

Separations Process Research Unit (SPRU) Disposition Project

*DOE Environmental Management Presentation to
Niskayuna Town Board
March 17, 2011*



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Agenda

- History of SPRU
- Current project status
- URS presentations
- Questions & answers



SPRU Facility History

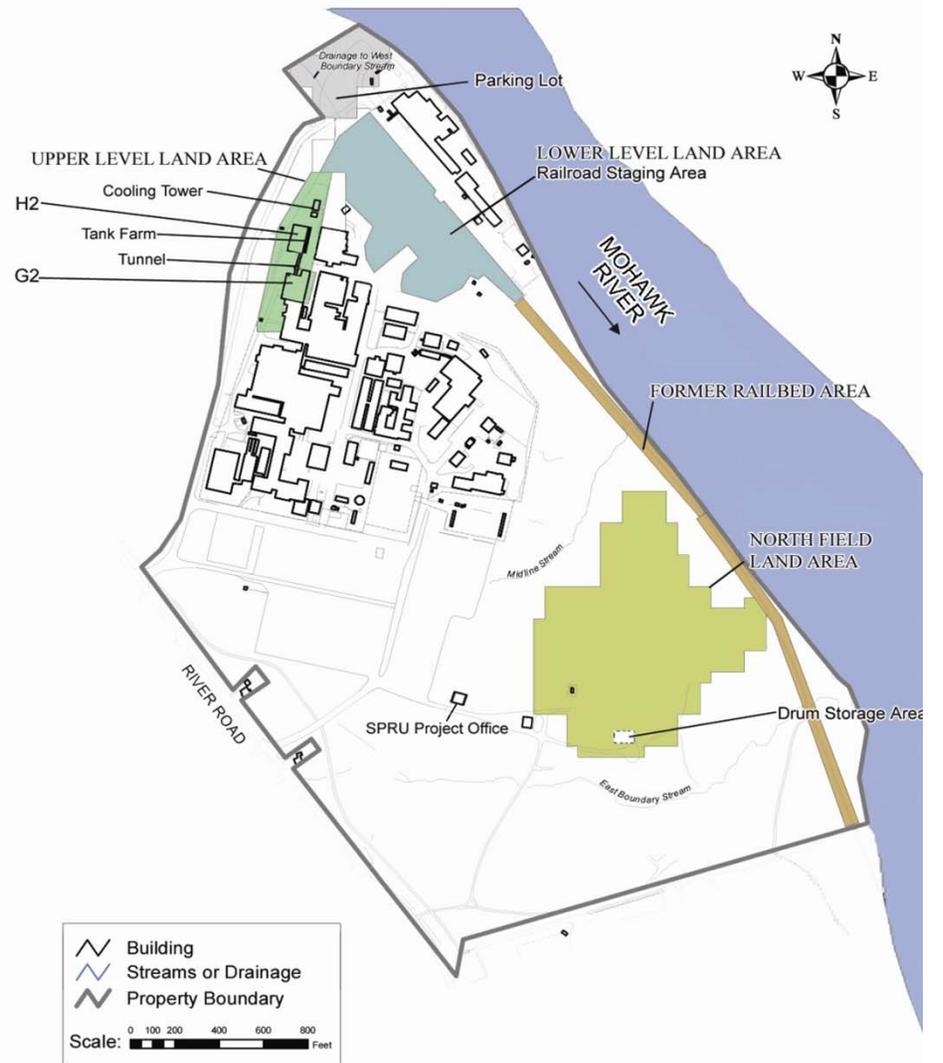
- Built between 1947 and 1949 and operated for the Government by General Electric for 3 years
- Used as a pilot plant to research the chemical process for plutonium extraction
- After SPRU shut down in 1953; the processing equipment was flushed and drained and waste disposed off-site
- SPRU has been maintained in a safe condition by Naval Reactors and their contractor



SPRU is Located on the KAPL Site



SPRU Overview



Notes: 1) Basemap Reference Drawing: O'Brien & Gere Engineers, Inc., File No.: 10350.23931-001, Sept. 1999.
2) Total SPRU Areas approximately 30 acres.



SPRU Consists of Buildings G2 & H2, Tank Vaults, and Pipe Tunnels



EM Cleanup Activities at SPRU

- SPRU disposition project consists of Buildings G-2 and H-2, and cleanup of land areas
- September 2007 DOE issued a contract to cleanup land areas
 - Lower level parking lot
 - Lower level rail bed
 - North field

These land areas have been cleaned up ahead of schedule

- December 2007, DOE issued a task order to URS to complete the decontamination and demolition (D&D) of the SPRU facilities

This is the work DOE still has in progress



Overview of SPRU Facility D&D thru Fall 2010

- 2008: URS mobilized, developed and implemented safety management programs, and took responsibility of Building G2
- 2009: Took over responsibility of Building H2, commenced asbestos abatement, utility facility isolation, and other activities to support entry into the below grade portions of the building
- 2010: Continued asbestos abatement, characterization surveys, and utility isolation
- September 2010: Demolished first floor of Building H2



Unplanned Events

- During the demolition at Building H2 a localized spread of radioactive contamination occurred as a result of cutting open one of the process vessels

All D&D work stopped to respond to and identify the cause of the contamination spread outside the immediate work area

- Later, after the work stoppage, contaminated water spilled onto the ground after a 7-inch rainfall from a tropical storm
- In an unrelated event to the tropical storm, a pump electrical failure caused a sump to overflow, and approximately 630 gallons of water was discharged to a drainage channel that eventually empties into the Mohawk River



Unplanned Events

- These events did not present a threat to the public health or the environment
- The radioactive contamination regrettably affected site operations. KAPL helped by responding with radiological controls support
- The water discharged contained a very small amount of radioactivity



Follow Up Actions

- The work area was stabilized
- URS issued a corrective action plan to prevent recurrence
- DOE initiated a Type B accident investigation. The report was issued on November 23, 2010
- URS improved the function of the water collection systems
- DOE and URS entered into a modified contract, which included provisions for restarting work



Safety is Our First Priority

- DOE and URS are committed to the safety of our workforce, the KAPL laboratory, the public and the environment
- EPA, NYSDEC, and NYSDOH have been engaged with the SPRU Project, and are expected to stay involved



URS Presentation

