



U.S. DEPARTMENT OF
ENERGY



Nuclear Materials Missions

Brief to SRS Citizens Advisory Board

March 14, 2023

Bert Crapse

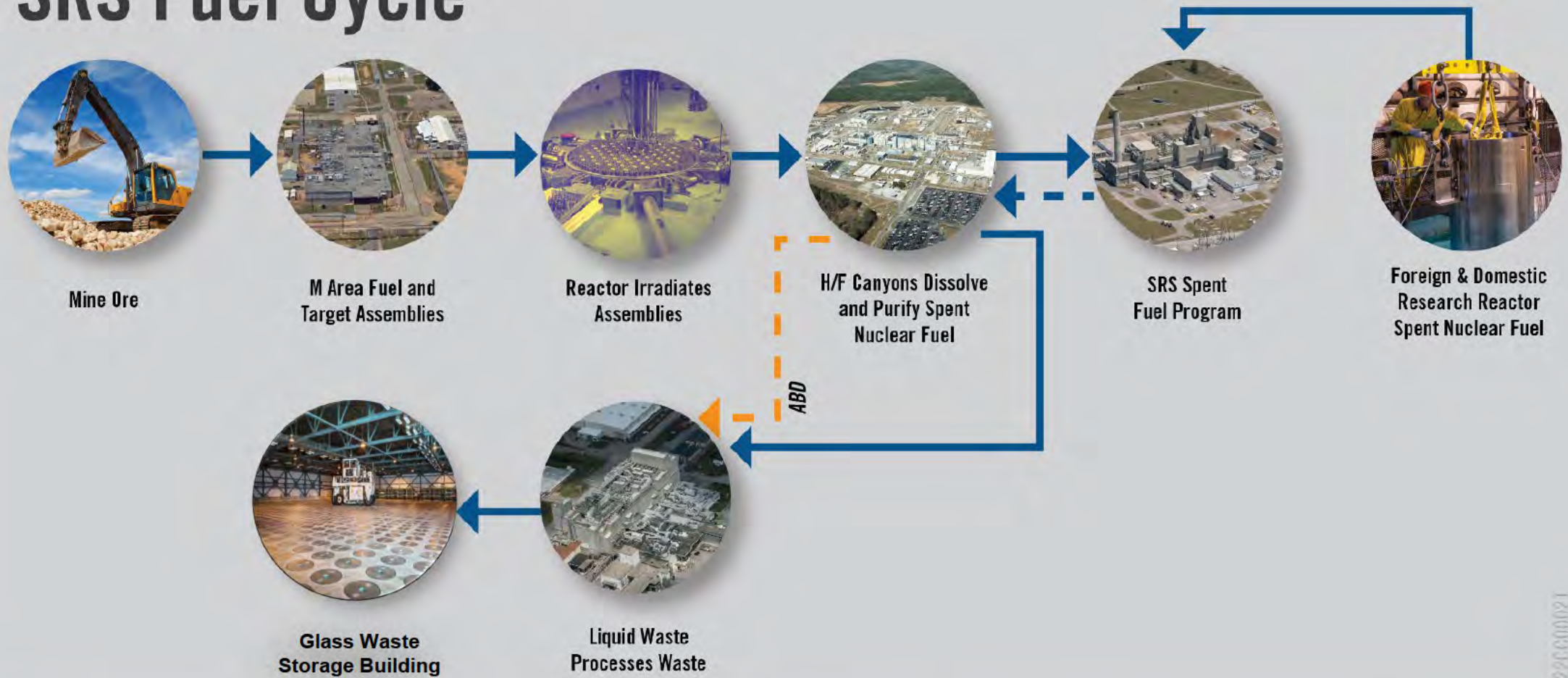
DOE Savannah River Operations Office

Nuclear Material Programs Division Director

SRS Nuclear Materials Missions

1. Nuclear Material Storage and Surplus Plutonium Disposition – K/Area
2. Spent Nuclear Fuel Storage – L/Area
3. Spent Nuclear Fuel Processing – H/Area
4. Excess Nuclear Facilities Deactivation and Surveillance & Maintenance
5. Solid Waste Treatment, Storage, and Disposal

