FERNALD CITIZENS ADVISORY BOARD

FCAB UPDATE

Week of March 1, 1999

(Last Briefing was Dated February 15, 1998)

MEETINGS

FERNALD MONTHLY PROGRESS BRIEFING — **Services Building Conference Room**
Tuesday, March 9,1999 • 6:30 pm

STEWARDSHIP COMMITTEE — **Large Laboratory Conference Room**
WEDNESDAY, March 10, 1999 • 6:30 p.m. (same room as normal full board meeting)

REMEDIATION COMMITEE — **Large Laboratory Conference Room**
THURSDAY, March 11, 1999 • 6:30 p.m.

FULL BOARD MEETING — **Large Laboratory Conference Room**
Saturday, March 13, 1999 • 8:30 a.m.

FUTURE OF FERNALD WORKSHOP — **Crosby Elementary School**
Tuesday, April 20, 1999 • 6:00 p.m.
This event was rescheduled to allow for more planning time.

ATTACHMENTS

- Draft Agenda for 3/13/99 Full Board Meeting
- Draft March 1999 Committee Agendas
- 2/10/99 Remediation Committee Meeting Summary
- 2/11/99 Stewardship Committee Meeting Summary
- Article by Jim Owendoff
- Idaho's SSAB's Recommendations about the Environmental Assessment for Intermodal Transport of Low-Level Waste to Nevada Test Site
- Environmental Management Local Site-Specific Advisory Boards Brochure
- Findings and Recommendations from the National Workshop by the League of Women Voters
- News Clippings

NEWS and ANNOUNCEMENTS

- The Remediation Committee will meet on Thursday NOT Wednesday, and the Stewardship Committee will meet on Wednesday NOT Thursday. This switch is permanent.
- **A Future of Fernald Workshop will be sponsored by the FCAB on April 20, 1999.** A number of issues are being discussed on site including ecological restoration, Native American issues, and the possibility of a cultural center or museum. The Stewardship Committee believes the time is right to hold a community-wide forum to discuss these issues, evaluate their appropriateness to Fernald, and identify the steps necessary to bring them to reality. Additional information will be available shortly.

FOR FURTHER INFORMATION

Please contact Doug Sarno or Gwen Doddy, Phoenix Environmental Corporation
Phone: 513-648-6478 or 703-971-0058 Fax: 513-648-3629 or 703-971-0006
E-Mail: PhnxEnvir@aol.com or [redacted]

FERNALD CITIZENS ADVISORY BOARD

FULL BOARD MEETING AGENDA
Saturday, March 13, 1999

Draft as of 2/25/99

8:30 am	Call to Order
8:30 – 8:45	Chairs Remarks and Announcements Results of SSAB Chairs meeting
8:45 – 9:00	Site Progress and Issues Leachate Piping Leaks First Waste Loadout Waste Shipping Resumption Safe Shutdown Completion
9:00 – 9:15	Transportation Workshop Update
9:15 – 9:30	Nye County Request for Support
9:30 – 10:00	Future of Fernald Workshop Planning
10:00 – 10:15	Break
10:15 – 11:00	Nuclear Materials Disposition Recommendation
11:00 – 11:30	Silos Proof of Principle and Radon
11:30 – 11:45	Public Comment
11:45 - 12:00	Wrap Up
12:00	Adjourn

FERNALD CITIZENS ADVISORY BOARD

MARCH 1999 COMMITTEE AGENDAS
Draft 2/25/99

STEWARDSHIP COMMITTEE
Wednesday, March 10, 1999, 6:30 pm

- Planning for Future of Fernald Workshop
- Update on Fernald Living History Project

REMEDIATION COMMITTEE
Thursday, March 11, 1999, 6:30 pm

- Planning for Transportation Workshop
  - Review input from SSAB Chairs meeting
  - Fernald Fact Sheet Development
- Discuss Nuclear Material Disposition EIS

Topics:
- On-Site Disposal Facility Project
- Nuclear Material Disposition Status
- Summary of the visit of the Nye County's Representatives
- Transportation Workshop

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FERNALD CITIZENS ADVISORY BOARD

Attendees:

DOE:	Jay Jalovec Randy Janke
FCAB Members:	Sandy Butterfield Lisa Crawford Bob Tabor Fawn Thompson Tom Wagner Gene Willike
FDF:	Tisha Patton
Ohio EPA:	Kelly Kaletsky
Phoenix Environmental:	Doug Sarno

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Meeting Summary:

On-Site Disposal

Mike Hickey presented an update on the on-site disposal facility project's borrow area study. The East Field was identified as a potential borrow area and divided into two sides: West Side, (27 acres) and East Side (48 acres). The excavated soil will be used for three types of earth work material:
- Clay for Liner and Cap,
- Unclassified soil for general earth work, and
- Top soil for establishing grass.

