



Idaho Treatment Group
*TRU Waste Processing Capabilities
at AMWTP*

Waste Management Symposium

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AMWTP Inventory



The start of above-ground transuranic waste storage in 1970s. Today, this site is covered by the Transuranic Storage Area-Retrieval Enclosure at AMWTP.

- From 1952 to 1970 transuranically-contaminated solid wastes and low-level wastes were buried in a series of pits and trenches located within the Radioactive Waste Management Complex (RWMC) in the Subsurface Disposal Area (SDA)
- In 1970, burial of the transuranic-contaminated waste was discontinued and above-ground storage initiated at what is today AMWTP.



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Original Waste Placement



Early storage at Pad R

71-5066

Early placement of transuranic waste storage drums and boxes from Rocky Flats

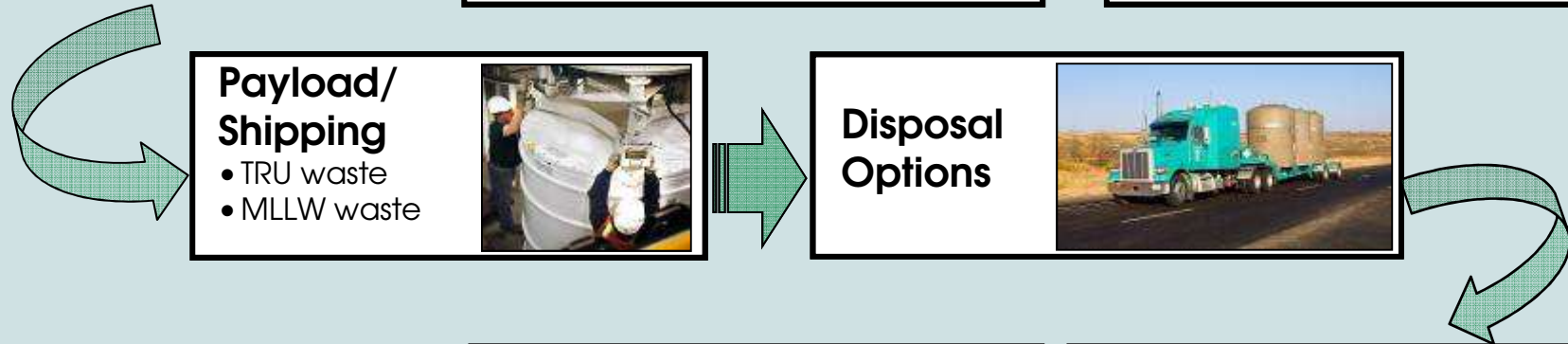
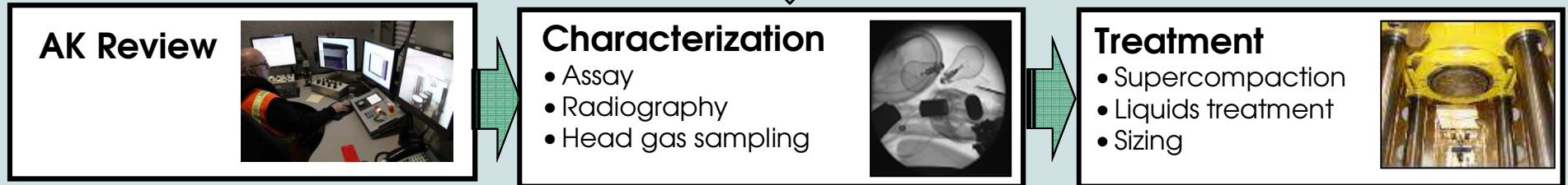
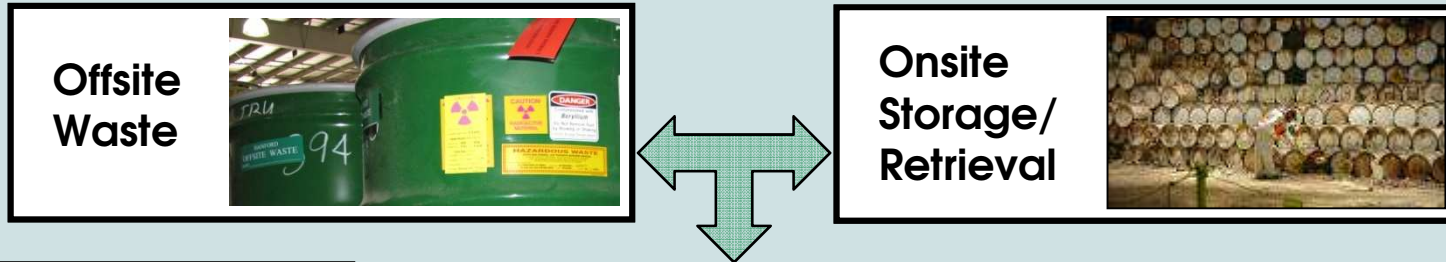


