



U.S. DEPARTMENT OF  
**ENERGY**



# Status Building 235-F Project

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*Citizens Advisory Board*

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# Purpose

- Provide information regarding ongoing risk reduction activities in the 235-F Facility
- Complete a topic of the Nuclear Materials Workplan

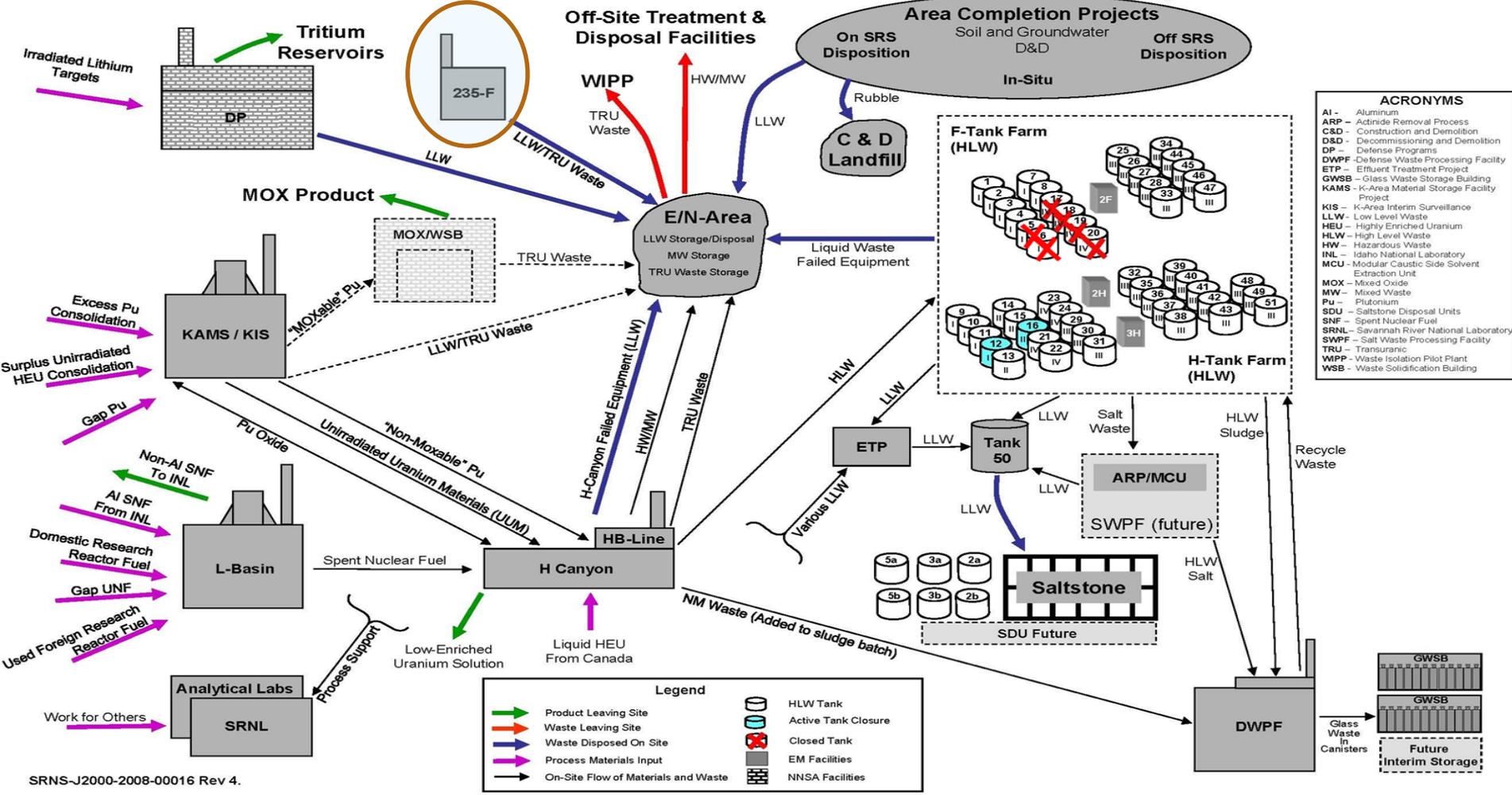


# Savannah River Site Waste and Material Flow Path

Areas specific to the presentation

This depiction of SRS activities shows only the general scope of the major facilities and missions. It does not represent all processes or all materials flow.

Off-Site Disposal e.g., Clive, Utah, Three Rivers Landfill



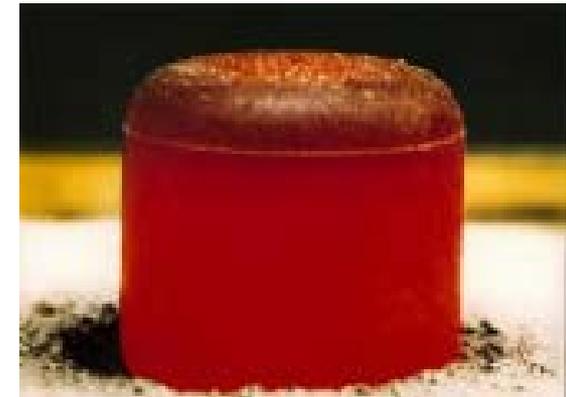
SRNS-J2000-2008-00016 Rev 4.