A total of 808,200 Cubic Yards (CY) is available from the East Side at a depth of six feet, however a total of 1,1100,700 CY of clay are needed for those projects. Using only the soil from the East Field, the Department of Energy (DOE) will be lacking 302,500 CY of soil. If an additional four (4) feet of soil is excavated from the East Borrow Area, there will be enough soil for all the needs. Using this clay will save about $2 million. The DOE recommends redesigning the existing Borrow Area Restoration Plan to remove all known brown clay and design a Restoration Plan for the West Side.

Nuclear Material Disposition Status

Randy Janke presented the status of the nuclear material disposition. In June 1997, critical safety violations were found on site, which caused a one year shut down. On May 18, 1998, the nuclear material disposition resumed. In July 1998, additional infractions of safety requirements were found, which caused the DOE to order Fluor Daniel Fernald (FDF) to conduct a Readiness Assessment (RA). The RA was completed on December 17, 1999 and nuclear material disposition resumed on January 13, 1999. By February 1, 1999, 400 drums of enriched restricted materials were moved from Plant 6 to TS4 (see attached chart). Two and a half (2.5) million net pounds of UF4 went to a commercial contractor and approximately 800 metric tons uranium (MTU) may be sent to a commercial contractor. If no commercial contractor wants the material, it will be shipped to Oak Ridge.

On December 28, 1998, DOE declared 938 MTU of the enriched restricted materials as waste. The 938 MTU may be shipped to Nevada Test Site or Envirocare.

Visit of Nye County Representatives

Seven (7) representatives of Nye County, Nevada visited the Fernald Site to discuss the transportation of low-level radioactive waste through their county. Due to the lack of emergency response capacities, the representatives asked DOE for the following:

- Emergency communications coverage,
- Hazmat vehicles with LLRW equipment,
- Crew vehicles,
- Trained full-time staff,
- Volunteer Stipend,
- Training,
- Equipment, and
- Emergency medical facilities.

Jack Craig said FDF could sent hazmat vehicles and communication equipment. The Remediation Committee decided to sent a letter to Craig, and others to be determined by Craig, supporting the Nye County request for equipment and funds.

Transportation Workshop

Doug Sarno met with Mona Williams, Judith Holmes, Kelly Kelkenberg, Martha Crosland and Bob Alcock at DOE HQ to discuss the workshop. They were very supportive of the workshop and will provide example transportation fact sheets. .

During the SSAB Chairs meeting, the round robin discussion will focus on transportation issues. Moreover, the SSAB members will discuss the workshop's details during the meeting and Sarno will meet with the facilitators.

Recent Events in Nuclear Materials Disposition

June 1997	Safety Violations found
May 18, 1998	Nuclear Disposition Resumed
July 1998	Additional Safety Violations found
December 17, 1998	RA Complete
December 28, 1998	DOE declared 938 MTU Waste
January 13, 1999	Nuclear Disposition Resumed
February 1, 1999	400 drums of en-riched restricted materials were moved from Plant 6 to TS4

FERNALD CITIZENS ADVISORY BOARD

Topics:
- Living History Project
- Natural Resource Working Group

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FERNALD CITIZENS ADVISORY BOARD

Attendees:

DOE:	Kathie Nickel Ed Skintik Pete Yearce	Living History Project:	James Innis
		FRESH:	Carol Schroer Edwa Yocum
FCAB Members:	Marvin Clawson Pam Dunn Mike Keyes Ken Moore Bob Tabor	Ohio EPA:	Donna Bohannon Tom Schneider
		Phoenix Environmental:	Doug Sarno
FDF:	Lisa Ludwick Joe Schmaker Sharon Stanton Tisha Patton Sue Walpole Eric Woods		

Meeting Summary:
Fernald Living History Project

James Innis presented an update of the Fernald Living History Project (FLHP)'s activities. The FLHP Advisory Group has undergone restructuring, with a shift of leadership from the University of Cincinnati to a community-based group. The initial trustees are Jane Harper, Crosby Township Trustee; Edwa Yocum, member of FRESH; and James Innis, board member of the Crosby Township Historical Society. The FLHP's goal is to videotape interviews of the Fernald site workers, retirees from the FEMP site, and neighbors and former neighbors whose personal experiences help define the human history of the Fernald Cold War Project. FLHP tested the validity of this concept by interviewing six representative individuals and from those videotapes composed a promotional video.

