



RSI

Institute For Regulatory Science

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Phone: 301-596-1700 Fax: 301-596-1707



June 12, 2002

Steve Zappe
NMED
2905 Rodeo Park Drive
Building 1
Santa Fe, NM 87505

Dear Mr. Zappe:

The Institute for Regulatory Science (RSI) would like to invite you to attend an Interactive Information Workshop regarding the expedited shipment of high-wattage contact-handled transuranic waste from the Los Alamos National Laboratory to the Waste Isolation Pilot Plant Hazardous Waste Facility. The workshop will be held from 5:00 p.m. - 9:00 p.m. on Thursday, June 27, 2002, at the following location:

Courtyard Marriott
3347 Cerillos Road
Santa Fe, NM 87505
Telephone: (505) 473-2800

This workshop is in response to a request by the U.S. Department of Energy to convene an Interactive Information Workshop in accordance with RSI policies and procedures. The purpose of the workshop is to present information regarding this project to an audience consisting of members of the public—especially stakeholders—and solicit their input through comments and questions. We are hoping that you will be a member of that audience. Please note that this is not a public hearing, but a workshop where only the topic of the proposed project will be discussed.

For your convenience, we have enclosed the following:

- Guidance for Stakeholders
- Registration Form
- Agenda
- Summary of topic to be discussed

If you would like to participate in this workshop, please complete the enclosed registration form and return it no later than June 24, 2002, to: Institute for Regulatory Science, 5457 Twin Knolls Road, Suite 200, Columbia, MD 21045, Attention: Sharon D. Jones. You may also reach Ms. Jones by phone at (301) 596-1700; by fax at (301) 596-1707; or via e-mail at RSI@NARS.org.

We hope that you will take advantage of this opportunity to obtain information and provide your input by attending this important event.

Sincerely,

A. Alan Moghissi, Ph.D.
President

AAM:mfb

Enclosures

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INSTITUTE FOR REGULATORY SCIENCE

www.nars.org

GUIDANCE FOR STAKEHOLDERS

There is ample evidence suggesting that the participation of stakeholders enhances the outcome of those activities which include scientific and engineering issues. This guide provides rules governing the participation of stakeholders in meetings that address these activities.

All meetings are normally chaired by a senior RSI staff member. All segments of technical meetings, except those designated as executive sessions of peer reviewers and similar activities are open to the public. Stakeholders can attend these meetings, provided the following criteria are met:

1. Consistent with the tradition of professional societies, all attendees must register. All registered individuals will be provided a name tag, which must be worn while attending the meeting. All registrants will receive a registration package, which includes information such as: a list of review criteria for peer review meetings; topics previously agreed upon as being relevant to workshops; and other technical information. As a general rule, there is no registration fee for these meetings.
2. During the meeting, all attendees may ask questions of the speakers. These questions are limited to clarification of specific issues presented by the speaker.
3. A segment of the meeting has been slated for comments by stakeholders. Those making statements should be aware that their comments should be directly related to a specific review criterion or technical topics provided to the audience during the registration. General statements that are not related to these items cannot be permitted.
4. Due to time constraints, lengthy statements should be avoided as there may not be enough time to accommodate all who wish to participate. Therefore, stakeholders designated by the sponsors will be provided specific times with a specific duration in the program to state their case. All other stakeholders wishing to make a statement should limit their statements to only a few minutes to allow as many people as possible to make their concerns and questions known during the time allotted for stakeholders' comments.
5. The Chair of the meeting will be responsible for ensuring that the audience adheres to these requirements.

**INSTITUTE FOR REGULATORY SCIENCE
REGISTRATION FORM**

Interactive Information Workshop

Expedited Shipment of LANL TA-54 TRU Waste

**Santa Fe, New Mexico
June 27, 2002**

Last Name **First Name** **MI**

Name As You Would Like it to Appear on Name Badge

Affiliation (if applicable)

Preferred Mailing Address **Street** **Apt./Suite/Floor**

City **State** **Zip Code**

Job Title (if applicable)

Phone Number

Fax Number

E-mail

Institute for Regulatory Science
Interactive Information Workshop
Expedited Shipment of LANL TA-54 TRU Waste

