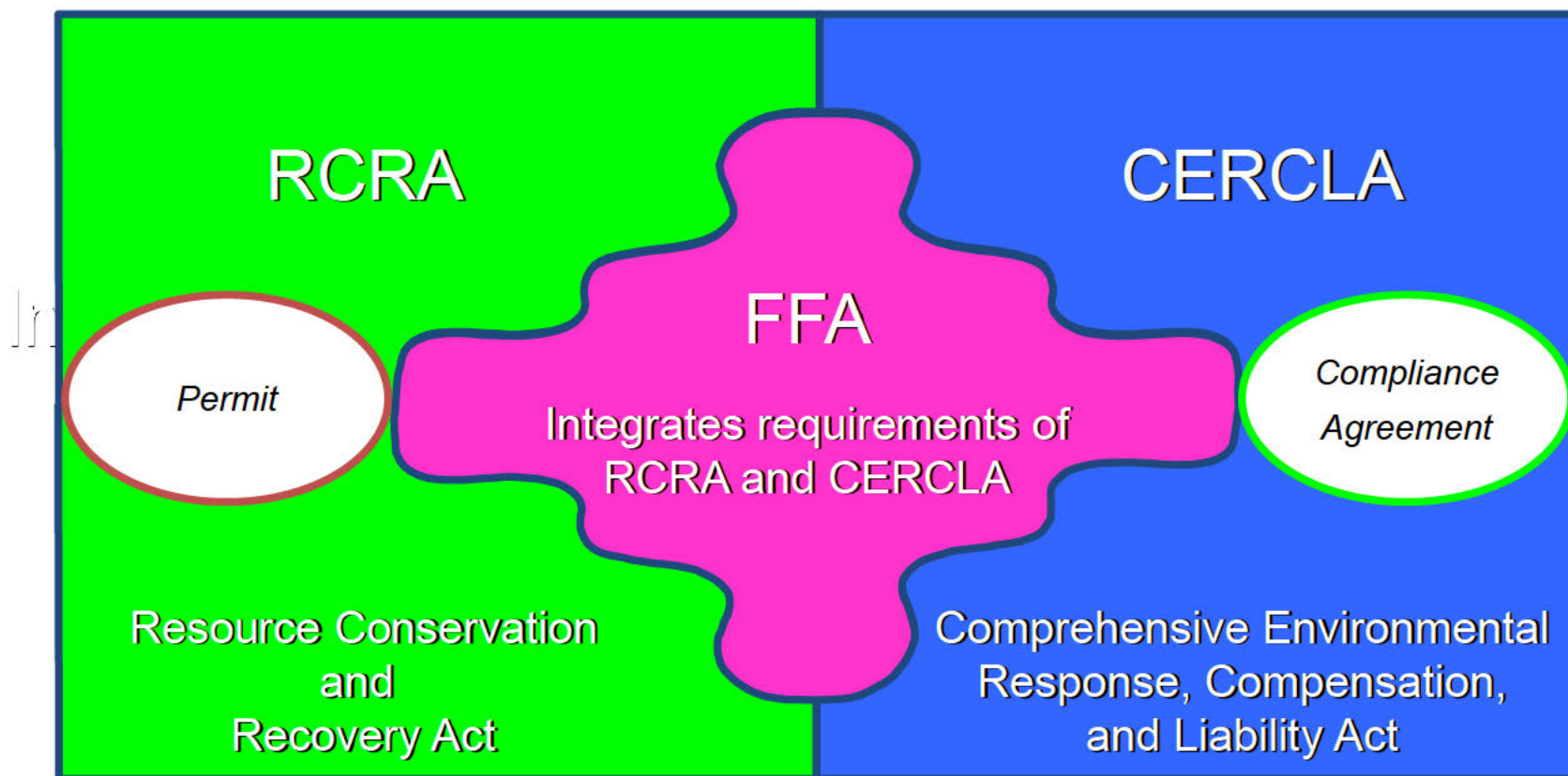
Major Environmental Laws (continued)



SRS Environmental Permits

Type of Permit	Number of Permits
Air	7
USACE—Section 10, Rivers & Harbors Act of 1899	1
USACE Nationwide Permit	4
USACE—404 Permit (Dredge and Fill)	1
Asbestos Demolition/Abatement	27
Domestic Water	222
Industrial Wastewater	77
NPDES Discharge	3
NPDES No Discharge	1
NPDES General Utility Water Permit	1
Stormwater Discharge	1
Construction Stormwater Grading Permit	8
RCRA Hazardous Waste	1
RCRA Solid Waste	4
RCRA Underground Storage Tank	7
Sanitary Wastewater	121
SC Department of Natural Resources Scientific Collecting Permit	1
SCDHEC 401	2
SCDHEC Navigable Waters	1
Underground Injection Control	28
Total	518

Cleanup Program Drivers



Resource Conservation and Recovery Act (RCRA)