Originally, FLHP hoped to fund this project through private grants; however, efforts to win private grants have been unsuccessful. Fortunately, FDF has offered to provide both the materials and part-time personnel to maintain the list of potential subjects and handle scheduling. They also have agreed to conduct the interviews, operate the camera, and make working copies for archiving at the PEIC for public viewing. This offer is for the fiscal year of 1999, however, there are hopes to continue funding this project into the next fiscal year. FLHP plans to conduct 80-100 interviews between April 1 and September 30, 1999.

The Stewardship Committee of the FCAB will help the FLHP inform the public of FHLP's efforts and to be the advocates of the program. An article will appear in the next FCAB Newsletter and the FCAB's logo may be used by the FLHP as a symbol of its support.

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Natural Resource Working Group

Kathie Nickel presented a description of the role and responsibilities of the Natural Resource Working Group. This group, consisting of DOE and FDF project personnel and the Natural Resource Trustees, is being established to develop design plans for the restoration projects outlined in the Natural Resource Restoration Plan (NRRP). The Natural Resource Working Group will meet and develop a conceptual design (based on the information presented in the NRRP) and a list of design components consisting of habitat and public use features for each of the project areas. Each of the liaisons will be responsible for informing their group about this design and receiving feedback. A second meeting will be held to finalize the design.

Nickel invited a member of the Stewardship Committee to join the Natural Resource Working Group. Marvin Clawson and Ken Moore will represent the FCAB. Doug Sarno will also attend the meetings.

There were some concerns among the attendees of the meeting that people adjacent to the site and local residents may not have a voice in the process of the creating a design. Nickel stated that the group will bring any plans directly affecting them to the attention of the residents (for example the creation of wetlands, which may bring an excess of mosquitos to the neighborhood).

In the course of discussion, it became apparent that no group has been established to coordinate overall decisions concerning the future of the site. Pam Dunn and Doug Sarno suggested a Future of Fernald Workshop to replace the Full CAB Board Meeting scheduled on March 13. This Workshop would attempt to bring together people with a stake in the final decision concerning the future of the site. The members of the Stewardship Committee as well as the other attendees agreed that a Future of Fernald Workshop is a good idea. The Stewardship Committee will try to identify which future use issues need more effort and will help focus effort to those issues.

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DOE Initiatives

Taking Public Participation in DOE One Step Further

James M. Owendoff

Siting nuclear waste disposal facilities poses one of the most difficult public policy challenges today. Citizen understanding of and broad agreement on the issues is probably the most difficult component of the challenge. Nevertheless citizen understanding and involvement in the decisions are necessary if decisions are to be sustainable. In an attempt to address these challenges, the Department of Energy recently engaged in a new form of citizen involvement, called Intersite Discussion workshops, that aimed to discuss upcoming decisions on nuclear waste and material, and give citizens an opportunity for input on those decisions.

The unique quality of these Intersite Discussion workshops was the cross-site, multi-stakeholder discussion of several upcoming decisions regarding disposal of nuclear wastes and materials. The design of the workshops provided a national perspective on the issues not normally provided during a traditional comment and response process. Without ceding any decisional authority, these workshops were the DOE equivalent of a "citizen town meeting"—an open dialogue involving the "city manager, the municipal employees, bondholders and town residents." This article seeks to explain the value of these Intersite Discussion workshops and analyze the lessons of this innovative form of public participation.

BACKGROUND

The exigencies of World War II and the ensuing Cold War required that the U.S. Department of Energy (DOE) and its predecessor agencies perform its mission in secret: to research, build, and test nuclear weapons. Such a longstanding institutional culture yields great difficulties in moving the DOE toward openness. However in recent years the DOE has made strides to open up its culture, operations, and decision making processes through declassification, public participation, and other forms of strategic outreach.

The Office of Environmental Management (EM) has worked to integrate public participation into its programmatic operations of cleaning up the

James M. Owendoff was named acting assistant secretary for the Environmental Management Program in January 1998. Upon arriving at the Department in 1995, Jim was the deputy assistant secretary for environmental restoration and, in 1997, was named the acting principal deputy assistant secretary. Prior to joining the Department, Jim served in the Office of the Deputy Under Secretary of Defense for Environmental Security and Chief of the Air Force Environmental Restoration Division.

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former nuclear weapons complex. EM has set up Site Specific Advisory Boards at 12 sites around the country, established government-to-government relationships with tribal nations, built stronger relationships and created more opportunities for dialogue with state and local governments, and taken efforts to encourage the involvement of low-income and minority communities around DOE sites.

