

March 29, 2003

Ms. Jessie H. Roberson,  
Assistant Secretary for Environmental Management (EM-1)  
U.S. Department of Energy (DOE)  
1000 Independence Avenue, SW  
Washington, D.C. 20585

**Environmental Management Site-Specific Advisory Boards**

Dear Ms. Roberson:

On January 31 and February 1, 2003 all nine Environmental Management (EM) Site-Specific Advisory Boards (SSAB) met in Carlsbad, New Mexico to conduct a conference on transuranic (TRU) waste management. A daylong briefing and tour of the Waste Isolation Pilot Plant (WIPP) preceded the conference. Enclosed for your consideration are the recommendations approved at the conference and subsequently adopted by the signatories below. The non-signatories were not able to reach consensus. We look forward to your timely consideration and response to these recommendations.

One hundred five people attended the first plenary session. Dr. Inés Triay, Manager of DOE's Carlsbad Field Office (CBFO) and her staff attended all sessions and provided excellent support. DOE managers from Albuquerque and Los Alamos also provided support. Patrice Bubar and Alton Harris of your staff provided an overview of the National TRU Waste Management Plan. Representatives from regulatory agencies in Idaho, New Mexico, South Carolina, and Washington also attended the workshop.

We conducted core-topic breakout sessions covering: regulatory and outreach, including issues related to WIPP certification, state permitting, and stakeholder involvement; transportation, including issues related to trucks and shipping containers, shipping and receiving, and emergency preparedness and response; waste characterization, including issues related to characterization, treatment, and packaging; and management, including issues related to the National TRU Waste Program strategy, the Performance Management Plan (PMP), priorities and scheduling, and costs. The enclosed recommendations were developed in the breakout sessions. The conferees approved them in plenary session February 1, 2003.

Sincerely,

  
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Chair, INEEL CAB

  
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Chair, Nevada Test Site CAB

  
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Chair, Northern New Mexico CAB

  
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Chair, Oak Ridge Site Specific Advisory Board

  
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Chair, Savannah River Site CAB

cc w/ enclosure:

Patrice Bubar, Associate Deputy Assistant Secretary for Environmental Management, EM-20, DOE  
Dr. Inés Triay, Manager, Carlsbad Field Office, DOE

Sandra Waisley, (Acting) Designated Federal Officer, EM-11, DOE  
Fred Dowd, Public Participation Specialist, EM-11, DOE-HQ/FORS

**DOE Site Managers and SSAB DDFOs:**

Steve McCracken, Site Manager, DOE Fernald EM Project  
Gary Stegner, Fernald CAB DDFO, Fernald EM Project  
Keith Klein, Site Manager, Hanford Site, DOE Richland Operations Office  
Wade Ballard, DDFO, Hanford Advisory Board, Hanford Site, DOE Richland Operations Office  
Roy Scheppens, Manager, DOE Office of River Protection  
Steve Wiegman, DOE Office of River Protection  
Elizabeth Sellers, Site Manager, DOE Idaho Operations Office  
Gerald Bowman, DDFO, INEEL CAB, DOE Idaho Operations Office  
Ralph Erickson, Site Manager, DOE Los Alamos Site Office  
Theodore J. Taylor, DDFO, NNM CAB, DOE Los Alamos Site Office  
Kathy Carlson, Site Manager, DOE Nevada Test Site  
Carl Gertz, DDFO, NTS CAB, DOE Nevada Test Site  
Gerald Boyd, Site Manager and DDFO, DOE Oak Ridge Operations Office  
Site Manager and DDFO, DOE Paducah Gaseous Diffusion Plant and PGDP CAB  
Gene Schmitt, Site Manager, DOE RFETS, Rocky Flats Field Office  
Jeremy Karpatkin, DDFO, RFCAB, DOE RFETS, Rocky Flats Field Office  
Jeff Allison, (Acting) Site Manager, DOE Savannah River Site  
Alice Doswell, DDFO, SRS CAB, DOE Savannah River Site

**DOE EM Site-Specific Advisory Boards (SSAB):**

Fernald CAB, Jim Bierer, Chair  
Hanford Advisory Board, Todd Martin, Chair  
Idaho National Engineering & Environmental Laboratory Citizens Advisory Board, Monte Wilson, Chair  
Northern New Mexico Citizens' Advisory Board, James R. Brannon, Chair  
NTS Community Advisory Board, Phil Claire, Chair  
Oak Ridge Site Specific Advisory Board, David N. Mosby, Chair  
Paducah Gaseous Diffusion Plant Citizens Advisory Board, J. Merryman Kemp, Chair  
Rocky Flats Citizens Advisory Board, Victor Holm, Chair  
Savannah River Site Citizens Advisory Board, Wade Waters, Chair