SRS Fuel Cycle



220000021

Nuclear Material Storage and Surplus Plutonium Disposition – K/Area



Plutonium Storage



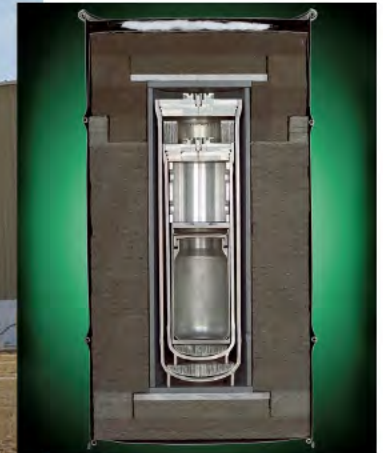
K-Reactor



9975 Container

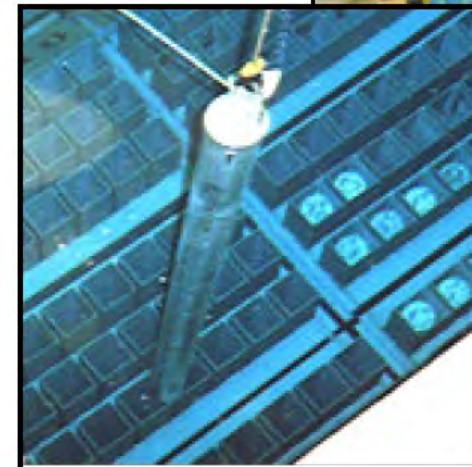


Glovebox

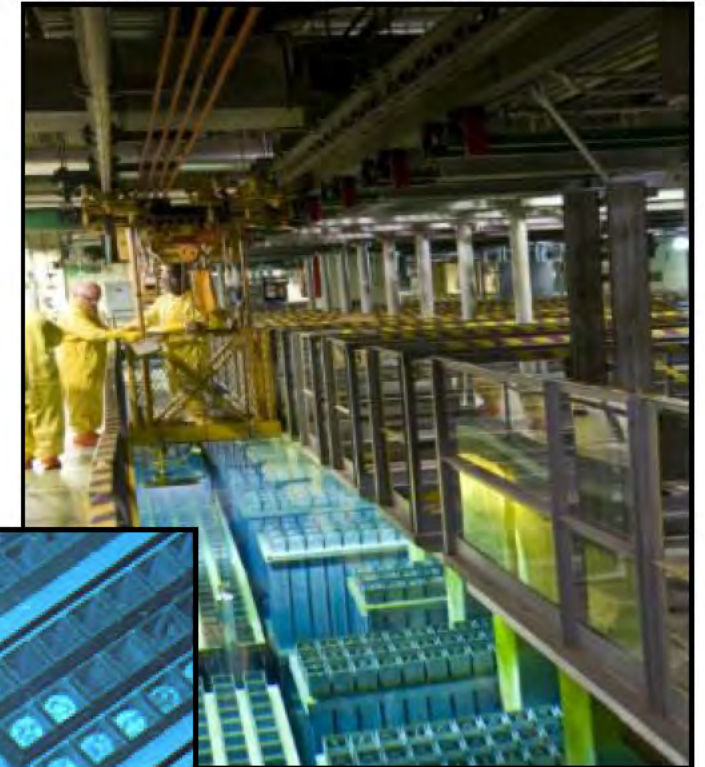


9975 cross section

Spent Nuclear Fuel Storage - L Area



Fuel Bundle



Fuel Racks

Excess Nuclear Facilities Deactivation and Surveillance & Maintenance



F/H Lab



F-Canyon / FB-Line



Receiving Basin for Offsite Fuels



235-F Operational

Solid Waste Treatment, Storage, and Disposal

Responsible for disposition of SRS solid waste, including:

- *Transuranic (TRU) Waste*
- *Low-Level Waste (LLW)*
- *Hazardous and Mixed Waste (HW/MW)*
- *Sanitary Waste*

Examples:

- Discarded personal protective equipment
- Lightly contaminated tools and equipment
- Soil and groundwater cleanup materials
- Empty containers
- Research residues
- Excess chemicals



Summary

- Nuclear Materials own unique and/or one-of-a-kind facilities.
- Requires a highly trained workforce to manage and operate.
- Supports National Security (Non-Proliferation Initiatives).
- Requires support of the Savannah River National Laboratory.
- Very expensive to maintain and operate.
- Some of our work is classified.
- Nuclear Materials facilities are safely operated to ensure the safety of SRS workers, the public, and the environment.