In the mid 1990s, some stakeholders and tribal representatives voiced a desire to have a comprehensive picture of DOE decisions about nuclear waste and materials. Their criticism stemmed from a perception that DOE was performing too many fragmented and uncoordinated Environmental Impact Statements (EIS) under the National Environmental Policy Act (NEPA), without providing an integrated comprehensive overview of the problem. The average citizen could not understand the relationship of and distinction between decisions to be made on the basis of EISs such as the Foreign Research Reactor Spent Nuclear Fuel EIS, Surplus Plutonium EIS, or a Waste Management Programmatic EIS. With such a number of disparate and simultaneous EISs, few could see, much less understand, the big picture—the interrelatedness between these decisions and the tradeoffs DOE was considering among the decisions and options. The stakeholders' rationale for such a national discussion was their belief that the DOE needed to provide a comprehensive overview of all the major nuclear material and waste decisions, explain how each site fits into DOE's big picture, and (ideally) seek consensus on these decisions.

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This process started in late 1995 when then Assistant Secretary Tom Grumbly agreed to such a process in concept at the Plutonium Roundtable in Seattle, Washington. His agreement set in motion a process, then named the National Dialogue, that evolved over two years. This process culminated in the smaller Intersite Discussion workshops held in June 1998. The previous years, 1996 and 1997, were spent formulating a National Dialogue Working Group and holding Pilot Field Workshops. Central to these events was the cooperative agreement between DOE and the League of Women Voters Education Fund (LWV-EF), which convened this process.

In January 1998 Deputy Secretary Betsy Moler approved one round of cross-site, cross-stakeholder workshops on nuclear material and waste management that would focus on DOE decisions scheduled to be made over the next year that involve intersite movement of nuclear material or waste or facility siting. Workshop participants would discuss key considerations for DOE when making management decisions about nuclear material and waste. The specific pending Department of Energy decisions that would be discussed included Storage of Surplus Nonpit Plutonium; Disposition of Rocky Flats Plutonium Residues; Interim Storage of West Valley Vitrified High-Level Waste; Selection of Low-Level Waste/ Mixed Low-Level Waste Treatment and Disposal Sites; Siting of Plutonium Disposition Facilities: Pit Disassembly and Conversion, MOX Fuel Fabrication, and Immobilization; and Tritium Production Technology Selection: Accelerator or Commercial Light Water Reactor. To have the process be viewed as credible, an independent entity—the League of Women Voters Education Fund (LWV-EF)—would be the convenor of the process.

PLANNING THE INTERSITE DISCUSSION WORKSHOPS

Three primary tasks had to be accomplished: devising the workshops agenda, performing the outreach to register opinion leaders as participants from around DOE sites, and preparing the necessary information to inform participants and prepare them to discuss the issues. Under the cooperative agreement, the LWV-EF would be primarily responsible for these activities. LWV-EF faced the daunting task of performing these three tasks in a few months. As a new concept for many DOE employees, relinquishing most of the control of a major public outreach strategy was not easy.

Two workshops were planned on university campuses: June 21 to 23 at San Diego State University and June 25 to 27 at Loyola University in Chicago. Each workshop was specifically designed to be a mix of representatives from small and large DOE sites that were also geographically diverse with a range of different site missions, e.g. long-term mission vs. closure. The backgrounds of the individual participants were also correspondingly mixed.

Holding the workshops on campus held several benefits: most participants stayed in the dorms and ate in the dorm cafeteria, which provided numerous opportunities for informal dialogue on the issues. Many participants believed the informal conversations over meals or in the hallways were one of the most beneficial outcomes.

LWV-EF registered a broad cross-section of important stakeholders and tribal representatives from the 16 major DOE sites, including:

- business and industry representatives;
- Department of Energy representatives, including senior managers from headquarters and field sites, as well as waste management, environmental restoration, and public participation staff;
- environmental justice representatives;
- Environmental Protection Agency regional and national staff;
- governors' representatives;
- high school journalism students;
- labor representatives (union and nonunion);
- local government officials;
- local grassroots environmental and public interest groups;
- Site Specific Advisory Board chairs or designees;
- state environmental regulatory agencies; and
- tribal representatives.

Getting the "right" or appropriate participants to the workshops was crucial to their success. Without a credible participant stock, the issues and input to DOE would be insufficient in achieving the goal of substantive input for the upcoming decisions. Before the workshops, a number of nongovernmental organizations notified DOE that their representatives would not attend the Intersite Discussion workshops. Many of these organizations were part of the Alliance for Nuclear Accountability (ANA), a national DOE watchdog group. They indicated to then-Secretary Peña that the workshops would be more of a public relations forum for the Department of Energy than a credible discussion workshop on the issues. While the boycott took away from the potential overall effectiveness of the Intersite

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Discussion workshops, LWV-EF registered about 160 key stakeholders as participants from around the DOE complex. However in spite of the boycott, a few representatives from ANA member organizations did participate in the workshops.

