

**U.S. Department of Energy
Environmental Management Program**

**Hot Topics in DOE's Environmental Management
Waste Program**

Waste Management 2008

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EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

EM's Waste Management Program

- EM is re-focused on providing complex-wide leadership in management and disposition of DOE waste streams
 - Zero tolerance for non-compliance with requirements
- Organizational changes in the Office of Regulatory Compliance (EM-10) improved integration of waste and excess nuclear material disposition efforts
 - EM's nuclear materials program activities were moved to EM-10 in January 2008.
- DOE's waste management policy remains unchanged
 - DOE's *Waste Management Programmatic Environmental Impact Statement* and Records of Decision are still valid



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High-Level/Liquid Waste Management

- **“Section 3116”/Waste Incidental to Reprocessing DOE Order 435.1**
 - Allows residual waste (tank heels) to be left in place and managed to meet LLW requirements
- **Tank closures at Idaho Progressing**
 - 11 Tanks grouted
- **SRS Tank Status**
 - Saltstone Operations Continue
 - Second Waste Determination expected in FY09



Transuranic Waste

- Waste Isolation Pilot Plant (WIPP) Summary
 - Over 53,000 m³ of defense transuranic waste disposed
 - Completed over 6,400 shipments
- Remote-handled (RH) shipments began in January 2007
 - 112 RH shipments received to date at WIPP
- WIPP must be recertified by EPA every 5 years
 - First recertification approved in March 2006
 - Second recertification application under development for submission in March 2009



Transuranic Waste (continued)

- Removed legacy transuranic waste from 13 sites; shipments from large generator sites continue
- FY 2008 Priorities
 - Sustain average of 21 contact-handled transuranic (CH-TRU) and 5 remote-handled (RH-TRU) transuranic shipments per week
 - Continue focus on safety and compliance
 - Continue to increase operational efficiencies
 - Continue to improve regulatory framework



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Shipment data as of 2/19/08

Low-Level/Mixed Low-Level Waste

- Established DOE LLW Corporate Board
 - First meeting January 2008
 - Identified issues and topics for June 2008 meeting
 - Approved by-laws
- DOE-wide life-cycle waste forecasts collected
 - Waste Information Management System (FY 07 data)
<http://wims.arc.fiu.edu/WIMS>
 - Revised data expected in MIMS by March 31, 2008.
 - Development of disposition planning tools continues



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Low-Level/Mixed Low-Level Waste

- On-site disposal continues at most sites, but volumes requiring off-site waste disposal continue to drop
 - Expect trend to continue
- Taking steps to optimize disposal operations at the Nevada Test Site
 - Quarterly forecast updates by sites
 - Configuration control of NTS forecasts
 - EM is direct funding single-shift disposal operations in FY 08



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Low-Level/Mixed Low-Level Waste

- Site/campaign highlights
 - West Valley Demonstration Project completed drum cell cleanout and shipments in October 2007.
 - To date, Mound OU-1 soils/waste shipped via rail to Clive
 - To date: 42,900 m³ LLW and 3,500 m³ MLLW
 - 94 more railcars expected
- Toxic Substances Control Act Incinerator at Oak Ridge continues to operate as DOE-wide treatment solution
 - 1.44 million pounds of TSCA waste burned in FY 07
 - Currently down for repairs



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Greater-Than-Class C LLW Disposal

- **EM has initiated efforts to develop an Environmental Impact Statement for GTCC LLW Disposal**
 - Notice of Intent published in July 23, 2007
 - Public scoping process completed September 21, 2007
- **DOE is evaluating disposal alternatives for commercially generated GTCC LLW, as well as DOE LLW and TRU waste with characteristics similar to GTCC LLW and which do not have an identified path to disposal**
- **The Energy Policy Act of 2005 requires DOE to report to Congress on alternatives evaluated in EIS and await their action before issuing a Record of Decision.**

Materials Disposition

- **Materials disposition is coordinated across the Department through Secretary appointed committee**
- **Consolidation and disposition of surplus plutonium and highly enriched uranium continues.**
- **Construction of the DUF₆ conversion facilities continue**
 - **NEPA analysis for disposal sites underway**
- **U²³³/Building 3019 Stabilization Project continues**
 - **Future processing will prepare U²³³ for permanent disposal**



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