# Waste Management – Idaho Lessons Learned

Elizabeth D. Sellers, Manager

U.S. Department of Energy - Idaho Operations
Office

February 2007



### Strategic Vision of the Idaho Cleanup Project

- Clearly define end-states and focus on risk reduction
- Convert to focused contract for cleanup
- Build on productivity successes and accomplishments
- Continue to focus on safely performing work
- Eliminate legacy of past missions and create opportunity for new
- Restructure the way the Feds do business

#### Results

Goal: Safe, timely and cost effective radioactive waste disposal

#### **Execution:**

Grouted first 3 of 15 HLW tanks



#### Results

#### Execution (Continued)

- CH-TRU shipments from AMWTP began May 2005
- RH TRU shipments to Waste Isolation Pilot Plant began January 18, 2007
- Mixed Low level Waste
   Shipments to Nevada Test
   Site began April 11, 2006
- Spent Nuclear Fuel moved from wet to dry storage.



# **Lessons Learned – Contracts & Shipping**

- Missed requirement to ship 6,000 cubic meters of waste out of Idaho by December 31, 2005.
  - International contract negotiations resulted in change
  - Facility shake down
  - ID voluntarily suspended accepting Spent Fuel until milestone was met February 21, 2006.
- Drum mis-certified for disposition to WIPP
- TRU Waste shipped to Envirocare (now Energy Solutions)

#### **Lessons Learned - Technical**

## Fire in Advanced Retrieval Project

- Roaster Oxides
  - Five and half month delay
- Buried Waste (landfill) Settlement Issue
  - Seven month delay
- Fire Safety Exemptions

#### **Lessons Learned - Technical**

- Spent Fuel basin (CPP-603) sludge removal delay
  - Sludge containing aluminum particles was being pumped into containers and mixed with caustic grout
  - Hanford ORPS report identified potential for hydrogen buildup
  - Work was halted, measures taken to insure adequate ventilation of headspace gas in the containers
  - Work resumed and completed safely



#### **Lessons Learned – Contracts**

- The Pit 9 contract was a firm fixed price contract designed to maximize the risk and profit available to the winning bidder.
- Winning bidder failed to complete the work and was terminated for default
- Payments advanced to the contractor and other expenses, were recovered by the government.
- A contract was awarded under an Indefinite Delivery Indefinite Quantity nationwide contract to North Wind Inc. on November 2, 2006 to remove the structures left by the Pit 9 contractor.

# **Cooperation/Communications**

- Tribal Relationship
- Inclusive of NR
- Spent Nuclear Fuel exchange with Savannah River Office
- Potential for off-site TRU coming to AMWTP for treatment and disposal at WIPP
- Special Nuclear Material cooperation with Oak Ridge
- Sodium Bearing Waste Project Savannah River Office

# Regulatory Interfaces

- Senior level quarterly meetings for decision making
- Use of CERCLA process to send D&D waste to lined facility in lieu of unlined LLW landfill.
- Interface closely on public communications (media, projects)
- Draft cleanup document reviews early involvement

### **Lessons Learned - Accelerated Completion**

- Owner needs to be a catalyst
- Contractors must drive innovation
- Infusion of experienced personnel
- Implement a strategy of early characterization
  - Enables risk identification, optimizes and minimizes waste streams
  - Ultimately reduces disposal costs
- Identify high risk activities and mitigation strategies risk management plan
- Strong Project Management/Leadership
- Integrate Treatment, Storage, and Disposal commercial vendor into on-site operations

## **Summary**

- Contracts focused on cleanup
- Safety and progress go hand-in-hand
- Errors will slow progress, but can be overcome
- Focused federal project management drives the process

