

Waste Area Group 7 Update

Idaho Cleanup Project Citizens' Advisory Board
November 14, 2012



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Waste Area Group (WAG) 7, Radioactive Waste Management Complex (RWMC) History

- RWMC was created in 1952 for disposal of radioactive waste generated by the research being done at the National Reactor Test Station.
- It received radioactive waste from operations on the Idaho Site and from other DOE sites including Rocky Flats Plant.
- Final CERCLA Record of Decision was signed in September 2008:
 - Targeted waste retrieval from 5.69 acres
 - In-situ grouting of 0.2 acres to reduce Technetium (Tc-99) and Iodine (I-129) mobility
 - Vadose zone vapor vacuum extraction and treatment (OCVZ)
 - Evapotranspiration surface barrier - cap





Current Status

Targeted Waste Retrieval in the Subsurface Disposal Area

- As of October 1, 2012:
 - Exhumed 3.11 acres (54.7%).
 - Packaged 5,771.8 m³ of targeted waste (77.1%).
 - Shipped 5,666.5 m³ of targeted waste, both TRU and MLLW (75.7%).
 - Exhumations have been suspended due to constrained funds.
- Accelerated Retrieval Project (ARP) VII exhumation 0.15 acres complete and 0.12 acres remain to be exhumed
- ARP VIII is being constructed
- ARP I & VI have been demolished to make way for ARP IX
- ARP IX construction will occur when funds are available



Exhumation in ARP VII



Photo courtesy of Mr. Steve Karns, DOE Facility Representative



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Drum Packaging in ARP VII



Photo courtesy of Mr. Steve Karns, DOE Facility Representative



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Maintenance Activities



Photos courtesy of Mr. Steve Karns, DOE Facility Representative



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ARP VIII under construction



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ARP VIII Airlock under construction



Photo courtesy of Mr. Steve Karns, DOE Facility Representative



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ARP VIII under construction



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Reuse of ARP I and VI Components

- Ventillation units, inlet dampers, canopies, a backup generator, retrieval enclosure heaters, Information Technology equipment, etc. from ARP I and VI are being reused in the construction of ARP VIII.
- Drum packaging units have been given to Advanced Mixed Waste Treatment Plant (AWMTP) for reuse.
- Exhumation equipment is maintained and will continue to be utilized in future exhumations.



ARP I & VI Demolition



Photos courtesy of Mr. Steve Karns, DOE Facility Representative



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Current Status (cont.)

- In-situ grouting – Completed
- OCVZ Extractions– continuous.
Thru 10/18 removed:
 - ~237,946 lb. total volatile organic compounds
 - ~137,500 lb. carbon tetrachloride
- Cap – to be designed
 - Will cover the entire Subsurface Disposal Area.
 - Will be constructed after the targeted waste retrieval is completed.



Funding Considerations

- The federal budget is constrained.
- Treatment of stored TRU waste and packaging/shipping to WIPP versus targeted waste exhumations:
 - Targeted waste exhumations are several years ahead of the OU 7-13/14 Remedial Design/Remedial Action Work Plan schedule.
 - The TRU portion of the targeted waste is not subject to the Settlement Agreement 2018 milestone to be out of Idaho.
- Exhumations may be halted without regulatory milestone impacts.
- ARPs are currently held in a safe configuration.



Near Term Schedule

- It is unlikely that ARP VII exhumation will restart during the FY 13 Continuing Resolution.
- Exhumation of 10 grids between ARP II and III will follow as soon as ARP VII exhumation is completed.
- ARP VIII construction will continue through the next 2 quarters of FY 2013.
- Turn over to operations of ARP VIII is scheduled for Q3 of FY 2013.



Long Term Schedule

- ARP VIII is more than twice as large as any of the previous ARPs and may take as long as 86 months to excavate, if only one crew is available.
- ARP IX is expected to take 12 months to build and 24 months to excavate.
- Demolition of all SDA structures will follow completion of ARP IX exhumations.



Long Term Schedule (cont.)

- The SDA will be capped following completion of SDA demolitions.
- Three CERCLA caps are planned for the Idaho Site:
 - Tank Farm ~ 2018
 - Idaho CERCLA Disposal Facility ~ 2020
 - Subsurface Disposal Area ~ 2022
- One cap at a time:
 - Benefit from lessons learned.
 - Maintain trained work force.
 - Soil availability limitations.