**New Mexico State Regulatory Staff**

Ron Curry, Cabinet Secretary, New Mexico State Environment Department  
Charles Lundstrom, Water and Waste Management Division  
James P. Bearzi, Chief, Hazardous Materials Bureau  
Steve Zappe, RCRA Permits Management Program

**Recommendations to the Department of Energy on  
Transuranic (TRU) Waste Management  
By  
Environmental Management's Site Specific Advisory Boards**

The cost of characterization of transuranic (TRU) waste is too high, particularly at small quantity sites. The cost of confirmation of TRU waste is too high, especially at large quantity sites.

THEREFORE, we recommend that the Department of Energy (DOE) characterize TRU waste as required to reduce risk and minimize transportation and handling of the waste, while making the confirmation process cost effective.

The receiving capacity of the Waste Isolation Pilot Plant (WIPP) is not always sustained.

THEREFORE, to meet site-specific needs, we recommend that the DOE allocate and coordinate resources complex-wide to optimize shipping to match the receiving capacity of WIPP.

Some requirements affecting the TRU waste management program are overly prescriptive, are hazardous to worker safety, do not contribute to public safety, and are also negatively impacting schedules and costs. These requirements were developed without the experience the National TRU Waste Management Program now possesses.

THEREFORE, we recommend that the DOE, in concert with stakeholders and regulators, initiate an ongoing program to identify, correct, and revise those requirements that interfere with the safe, prompt and cost effective management of TRU waste.

There are potential TRU wastes for which volumes and disposition paths are not yet identified, including but not limited to: (a) pre-1970 TRU waste, (b) non-defense TRU waste, (c) sodium bearing waste, (d) Hanford tank waste, and (e) TRU waste without an identified disposal path. These potential TRU wastes may cumulatively exceed the authorized capacity of WIPP.

THEREFORE, we recommend that the DOE identify volumes and disposition pathways for all potential TRU waste streams; and further,

We recommend that DOE, in consultation with stakeholders and regulators, initiate action to assure that WIPP has the capacity to accommodate all of the above listed TRU wastes, as necessary.

There is TRU waste for which containers are not currently available or planned.

THEREFORE, we recommend that the DOE accelerate TRU waste container design, licensing and deployment.

At present, the regulatory framework requires one hundred percent confirmation of TRU waste process knowledge.

THEREFORE, we recommend that the DOE streamline TRU waste management by accepting demonstrated process knowledge for TRU waste characterization; and further,

We recommend that the DOE, in consultation with stakeholders and regulators, reexamine the categorization of TRU waste using a risk-based approach; and further,

We recommend that the DOE identify the inventory of orphan TRU waste and assign a corporate project team to develop a path forward.

Ninety-five percent of the TRU waste is at five sites and the remaining five percent is at more than twenty sites. The small sites have limited capacity (i.e., time, personnel, and funding) to characterize and obtain WIPP certification for disposal. The ability to ship from small sites to major sites involves less rigorous characterization than WIPP acceptance criteria. Some major sites will have the personnel and facilities to characterize the waste to WIPP at less risk and for less money.

THEREFORE, we recommend that the DOE evaluate the concept of one or more locations to characterize TRU waste for WIPP disposal; and further,

We recommend that the DOE finish its analyses and make a decision with adequate public involvement regarding where to characterize TRU waste for disposal.

The following issues impede accelerated cleanup: (a) oversized boxes have no available containers or method of transport without size reduction; and, (b) high-activity waste has no available container without requiring repackaging and increased risk to personnel.

THEREFORE, we recommend that the DOE expedite design, certification, and fabrication of appropriate containers (e.g., ARROW-PAK and TRUPACT III), and accelerate the adoption of rail transport, as appropriate.

There is a continuing public concern about shipping radioactive TRU waste, which impacts states' approaches to permitting and inspection.

THEREFORE, we recommend that the DOE revitalize its efforts in coordinating transportation issues with states and Indian Tribes and assist in updating and disseminating information to the public about transportation risks and safety and provide public participation opportunities on transportation issues.

Approved: March 29, 2003