

University of Illinois Research and Test Reactor Decommissioning

John Hickman & Bruce Watson, CHP
Reactor Decommissioning Branch
Division of Decommissioning, Uranium
Recovery, and Waste Programs

Milestones

- 1988 Reactor Shutdown
- 2004 Fuel Removed
- March 2006 (Rev.1)

Decommissioning Plan

- June 2007 Final Status Survey Plan
- DP and FSSP approved December 2007

Schedule

- September 2011 - Project Management Plan and Procedures
- October 2011 - Start Decommissioning
- July 2012 – Complete Physical Decommissioning Work
- October – Submit Final Status Survey Reports to NRC for approval
- January 2013 - License Termination

Concerns

- Coordination with local officials and organizations
- History of student issues with security fencing during fuel movement

Facility Exterior



Reactor



Coordinated with IEMA to ring air samplers around building



Cleared rod drives, etc., out of tank



Bioshield prep for sawing



Cutting the upper Bioshield



Tank internals to be removed



Everything out



The surprise

- Everything was going along well until they poked a hole in the wall while trying to trace a conduit, and then.....

Wrapping building for asbestos/vermiculite abatement



Building Demolition



U of IL's Lessons Learned

- A lot of homework up front means a smooth D&D – lots of contract detail and available documentation on the facility.
- Never completely believe your blueprints.
- Created a weekly status newsletter with images which was well received.

Statistics

- 10 months (Oct 2011-July 2012)
- 6 Radioactive waste shipments
 - 277,345 pounds
 - 7004 cubic feet
 - 4.316 Ci activity
- 22 semi's of non-radioactive waste
- 17 trucks/340 cubic yards of asbestos waste
- 2.568 man-rem (DP estimated 8.5)
- \$4.2M budget vs \$4.3M cost

Closeout Actions

- July 2012 - Inspection with split soil samples
- October 2012 – Final Inspection Report
- November 2012 - Licensee submitted Final Status Survey Reports
- License Termination