Santa Fe, NM - June 27, 2002

AGENDA

Courtyard Marriott

- | | | |
|-----------|---|---|
| 4:30 p.m. | Registration | |
| 5:00 p.m. | Poster Session | |
| 6:00 p.m. | Introduction
- Description of process and stakeholder participation | A. Alan Moghissi, RSI
Betty R. Love, RSI |
| 6:15 p.m. | Description of the Cleanup Reform Act
- Concept/Process of the Act
- DOE Top-to-Bottom Review | George Rael, DOE/AL |
| 6:30 p.m. | Description of Legacy Waste
- Discussion of Accelerated Work-off | James Orban, DOE/AL |
| 7:00 p.m. | Description of Accelerated Environmental Restoration
at Los Alamos | Everett Trollinger, DOE/NNSA |
| 7:30 p.m. | Break | |
| 7:45 p.m. | Stakeholder Participation | |
| 8:45 p.m. | Adjournment | |

** Refreshments will be provided*

**Expedited Shipment of LANL TA-54 TRU Waste
Interactive Information Workshop
June 27, 2002, Santa Fe, NM**

The Los Alamos National Laboratory (LANL) is currently storing approximately 9,100 m³ of transuranic (TRU) waste at Technical Area 54 (TA-54) above ground in domes and on pads, and below ground in trenches, pits, and shafts. This waste is stored in 55- and 85-gal drums containing organic and inorganic debris generated by plutonium processing activities at LANL and contaminated with ²³⁸Pu and ²³⁹Pu. The TRU waste is comprised of different waste forms, some of which are more dispersible than others. An assessment of approximately 27,000 containers in the TRU waste inventory shows that only 36% of the total radioactivity of the 27,000-container inventory is both accessible (i.e., stored above ground) and dispersible, and therefore "at risk".

The Cerro Grande fire in the summer of 2000, and the events of September 11, 2001, have contributed to an increased desire to accelerate disposal of this waste at its final destination at the Waste Isolation Pilot Plant (WIPP). A key observation is that approximately 60% of the activity present in the portion of the inventory at risk is contained in only 2,000 drums, resulting in the motivation to prioritize these drums to the 'front of the line'. The higher levels of radioactivity in these drums result in releases of more energy (wattage) than most of the TRU waste drums. The increased wattage is associated with an increased radiolysis, whereby the energy released by radioactive material can slowly break down adjacent materials (such as plastics) and release—among other things—flammable gases. However, flammable gases cannot be allowed to accumulate beyond a 5% concentration during transportation assumed to take 60 days, according to the requirements of the U.S. Nuclear Regulatory Commission (USNRC). The proposed shipment of these 2,000 drums with minimal repackaging envisions taking advantage of LANL's proximity to WIPP. The current procedure that applies to all sites requires that the TRUPACT-II not be sealed up longer than 59 days. The accumulation of flammable gas is calculated using this 60-day limit. LANL is only 5-8 hours driving time from WIPP. A major element of the proposed plan is that the TRUPACT-II will not be sealed up for longer than five days. Higher wattage-loadings per container can be allowed in a TRUPACT-II which is only sealed up for five days and still not exceed the 5% flammable gas limit. Furthermore, it is proposed to evacuate the loaded TRUPACT-II before sealing it up to minimize the initial amount of gas that may have accumulated inside the containers during storage. Naturally, procedures will have to be in place to ensure that the TRUPACT-II's are sealed, transported, and unloaded within the five-day time period.

Current operating parameters would require the contents of these drums to be spread among several thousand drums in order to reduce the radioactivity, and consequently the wattage, in each individual drum to meet the limits authorized for TRUPACT-II transportation. This repackaging process is time-consuming, expensive, and more importantly, results in worker exposure. In addition, it requires facilities which are in short supply at LANL. The proposed approach is expected to meet the USNRC requirements with minimal repackaging, thus making it possible to ship these 2,000 drums to WIPP in 18-24 months. If a similar method can be applied to all of the remaining TRU waste at LANL, the disposal of all LANL TRU waste at WIPP can be completed within 10 years instead of the 30+ years currently planned. Because LANL will not be shipping thousands of nearly-empty drums, the number of shipments required drops from over 4,500 to less than 1,500.

The USNRC is currently reviewing the proposed methodology for the 2,000 drums. The USNRC would have to respond favorably to this proposal and to any subsequent proposals to address the rest of LANL's TRU waste inventory. LANL will also have to 'gear up' rapidly to bring modular facilities on-line to characterize and load the waste; this will require some changes to their RCRA interim status authorization and arrangements with outside contractors to increase capacity to characterize the waste. Finally, while this proposal is expected to reduce the overall cost of disposing of LANL's TRU waste by several hundred million dollars, it will require higher initial outlays than currently proposed in the President's budget.