



Department of Energy

Carlsbad Area Office
P. O. Box 3090
Carlsbad, New Mexico 88221

April 21, 1997

To [unclear] [unclear]
RECEIVED

APR 24 1997

NM ENVIRONMENT DEPARTMENT
OFFICE OF THE SECRETARY

Dear WIPP Stakeholder:

The DOE Carlsbad Area Office is complying with a request by the U.S. Environmental Protection Agency (EPA) to conduct an Expert Elicitation on the waste particle diameter parameter used in the DOE's Compliance Certification Application to the EPA. The EPA has asked that an expert panel project the likely sizes of radioactive waste particles that would be released from the Waste Isolation Pilot Plant (WIPP) repository in the event of an inadvertent drilling intrusion.

The Carlsbad Area Office is convening a panel of at least five experts to examine this issue at the Pecos River Village Conference Center May 5-9 in Carlsbad, New Mexico. The public is encouraged to attend the meeting and comment on this issue. An orientation and training session, beginning on May 5 at 8 a.m., will be followed by presentations from Sandia National Laboratory's representatives regarding this parameter. They will reference information provided in the Compliance Certification Application, which is the DOE's submittal to the EPA to demonstrate compliance with the environmental protection requirements for the WIPP.

At 6:30 p.m. on Monday, May 5, the public is invited to comment on the specific issue of the waste particle size parameter or parameter range. Persons representing organizations will have up to 30 minutes to speak, and individuals will have up to 10 minutes. If more time is needed for the public to comment, time will be available on Tuesday afternoon, May 6. Opportunities for follow-up comment on the issue will be made available throughout the week. (Please see preliminary schedule). The schedule for public and observer comment is flexible and will depend on the progress of the elicitation process.

Stakeholders are asked to notify the DOE by May 1 of their intent to provide oral comments. Any written comments and copies of oral presentations are due at that time. Walk-ins are welcome and may sign up to comment during the open time remaining. To sign up to speak on the waste particle size parameter or to request additional information such as a fact sheet on the expert elicitation process plan, please call the WIPP Information Center at 1-800-336-WIPP. Written comments may be sent to: Ms. Pat Kilgore, U. S. Department of Energy, Carlsbad Area Office, Office of Public Affairs, P. O. Box 3090, Carlsbad, NM 88221-3090.

The panel's written report is expected to be completed by May 12. We hope you will be able to participate.

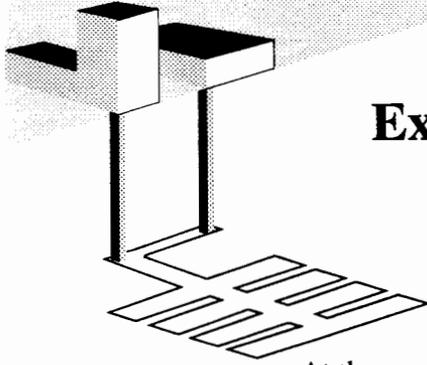
Sincerely,

George E Dials

George Dials
Manager



Waste Isolation Pilot Plant



Expert Elicitation Panel to convene about waste particle diameter parameter

At the request of the U.S. Environmental Protection Agency (EPA), the U.S. Department of Energy Carlsbad Area Office (CAO) plans to conduct an Expert Elicitation. A panel of experts will be formed whose judgment will be elicited on the waste particle diameter parameter used in the Waste Isolation Pilot Plant (WIPP) Compliance Certification Application. The panel will consider all available information, including public comments, in developing their judgment.

What is an Expert Elicitation?

An Expert Elicitation is a formal, structured, and well-documented process for obtaining judgments of experts on a technical issue that cannot be resolved through other means (such as further studies). In this case, panel members will listen to citizens, as well as other technical specialists who comment about the waste particle diameter parameter, and will consider those comments.

The specific challenge is to determine the likely sizes of radioactive waste particles that could be released due to the combination of high-pressure gas in the repository and a borehole intrusion. The model used in the Compliance Certification Application indicates that the distribution of particle size affects the quantity of material released, but the estimates of size are uncertain. This uncertainty led the EPA to request that the assumptions made in this model be based on an elicitation of expert judgment. These experts will consider several processes including:

- The effect of the closure of salt around the waste and of possible brine inflow;
- The form and size of the materials placed inside the disposal rooms; and
- Steel corrosion and degradation of other types of materials.

The elicitation method was chosen, rather than conducting a study, because no known scientific study could accurately determine the sizes of the particles. Therefore, the particle sizes will be projected based on the panel's expert judgment and experience.

Who is on the panel?

The members of an Expert Elicitation Panel are qualified and unbiased subject matter experts. These individuals have distinguished themselves with extensive and significant research in their given fields. A majority of the panel members will be independent of the DOE. A minimum of five members will serve on the panel. Their expertise could be in such fields as archeology, chemistry, rock/soil mechanics, and performance assessment/disposal system performance.

