

**NORTHERN NEW MEXICO CITIZENS' ADVISORY BOARD
Recommendation to the Department of Energy**

No. 2011-02

“Accelerating TRU Waste Shipments from Area G to WIPP”

Drafted by the Environmental Monitoring, Surveillance and Remediation (EMSR) Committee

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Background

Transuranic waste stored at Los Alamos National Laboratory (LANL) has been shipped to the Waste Isolation Pilot Plant (WIPP) in Carlsbad New Mexico for several years. These shipments are required for the cleanup of Area G as agreed to by the Department of Energy (DOE), LANL and the New Mexico Environment Department (NMED) in the 2005 Order on Consent.

In FY 2009, LANL shipped 2,112 barrels plus 16 remote-handled containers. In FY 2010, 3341 barrels were shipped.

As of January 2011, there are about 10,000 drum-equivalents above ground and approximately 11,500 retrievable below ground. The below ground estimate is based of waste volume, but number of drums required for disposal may increase due to the type of the waste and its shape.

Assuming 4000 barrels could be shipped per year, more than 5 years would be required to ship all waste. After all waste shipments are completed, two additional years are required to complete the cleanup at Area G, which would result in a best case scenario of 2018 for completion of cleanup. In addition, the actual number of shipments which can be received at WIPP varies due to the national program that coordinates who ships when, as well as the placement of loading, inspection, certification, etc. crews across the complex, resulting in a worst case scenario of 2020, or beyond, for completion of cleanup, significantly beyond DOE's goal and NMED's Consent Order.

According to Dr. Inés Triay, Assistant Secretary, Office of Environmental Management, the new program - Excellence in Management and Leadership – a DOE goal is to reduce the EM (Environmental Management) waste footprint across all DOE sites by 90% by 2015. This could put additional receiving requirements on WIPP.

At any rate, the time needed to complete cleanup of Area G is after the 2015 proposed completion date.

Comments and Observations

With sufficient funding and management of other potential restraints, the Transuranic Waste at Area G could be removed very quickly.

A best estimate scenario, which would lead to removal of Transuranic Waste in less than three years to meet the Consent Order commitment, is 23 shipments per month (11 months—December is generally WIPP's annual maintenance outage). There are generally 42 drums per shipment. (42 drums x 23 shipments x 11 months = 10,626 drums.) Many determining factors could affect this rate, including the pace of repackaging (relies on equipment reliability of drum lifts, glove bags, HVAC systems—all of which can break) and capability of the RANT (Radioassay and Nondestructive Testing) loading facility, to name just two.

Recommendation

No. 1 DOE should perform a review of the current shipping schedules for the shipment of Transuranic Waste from Area G to WIPP to determine the effect on the scheduled 2015 Order on Consent cleanup completion date.

No. 2 The realistic shipment dates of transuranic waste from LANL Area G consistent with DOE national priorities should be included in the calculation of cleanup milestones of the 2005 Order on Consent.

No. 3 Regarding Area G, DOE should provide targeted funds so that waste collection, characterization, repackaging, loading and shipping can be accomplished on an accelerated schedule. This may include funding WIPP workers onsite at LANL.

No. 4 DOE should provide funding to meet the Consent Order completion dates. If this is not possible, DOE should closely review the Consent Order milestones and schedules consulting with LANL and NMED.

Intent

The intent of this recommendation is to help ensure that the rate of removal of Transuranic Waste from Area G is consistent with the completion of milestones in the 2005 Order on Consent. It is hoped that all agencies can work together and that all available funds can be used for WIPP shipments rather than some monies being diverted to pay fines.

References

- 1. E-mail communication from Ed Worth to Pamela Henline, December 16, 2010*
- 2. Site Specific Advisory Board meeting, September 15-16, 2010 held in Santa Fe, New Mexico*