LWV-EF and DOE shared the responsibility of producing informational packages that prepared workshop participants. It was critical that the information be delicately balanced between comprehensiveness and accessibility. Without enough detail, participants could not discuss the technical points of the issues with any depth. With too much detail, the lay person would drown in a sea of incomprehensible data. This author believes one of the major benefits of the workshops was the production of the information package that achieved these objectives. Furthermore, its clear articulation of the issues helped the DOE decision makers further comprehension of the interrelatedness of the decisions.

THE WORKSHOPS: WHAT HAPPENED

The workshops were a mix of information sessions, small group discussions, and roleplaying exercises. The structure of the workshops followed a three-point plan:

1. Information sharing among sites' representatives;
2. Interest mapping by site and by stakeholder group; and
3. A role-playing exercise that divided participants into small groups and placed them in charge of the EM program—in other words, each group would choose the locations for final disposal and disposition of the radioactive wastes and materials in the DOE complex.

While the information sessions were viewed as necessary to form a common base of knowledge among participants, the capstone of the workshops was the waste and material management exercise. Faced with a map of the continental United States with plastic blocks representing each different type and volume of nuclear waste at each DOE site, each stakeholder group was tasked to collectively decide how and where to treat, store, and dispose of the radioactive wastes and materials currently stored at DOE sites. Each group was a cross-section of participants from different backgrounds and locations. Whether the group agreed on final locations of the DOE radioactive wastes and materials was not the ultimate goal, although it was the stated objective. Participants' understanding the overall picture of waste management decisions facing DOE and the inherent tradeoffs was the intended objective. The dialogue within each group elicited each individual's rationale on how to address the environmental legacy of the nuclear weapons production. Economic, environmental, social, and political risks, ramifications, and consequences of the options were among the issues debated within each group. Each group's results were presented at the plenary final session of the workshops with senior DOE decision makers present.

The final session also included opportunities for any workshop participant to dialogue directly with senior DOE officials. Chairs with microphones were set up on stage, allowing a stakeholder to ask any DOE person present to come on stage and have a discussion about any issue. Further-

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more, at the conclusion of one workshop, the three senior DOE officials gave impromptu presentations on how the input from the waste management exercise and the whole workshop would impact their relative decisions on nuclear waste and materials disposal and disposition. These opportunities for direct, unfiltered input and substantive discussions were the crown jewels in this public participation activity.

LESSONS

These first-time workshops were unique public participation efforts on several levels. They served as open, legitimate forums for dialogue between citizens and DOE. By their cross-site, cross-sector nature, they provided a national picture to the radioactive waste disposal challenge. They focused on two-way education and information sharing regarding multiple decisions. What happened offers lessons for the future of public participation in DOE and the road to stakeholder involvement in complex-wide decisions.

UNDERSTANDING AND EDUCATION

In a relatively short time period, participants gained an in-depth understanding of many DOE sites as well as nuclear waste and material issues. One primary outcome of the workshops was to break down parochial viewpoints by understanding the complex-wide implications of addressing the environmental legacy of the Cold War. The major DOE sites were physically constructed decades ago in remote locations across the continental United States. Living near a DOE site gives one the impression that they are isolated islands of activity. Furthermore, DOE management historically did not—could not—encourage citizens to understand the operations of the nuclear complex as a whole. In reality each DOE site in the complex is part of the web of an interrelated industrial empire—many of each site's problems are problems of the entire DOE complex. At the workshops, participants gained a broader understanding of the Department's sites and the complexity of nuclear waste and material issues, together with an appreciation of the variety of viewpoints related to and the complexwide implications of addressing the environmental legacy of the Cold War. The workshops have spurred some intersite consultations and activity among stakeholders and more interaction among different Site Specific Advisory Boards.

One of the explicit goals of the workshops was a mutual learning and enhanced openness of thought. It was anticipated that all of the participants would have an opportunity to learn from each other through discussion and would bring about an exchange of information and perspectives. The expectation was that each participant would gain an understanding of the nuclear material and waste issues and broaden his or her perspectives beyond an individual, a site, or a stakeholder viewpoint. Creating complex-wide understanding of the issues, alternatives, and consequences for disposal fosters acceptance and of implementing these decisions.

OPPORTUNITY FOR DIRECT INPUT TO AND DIALOGUE WITH DECISION MAKERS

One hallmark of these events was giving individuals a chance to dialogue directly with DOE decision makers on pending DOE decisions. Workshop participants could debate the merits of an issue publicly and

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influence the outcome of a major DOE decision on nuclear waste and material disposal and disposition. These DOE officials demonstrated an extraordinary willingness to engage in open dialogue on extremely controversial issues.