- **Regulates the management of both hazardous and non-hazardous waste**
 - Provides corrective actions for releases of hazardous waste or hazardous constituents (chemicals, not radionuclides)
- **Authority to administer RCRA delegated to SCDHEC by EPA**
- **SCDHEC issued SRS RCRA Permit and addresses:**
 - Post closure care and maintenance of closed RCRA hazardous waste management facilities (e.g. A/M/Metallurgical Laboratory, F-Area Seepage Basin, H-Area Seepage Basin, Mixed Waste Management Facility and Sanitary Landfill HWMFs)
 - RCRA Solid Waste Management Units (SWMUs) (e.g. waste units)
 - Addressed through FFA Process
 - RCRA permit inclusive of all remedial decisions reached for SWMUs

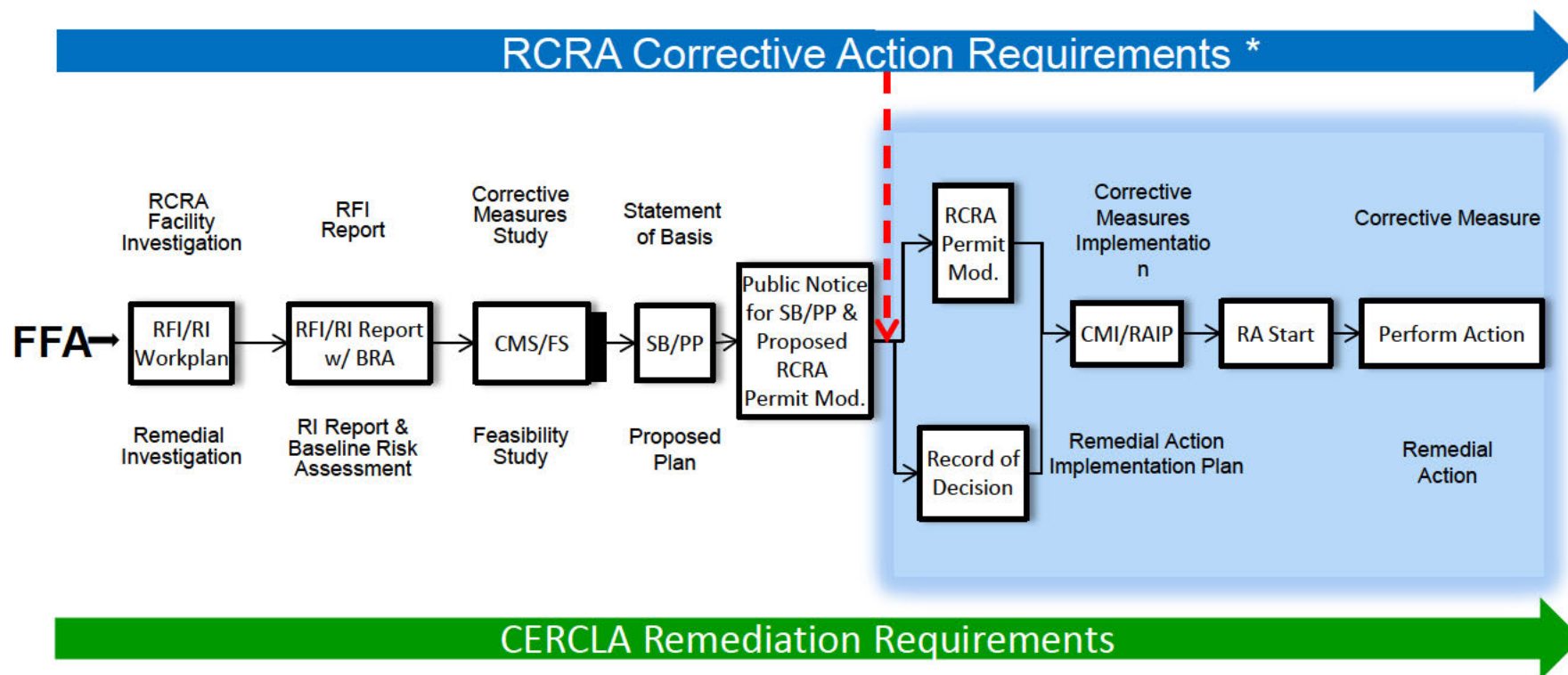
- **Permit Renewal Application/Major Modification to Existing Permit**
 - Corrective Action Plan (CAP)
- **Reviewed by SCDHEC**
 - No set time tables for review
- **SCDHEC determines it is complete or issues NOD**
- **SCDHEC issues draft permit after application is complete**
- **45 day public comment period**
 - www.scdhec.gov/environment/admin/htm/eqpubnot.htm
- **Final permit issued**

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- Protects human health and the environment from releases or threatened releases of hazardous substances (radionuclides and chemicals)
- Requires a Federal Facility Agreement (FFA) for federal facilities listed on NPL
- Cleanup actions contained within CERCLA Records of Decision (RODs)
 - Document signed by EPA, DOE and SCDHEC documenting cleanup decisions
 - Legally-binding documents

