

WAG 7 Update

Idaho Cleanup Project Citizens' Advisory Board

September 20, 2012

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WAG 7, Radioactive Waste Management Complex (RWMC)

- 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 Tc-99 and I-129 mobility
 - Vadose zone vapor vacuum extraction and treatment (OCVZ)
 - Evapotranspiration surface barrier - cap


















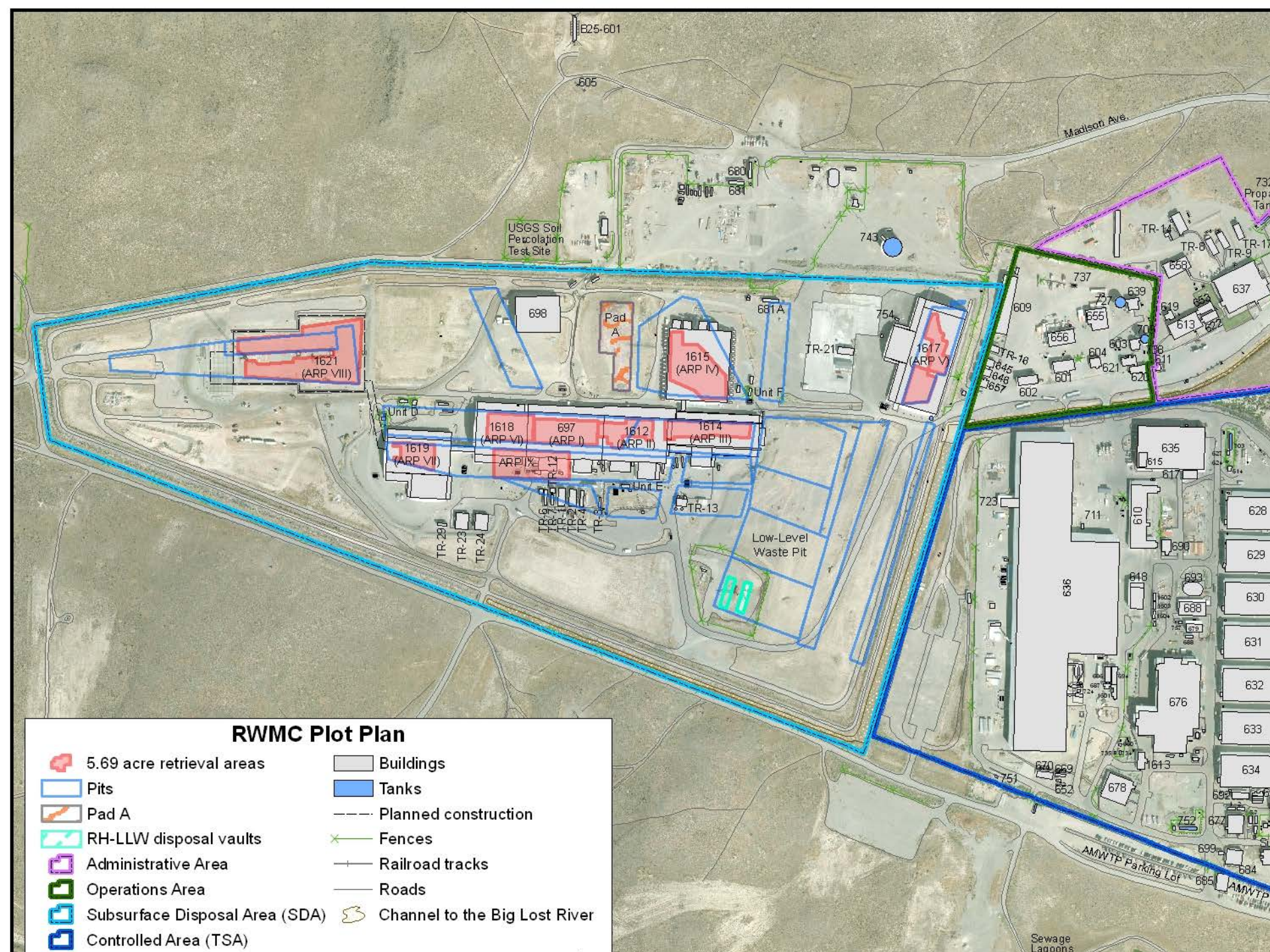
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RWMC Plot Plan

- | | |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
|  5.69 acre retrieval areas |  Buildings |
|  Pits |  Tanks |
|  Pad A |  Planned construction |
|  RH-LLW disposal vaults |  Fences |
|  Administrative Area |  Railroad tracks |
|  Operations Area |  Roads |
|  Subsurface Disposal Area (SDA) |  Channel to the Big Lost River |
|  Controlled Area (TSA) | |



Current Status

Targeted Waste Retrieval in the Subsurface Disposal Area

- As of September 4, 2012:
 - Exhumed 3.11 acres (54.7%).
 - Packaged 5,769.9 m³ of targeted waste (77.1%).
 - Shipped 5,647.4 m³ of targeted waste, both TRU and MLLW (75.4%).
- Accelerated Retrieval Project (ARP) VII FY 2012 planned exhumation, 0.15 acres, was completed on August 28.
- ARP VIII is being constructed.
- ARP VI has been demolished, ARP I is being demolished and should be completed by 9/30/2012.



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Exhumation



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ARP VIII



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ARP VIII Airlock



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ARP VI Demolition



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ARP I D&D Fixative Application



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Current Status (cont.)

- In-situ grouting – Completed
- OCVZ – continuous. Thru 8/23 removed:
 - ~237,817 lb. total volatile organic compounds
 - ~137,439 lb. carbon tetrachloride
- Cap
 - Will cover the entire Subsurface Disposal Area.
 - Will be constructed after the targeted waste retrieval is completed.



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Reuse of ARP I and VI Components

- The original excavator used in ARP I is still on the job.
- Drum packaging units have been given to Advanced Mixed Waste Treatment Plant (AWMTP) for reuse.
- Lights, IONEX air-handling units, etc. from ARP I and VI are being used in construction of ARP VIII.



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Reuse of ARP V

- ICP plans to use ARP V to repackage Rocky Flats sludge drums retrieved from AMWTP to ensure achievement of regulatory milestone.
- The ARP V structure has been removed from CERCLA regulation.
- SDA beneath the ARP V structure is still CERCLA.
- Idaho Department of Environmental Quality is reviewing a change to RCRA permit to include ARP V treatment process.
- EPA Region 10 is reviewing a TSCA Risk Based Disposal Authorization request. The Rocky Flats sludge drums may contain PCB residues.



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.
- ARP IX is expected to be designed by CWI during the contract extension.



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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 can be held in a safe configuration.



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Long Term Schedule

- ARP IX foundation will be constructed during the CWI contract.
- ARP VIII is more than twice as large as any of the previous ARPs and may take as long as 46 months to excavate, if only one crew is available.
- ARP IX is expected to take 12 months to build and 12 months to excavate.
- Demolition of all SDA structures will follow completion of ARP IX exhumations.



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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.



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