DOE believes that these interactive discussions will help the Department make better decisions on nuclear wastes and materials by creating a better understanding of the concerns of those who will be affected by the decisions. Some common concerns expressed at the Workshops include:

- both technical and political feasibility should be considered in planning and decision making, and urgent risks must be addressed;
- limited consolidation of nuclear waste and materials should be pursued, wastes and materials should be moved between sites only when justified, and transportation should be minimized;
- site suitability for storage or disposal should be considered;
- lifecycle cost effectiveness of options should be considered;
- any receiving site should be adequately compensated; and
- public education and involvement about nuclear waste and materials issues is critical—in particular, DOE should perform more outreach to environmental justice communities and to youth.

The contributions of the high school students were another highlight of the workshops. Some planners of the Intersite Discussion workshops were skeptical of the need to invite and involve high school students. At the workshops, however, their thoughtful input to the discussions, their energy, and their mature performance made an enormous positive difference in the workshops, as evidenced in the LWV-FE's evaluation forms. In fact, two of the high school participants are now serving on the Site Specific Advisory Board in their communities.

NEPA NECESSARY BUT NOT SUFFICIENT

The Intersite Discussion workshops differed from typical public participation processes under the National Environmental Policy Act (NEPA). This statute sets a minimum standard for public participation for federal agencies in making decisions that impact the environment. Any public interaction beyond that minimum standard is encouraged by NEPA, which is in itself an inherently flexible statute. These workshops were seen as separate and distinct but supportive of the NEPA process.

Generally, DOE uses the NEPA framework as its decision-making process regarding major environmental actions. Almost 30 years after NEPA was enacted, the statute is necessary but not sufficient for stakeholders and DOE to dialogue on these important issues such as radioactive waste disposal. As DOE continues to open up its institutional culture, stakeholders will have more to say and more power to influence decisions. In conventional scoping meetings and public hearings held under the NEPA process, the structure of the interaction between DOE and participants often promotes an adversarial relationship with little substantive dialogue.

The inherent complexity and controversy in siting a nuclear waste disposal facility requires broad-based

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support for the decisions. Stakeholders are not satisfied with the conventional processes of public interaction under NEPA. Ongoing and sustained forums of discussion and dialogue with affected citizens are necessary if the nation is to move forward on these critical decisions.

CLOSURE

The Intersite Discussion workshops were a multilateral forum that emphasized dialogue and interaction in a small group format in order to elicit a more direct exchange of perspectives and information. Traditionally, DOE's public participation involves interaction at the site-level or with discrete stakeholder groups or governmental representatives. The Intersite Discussion Workshops were important for the Department of Energy because it was the first time that a broad range of stakeholders and representatives of tribal, state, and local governments were brought together in a workshop to engage in a national dialogue on nuclear waste and material issues.

LWV-EF is charged with the responsibility of writing the summary report on the workshops. It will capture the overarching themes, comments, and input. This report will be given to the DOE decision makers who participated in the event as well as those officials whose decisions will be affected by the workshops. The ultimate measure of the utility of the Intersite Discussion workshops will be how this input is used by DOE—and, by extension, how DOE *documents* its use of the report. In sum, these workshops were another step in the process of informed discussion about the difficult choices facing DOE and communities hosting DOE sites. ❖

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Citizens Advisory Board
Idaho National Engineering and Environmental Laboratory

Preliminary Draft Environmental Assessment Intermodal Transport of Low-Level Radioactive Waste to the Nevada Test Site

INTRODUCTION

The Idaho National Engineering and Environmental Laboratory (INEEL) Citizens Advisory Board (CAB) reviewed the Department of Energy's (DOE) Preliminary Draft Environmental Assessment (EA) of Intermodal Transport of Low-Level Radioactive Waste (LLW) to the Nevada Test Site (NTS). We appreciated having an opportunity to review the Preliminary Draft EA.

The EA appears to support a decision making process with an appropriate objective—to route shipments of LLW for disposal at NTS so as to avoid transportation through the Las Vegas metropolitan area and over Hoover Dam. The case for that objective is well presented in the purpose and need section of the EA. While the EA offers little evidence that intermodal transportation to NTS is inappropriate, the INEEL CAB believes additional analysis would support an enhanced decision based more thorough analysis and more complete data. We submit the following recommendations for improving the document before it is finalized and a Record of Decision is formulated.

RECOMMENDATION

1. **The INEEL CAB recommends that DOE clarify the proposed action, confirm the need to prepare NEPA documentation, and consider coordination with other agencies.**

The INEEL CAB understands that NEPA documents support federal agency decision making. We therefore noted this quotation with confusion: "DOE-NV will use the results of the assessment to decide whether or not to encourage the LLW generators and their transportation contractors to change their current operations to accomplish these objectives. The DOE doesn't have the legal authority to require the use of particular transportation modes and routes."