- A tri-party agreement was executed in 1993 between EPA, SCDHEC, and DOE
 - Directs the characterization and remediation of 515 units (e.g., basins, pits, piles where waste has been placed) and any new releases
 - *Integrates RCRA and CERCLA cleanup requirements*
 - Includes cleanup milestone schedules for waste units through Fiscal Year 2042 (FY42) (formerly FY31)
 - Includes waste removal and closure milestones for 23 old style high level waste tanks (4 already closed)

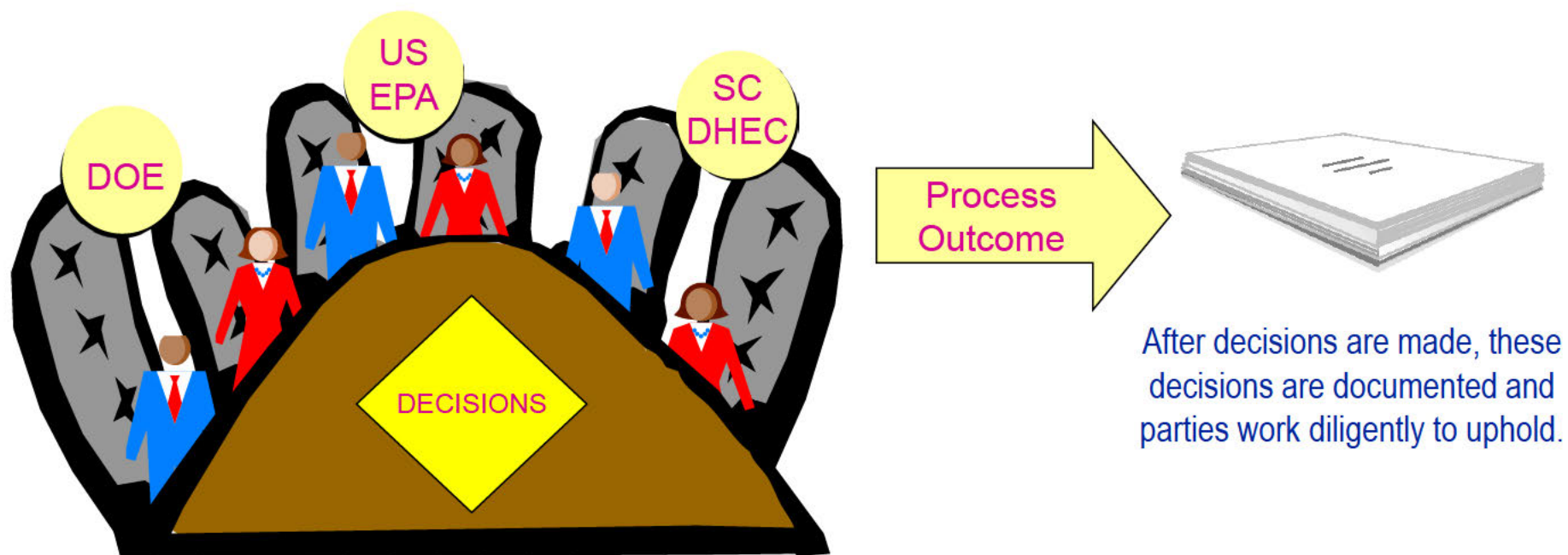
- RCRA / CERCLA integration
- High Level Radioactive Waste (HLW) Tank Systems
- Administrative Record
- Decommissioning Facilities
- Area Operable Units
- Public Participation
- Funding
- Dispute Resolution



* SCDHEC has the right to invoke its authority to require corrective action in accordance with the South Carolina Hazardous Waste Management Act if the FFA dispute process has been exhausted. (FFA Section XLIV.D)

Core Team Process

SRS is held up as the model in the DOE Complex for implementing a cleanup program with decisions that are technically risk-driven, cost effective and achieve incremental progress



Area Completion Approach

- In 2005, began implementing Area Completion Approach
- A systematic approach to completing cleanup work integrating Deactivation & Decommissioning (D&D) and Soils and Groundwater (S&G) scope
- Historical process:
 - Did not focus on any single area
 - Evaluated individual waste units (some located in remote areas) with much paperwork and higher costs
 - Did not address D&D facilities
- Today's process:
 - Addresses groupings of waste units and facilities in 15 geographic areas
 - Integrates facilities / waste unit cleanup
 - Area End States determined up front with the regulators
 - Economies of scale in sampling, remediation and documentation (one set of documents for each of the 15 areas)

- EPA, SCDHEC and DOE work collaboratively to develop and implement sound remediation approaches
- FFA allows for effective integration of complex regulatory laws without duplicative effort and paperwork
- SRS cleanup program ensures protectiveness of off-site communities
 - Groundwater
 - Operating facilities

QUESTIONS??