

**SUMMARY OF DOE PUBLIC WORKSHOP IN NEVADA
SILO 3 PATH FORWARD
JULY 1, 1997**

Background

On Tuesday, July 1, 1997 the U.S. Department of Energy (DOE) held a public workshop from 6-8 p.m. at the Clark County Government Center in Las Vegas, Nevada. This workshop was the second public workshop to be held in Nevada this summer to discuss the remediation of Silo 3 at the Fernald Environmental Management Project (FEMP).

The focus of the workshop was to educate stakeholders and further evaluate a select group of potentially viable treatment technologies available for the remediation of Silo 3 including:

- Cement Stabilization/Solidification
- Polymer (Micro) Encapsulation
- Sulfur/Polymer Encapsulation
- Vitrification

Attendance at Workshop

Approximately 20 people attended the workshop including representatives from the following affiliations:

- DOE-Nevada
- DOE-Fernald
- Fluor Daniel Fernald
- Nevada Test Site Community Advisory Board
- UNLV representatives (including representation from the Harry Reid Center)
- Nevada Nuclear Waste Project Office
- Nevada Risk Assessment Management Program
- Local Nevada residents
- Nye County officials

Presentations

The workshop opened with brief remarks from Nina Akgunduz, DOE-Fernald Silos Project Team Leader. Akgunduz explained the purpose of the meeting and also provided a brief summary of the June 16 public workshop held in

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Cincinnati. Akgunduz also explained this workshop is the second in a series of public involvement activities to be offered to interested stakeholders during the next few months to focus on the Fernald Silos Project path forward.

During the next part of the meeting, Don Paine, Fluor Daniel Fernald Silos Project Manager, reviewed the proposed technologies being considered for the remediation of Silo 3 including:

- Cement Stabilization/Solidification
- Polymer (Micro) Encapsulation
- Sulfur/Polymer Encapsulation
- Vitrification

Paine explained each of the waste treatment processes in detail and presented the advantages and disadvantages associated with each technology. Paine concluded by presenting comparisons of each technology and the following general conclusions:

All 3 waste forms can be designed to meet disposal requirements for many waste streams including Silo 3;

Next, Terry Hagen, Fluor Daniel Fernald's Director of Strategic Planning, presented an overview of the criteria used to determine the potential technological alternatives associated with the remediation of Silo 3. Hagen explained the criteria is basically divided into 3 categories including:

Threshold Criteria -- Includes overall protection of human health and the environment

Balancing Criteria --Including long-term effectiveness and permanence; reduction of toxicity, mobility, or volume through treatment implementability; short-term effectiveness; and cost

Modifying Criteria -- Including state and community acceptance

Hagen presented a comparative analysis of the alternatives associated with each of the criteria. General conclusions resulting from the comparative analysis included:

All four of the potential alternatives are protective of human health and the environment

All four alternatives can comply with identified ARAR's



The treatment technologies combined with disposal in an arid environment provide approximately equal long-term effectiveness and permanence

Work risks are higher for vitrification and encapsulation technologies because of higher operating temperatures

Transportation risks for all four alternatives are significantly below U.S. EPA guidelines

Transportation risks are lowest for vitrification due to smaller number of waste shipments

Off gas issues are more significant for vitrification and encapsulation technologies

Cleanup time is judged to be most certain for cement stabilization as the most developed technology

All of the alternatives reduce RCRA metals mobility to below regulatory limits

None of the treatment technologies achieve a significant reduction in waste toxicity

Vitrification will realize a reduction in volume of the treated waste

Cement Stabilization will realize a volume increase in the treated waste

Sulfur/Polymer Encapsulation and Polymer Encapsulation are expected to perform similar to cement stabilization relative to volume increase

Hagen also presented cost comparisons between the alternatives and discussed aspects associated with the administrative and technical implementability of the technologies. He specifically requested feedback from stakeholders about the preliminary information presented on the nine criteria analysis. This will be used to directly support selection of the treatment technology for Silo 3. Hagen stated that DOE does not intend to propose vitrification for the remediation of Silo 3 primarily due to technical implementation and cost concerns associated with the implementation of vitrification for Silo 3.

Action Items

Nevada stakeholders asked several questions at the workshop pertaining to the following topics:

- Quality Assurance of the technological alternatives
- Cost issues
- Long term disposal issues

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Performance standards (regulatory guidelines)
 Final waste form
 Performance Assessment Criteria
 Transportation issues (including accident scenarios)

Next Step

Fernald representatives did inform the Nevada stakeholders that we plan to conduct a third public workshop in Cincinnati on July 29. The focus of the workshop will be to present the proposed remediation alternatives to be identified in the Silo 3 Explanation of Significant Difference (ESD), which is being prepared as part of the ongoing regulatory process associated with the Silos Project. DOE would like to obtain feedback from stakeholders relevant to the development of the ESD and identify additional information needs by members of the public.

Nevada stakeholders did not feel it was necessary for Fernald representatives to repeat this workshop but did ask that we plan to come back to Nevada when the ESD is being prepared (late September or early October) to come to final consensus on the Silo 3 path forward.

Stakeholder Input

Feedback received from the evaluation forms highlighted the following comments from stakeholders:

The presentations from Don Paine and Terry Hagen were outstanding. The presenters were credible technical speakers and effective communicators.

Would like to see more quantitative uncertainty analysis regarding the proposed alternatives

Would like to see DOE-Fernald move forward with cement stabilization for Silo 3 because of certainty and success of this alternative

Cement Stabilization is perceived by Nevada stakeholders as being most benign

Appreciate the fact that Fernald representatives continue to keep the communication lines open by informing us about future plans regarding the Silos Project. Sincerely appreciate the efforts we have made to consider opinions

of Nevada stakeholders.

Overall remarks made asking DOE-Fernald to keep the Nevada Test Site Citizens Community Advisory Board in the loop.

A transcript, presentation handouts, and evaluation forms from the July 1 Silos Project public workshop will be available within the next two weeks at DOE's Public Environmental Information Center (PEIC) located at 10995 Hamilton Cleves Highway; (513)648-7480.

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