We recommend that DOE reconsider its approach to achieving the desired results. Those results might be better achieved through the coordinated participation of other appropriate and involved agencies (Department of Transportation, for example) as cooperating preparers of the NEPA documentation. DOE should clarify the proposed action and determine if NEPA documentation is even appropriate.

2. **The INEEL CAB recommends that the EA address the impacts of another alternative that would allow both intermodal and total truck options as long as the routing can avoid Las Vegas and Hoover Dam economically.**

As it is presently configured, the EA compares a "No Action" alternative (using current modes of transport and current routes) against one alternative that assessed exclusive use of intermodal transportation and another that assessed exclusive use of all-truck routes. We noted the absence of another feasible alternative that would evaluate the possibility of giving shippers more discretion and allow a choice of intermodal and total truck options. We note that shipments from INEEL and Hanford might be more economical using total truck, but recognize that intermodal would be preferred for

shipments from the eastern DOE sites. This combination alternative would be consistent with the statement that the DOE's Nevada Operations Office (DOE-NV) "does not intend to recommend a single alternative." In the spirit of the National Environmental Policy Act (NEPA), we recommend that the EA evaluate the impacts of all reasonable alternatives that meet the purpose and need for action.

3. **The INEEL CAB recommends that the EA address the impacts of operating two intermodal facilities, including one in Caliente, Nevada, and another in Yermo, California.**

Neither facility would be ideal for all LLW destined for shipment to NTS. As it appears that the impacts of constructing the necessary facilities are minimal, we urge DOE to consider operating two facilities to support economical transportation from points west and east of the NTS.

4. **The INEEL CAB recommends that DOE consider the option of using a road that could provide direct access between State Road 375 and the NTS.**

The distance that would be traveled by LLW truck shipments coming from the east intermodal site at Caliente, NV could be decreased significantly if DOE were to use a road allowing direct access between State Road 375 and the NTS to avoid requiring the use of existing roads through Tonopah, Nevada. More detailed maps than those presented in the EA indicate that existing roads might provide options; road upgrades and new construction are additional options. We are aware of the infrastructure and topological challenges that this recommendation might entail (i.e., mountainous terrain, protection of Desert Bighorn Sheep, and Nellis Air Force Bombing Range). At a minimum, the EA should demonstrate that DOE considered the possibility of shortening the distance traveled, avoid more cities, and its rationale for ruling those options out.

5. **The INEEL CAB recommends the addition of analysis related to potential shipments of all DOE-managed waste that could be disposed at NTS.**

We are curious about the lack of analysis of transportation impacts related to shipments from Hanford and from INEEL to the NTS. We were also puzzled by a stated conclusion that intermodal transport from INEEL would be more expensive than truck transport from INEEL given the lack of supporting documentation. We believe the EA should consider all LLW that could be destined for disposal at the NTS as a result of the pending LLW Record of Decision (ROD) for LLW disposition.

We note that DOE is also considering NTS for complex-wide disposal of mixed LLW (MLLW) as well. It seems pointless to restrict the analysis to only one waste stream that could be disposed at NTS unless no other waste streams are appropriate for intermodal transport. We recommend that the analysis in the EA be supplemented to ensure consistency with DOE's overall management for all waste streams. The EA should assess all impacts associated with all planned shipments of waste destined for NTS (based on the latest volume estimates). The expanded analysis would forestall the need to prepare additional NEPA documentation in the future.

6. **The INEEL CAB recommends that all conclusions presented in the EA be confirmed and substantiated.**

Some of the conclusions presented in the EA appear to be unsubstantiated. One example is a conclusion that 24-hour operations of an intermodal facility in downtown Caliente would have no impact on the residents of Caliente. We encourage DOE to make sure all conclusions are well documented and based on sound analysis.

7. **The INEEL CAB recommends that DOE consider routing empty trucks along the same routes used for loaded trucks.**

The analysis suggests that the primary impacts associated with transportation of LLW to NTS are not related to the fact that LLW is radioactive but rather to increased traffic. As a result, we questioned the rationale for routing empty trucks through the Las Vegas metropolitan area (presented on page 22). We feel that a decision to route both full trucks and empty trucks along designated routes could serve to minimize the traffic impacts of LLW disposal at NTS.

FERNALD CITIZENS ADVISORY BOARD

Findings and Recommendations Sections of the Report to the Secretary of Energy InterSite Discussions on Nuclear Material and Waste: A National Workshop by the League of Women Voters Education Fund

December 1998

Attached are the Findings and Recommendations Sections of the InterSite Discussions on Nuclear Material and Waste: A National Workshop by the League of Women Voters Education Fund (LWVEF). As you recall, two meetings were held last summer, one in Chicago, IL and one in San Diego, CA. Jim Bierer attended the Chicago meeting.