# Building 235-F Background

- Building 235-F has had numerous missions over the years, with the most recent being fabrication of Pu-238 in the Plutonium Fuel Form Facility (PuFF) for use in construction of power sources for NASA deep space missions in the 1980's
- Residual material in the nine PuFF facility cells was last measured in 2006
- About 1.5 kilograms of Pu-238 material remain in the cells
- In a seismically induced full facility fire accident scenario the calculated unmitigated dose is about 11,900 rem onsite and 14.3 rem offsite
- The building is safely maintained in the surveillance and maintenance mode
- The project objective is to reduce the unmitigated onsite dose to less than 100 rem by reducing Pu-238 levels in PuFF
- The facility end state will be determined through an agreement with State Regulators



Space Mission



Fuel Form

# Key Accomplishments



Radioactive Material Measurement

- Completed mechanical and electrical isolation of cells 3 - 9
- Removed outer shield windows and cleaned inner windows of cells 1 – 9
- Established cell lighting of cells 1 – 9
- Completed measurements of the amount of material in cells 1 – 9
- Completed window remediation of cell wing cabinets
- Demonstrated use of vacuum in cell 6

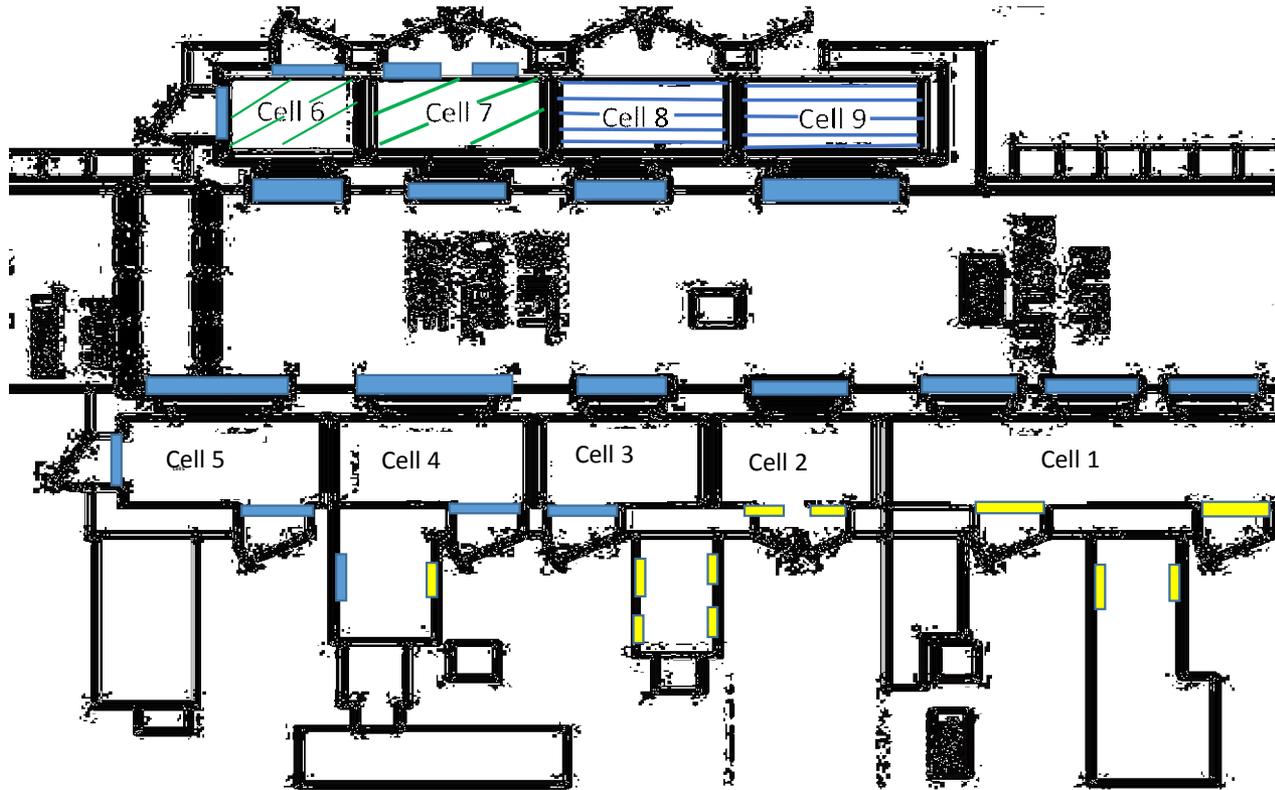
# Key Plans for FY 2018



PuFF Cells 4 & 5: Current State

- Complete measurements of the amount material in cell wing cabinets and issue final report for PuFF
- Complete mechanical and electrical isolation of cells 1, 2 and cell wing cabinets
- Approve and implement Safety Basis documents needed for work in cells 1 & 2

# PuFF Current State



- Window remediation complete 
- Windows requiring remediation 
- Cells 8 and 9 are complete 
- Cells 6 and 7 hot mockup 

# Questions