What is the waste particle diameter parameter?

The waste particle diameter parameter refers to the sizes of particles of waste that could possibly be released from the WIPP repository during a hypothetical borehole intrusion scenario.

In this scenario, a deep borehole intersects a waste emplacement room sometime in the future. If there is significant gas pressure in the room (due to various processes), this

pressure could push the drilling mud out of the borehole and cause a limited amount of radioactive material to separate or flow up the hole.

The sizes of the particles affect the calculated amount of radioactive material that could separate from the waste and ultimately reach the surface.

How does the process work?

All the proceedings are directed by an elicitor. The elicitor is an individual who assists the panel members in forming judgments by helping explain the task and the meaning of the questions, helps the experts divide the issue into meaningful components, and assists the experts in explaining their judgments in a useful format. This person also searches for inconsistencies in the given judgments, asks for information in different ways to provide cross checks, and ensures the experts give defensible rationales to support the judgments.

The public is welcome to observe the entire elicitation process in Carlsbad, New Mexico. Moreover, the general public and other interested parties are invited to present relevant information to panel members for their consideration. The elicitor and the panel will discuss all the issues and release a final report by the end of May.

Can I participate?

Yes. Stakeholders are invited to present information specifically about the waste particle diameter parameter used in the Compliance Certification Application. Other topics will not be addressed during the elicitation.

Important background information will be presented on May 5 beginning at 8 a.m. Sandia National Laboratories staff will present technical information relevant to the issue in the afternoon. Stakeholder comments will be scheduled for the evening session, which begins at 6:30 p.m. Individuals will be allowed to speak for up to 10 minutes. Those persons representing organizations will be allowed to speak for up to 30 minutes. Additional time for stakeholder presentations may be scheduled for the afternoon of May 6, as needed. Attendance throughout the entire week is encouraged, with other opportunities available during the week to provide additional comments.

How may I provide my input?

If you would like to speak at these proceedings, you are asked to register with the WIPP Information Center at 1-800-336-WIPP by May 1, 1997. A written copy of the verbal presentation should be submitted by May 1, 1997. Walk-in commenters are welcome to sign up to speak in the time remaining.

If you prefer to submit written comments, they must be submitted by May 1, 1997 to:

Ms. Pat Kilgore
U.S. Department of Energy
Carlsbad Area Office
P.O. Box 3090
Carlsbad, NM 88221-3090

Comments may be faxed to (505) 887-5419.

How can I get more information?

For more information about the Expert Elicitation, the WIPP, or the National TRU Program, call the WIPP Information Center at 1-800-336-WIPP (1-800-336-9477). You may also visit the WIPP Home Page at <http://www.wipp.carlsbad.nm.us>. If you prefer, write to Ms. Pat Kilgore at the address above.



U.S. Department of Energy
Carlsbad Area Office
The Waste Isolation Pilot Plant

Expert Elicitation Agenda

All meetings will be held at the Pecos River Village Conference Center and will be open to the public and other observers. Appropriate reference materials and an overhead projector and slide projector will be available. All sessions will be tape recorded. Public comments will be recorded by a court reporter.

Monday, May 5

8:00 to 12:00	Orientation/training (including administration, logistics and probability training)
12:00 to 1:00	Lunch break
1:00 to 5:00	Orientation/training continued (including probability and technical background presentation)
5:00 to 6:30	Dinner break
6:30 to 9:00	Public comment period on technical background

Tuesday, May 6

8:00 to 12:00	WIPP site tour for panel members
12:00 to 1:00	Lunch break
1:00 to 5:00	Public comment period on technical background continued (if any); discussion of technical background by panel; and development of conceptual model for particle size by panel
5:00 to 6:30	Dinner break
6:30 to ?	Development of conceptual model for particle size continued by panel (if necessary)

Wednesday, May 7

8:00 to 12:00	Development of conceptual model for particle size continued by panel; and preliminary conceptual model summarized
12:00 to 1:00	Lunch break
1:00 to 5:00	Observer and public comments (if any) on preliminary conceptual model; reconsideration and finalization of conceptual model by panel; and elicitation of experts regarding model input parameters
5:00 to 6:30	Dinner break
6:30 to ?	Elicitation of experts regarding model input parameters continued (if necessary and perhaps individually in private if appropriate)

Thursday, May 8

8:00 to 12:00	Elicitation of experts regarding model input parameters continued (if necessary); preliminary elicitation of model input parameters summarized; and preliminary results of model implementing those parameters
12:00 to 1:00	Lunch break
1:00 to 5:00	Observer and public comments (if any) on preliminary results of elicitation: reconsideration and finalization of input parameters by panel
5:00 to 6:30	Dinner break
6:30 to ?	Reconsideration and finalization of input parameters by panel continued (if necessary)

Friday, May 9

8:00 to 12:00	Verification of elicitation by panel and documentation
12:00	Adjourn