AMWTP Experience

- Multiple types and sizes of containers; boxes, bins, drums
- Severely degraded containers
- Prohibited items; pressurized cylinders; liquids; sealed internal containers; excessive decay heat; excessive fissile content; excessive plutonium equivalent curie content
- Pyrophorics
- PCBs
- RH components



AMWTP Waste Treatment Process



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Waste Storage & Retrieval



Waste drums and boxes stacked in the Retrieval Enclosure



*Box retrieval work inside AMWTP
Retrieval Containment Enclosure*



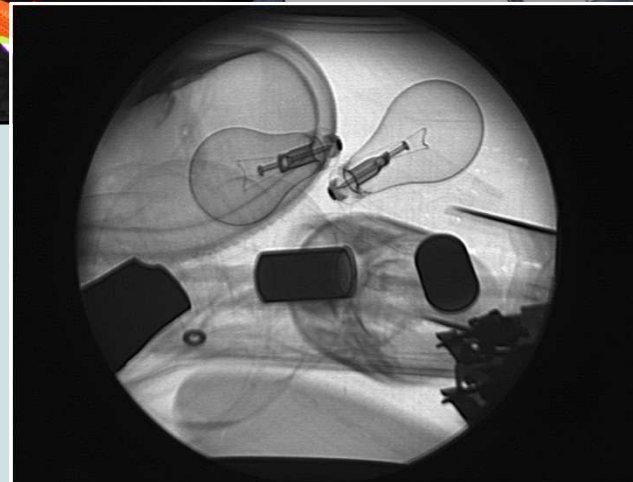
Characterization Capabilities

Three Radiography Units

- Two capable of either one box or four drums
- One capable of either one box or three drums

Eight Radioassay Units

- Two drum units (WAGS and SGRS)
- Two drum units and one box unit (RBAS)
- Two drum units in Treatment Facility
- One mobile box unit (SuperHENC) operated by CCP



ITG Idaho Treatment Group **Characterization**



ITG Idaho Treatment Group **Treatment Capabilities**



Business end of Supercompactor = > 4 million pounds of pressure



Soils, solidified, and debris waste:

- Prohibited item removal
- Liquid absorption
- Repackaging
- Venting

For debris:

- Supercompaction



55-gallon drum post Supercompactor = a puck

Top: Practicing Drill & Drain technique for removing liquids.

Bottom: Operator sorting waste in Treatment Facility boxline.



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Shipping

AMWTP Sends Waste To:

- WIPP for all TRU waste
- Nevada National Security Site for LLW/MLLW up to 100 nCi/gram of TRU alpha activity bearing waste
- Clive, UT Bulk Waste Facility for LLW/MLLW less than 10 nCi/gram



Crews loading a MLLW shipment destined for Clive, UT



ITG's first MLLW shipment leaving in a flurry for Nevada National Security Site



DOE's Premier Site To Receive/Treat Offsite Waste

- To date AMWTP has received, validated, treated and shipped ~600m³ from 15 sites
- DOE Record of Decision allows more than 8,700m³ to be shipped to AMWTP from other complex sites



Inspecting shipment received from G.E. Vallecitos Nuclear Center, CA



Lawrence Livermore National Laboratory waste



Processing Hanford waste in AMWTP Treatment Facility





Idaho: The Preeminent Waste Handling Site in the DOE Complex

AMWTP and ICP have complete capabilities for handling TRU and LLW/MLLW waste streams

AMWTP

- Comprehensive certification and transport of contact-handled TRU
- Facilities and experience to treat debris containers

ICP

- Comprehensive certification and transport of remote-handled TRU
- Facilities and experience to treat sludge waste



The Idaho Site's Radioactive Waste Management Complex