The participants developed a series of recommendations in response to identified problems/challenges, occurring at the workshop (see table page 21 of report). The participants also developed two formal recommendations: 1) The Secretary of Energy should initiate a National Dialogue on Nuclear Material and Waste and 2) The Secretary of Energy should develop a National Material and Waste Management Strategy. The LWVEF believes that a larger dialogue, if properly designed and executed, could plan an integral role in the development of a viable National Material and Waste Management Strategy that is supported by the American public.

This excerpt was handed out at the SSAB Chairs meeting. Call Gwen Doddy [redacted] if you would like a full copy of the report and we will try to get one.

REPORT TO THE SECRETARY OF ENERGY

InterSite Discussions on Nuclear Material and Waste: A National Workshop

by the

League of Women Voters Education Fund
December 1998

ACKNOWLEDGEMENTS

This project was funded by the U.S. Department of Energy, Office of Intergovernmental and Public Accountability. The League of Women Voters Education Fund gratefully acknowledges this support, as well as the hard work of the staff who administered the project.

In addition, we acknowledge the efforts of the CDR Associates facilitation team, which eased the way through many roadblocks. We also acknowledge Toby Michelena of Global Environmental Strategies for his extensive work in preparing our technical workshop materials and developing the cross-site, cross-stakeholder exercise, which became a central piece of the workshop design. And, in recognition of its work providing the base map for this exercise, we thank the Consortium for Risk Evaluation with Stakeholder Participation (CRESP) at the University of Washington.

Last but not least, the LWVEF acknowledges, with deep appreciation, the many Americans from all walks of life who have given themselves to the challenge of developing a strategy for safely managing the nation's nuclear material and waste.

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to-face with questioners .... Good process for winding up workshop – enabled participants to express their burning issues and obtain one-on-one answers from DOE."

Fifteen participants – or slightly more than 20 percent of respondents – evaluated the closing segment in less glowing terms. Comments included: "Don't get clear sense of how event will make a difference or affect DOE's decisions; I saw no clear recommendation that will alter how DOE does business.... Good but what's DOE going to do now?"

One respondent who had attended the workshop in both locations highlighted a report-out element used in the San Diego workshop that didn't occur in Chicago. The San Diego event allowed top DOE officials to provide feedback to participants along the lines of "What I heard was..." and "As a decision maker, I wonder...." This participant observed: "Better than San Diego but we didn't hear what DOE got out of the workshop."

Eleven respondents considered the closing inadequate, registering such complaints as these: "Too slow; not sure was a good dialogue; need to do better job of cutting off long speeches by a few participants; not really useful.... Inadequate time for questions of DOE decision makers and also need opportunity for each site's representatives to have small group discussions with the DOE decision makers." Three respondents looked warily to the future, with one saying that the next steps were "too fuzzy" and two mentioning the need for "representatives who will commit to those recommendations from stakeholders."

Summary Findings

By bringing together individuals whose experience spanned a wide range – from high school journalism students to people whose decades-long careers focused on nuclear issues – the workshop engendered broad-ranging, lively discussions. In one-on-one conversations, break-out groups and plenary dialogues, participants framed key issues and brought numerous perspectives to discussions of the following concerns:

- Do DOE's proposed options for disposal of low-level and mixed low-level waste and plutonium residues make sense in whole or in part? Are these the most pressing decisions to be made?

- Will Tribes and environmental justice communities receive the consideration they seek in the face of public policy decisions that have the potential to affect community identities, natural resource quality, jobs and human safety?

- Will establishing new treatment, storage or disposal missions for legacy waste/materials at some sites bring about a net improvement in human health and the environment or create more waste and further detract attention and resources from cleanup missions that are already under way?

- Are federal decisions to proceed with the use of the Waste Isolation Pilot Plant overdue? Or are they unwise from an environmental justice and a geological standpoint?

- Does the National Environmental Policy Act process of public involvement in decision making adequately serve public policy?

- Do safety questions relating to transport of nuclear material and waste merit more concern – i.e., increased federal investment in studies and outreach on risk and emergency response training?

- Can federal dollars saved by closing sites or by promoting waste reduction, reuse and recycling measures, and other best practices for site cleanup be set aside for other activities, including economic development efforts where site closures might bankrupt communities?

In the end, DOE officials saw the workshop as an opportunity to look for a clear response to the options for near-term decisions. Meanwhile, business and labor representatives, Tribal and local and state agency leaders, and citizens representing public interest organizations and Site-Specific Advisory Boards looked for clear signals that DOE decision makers understood and respected their concerns.

The workshop was thus a venture onto uncertain ground for everyone who came. Tension points emerged over such questions as:

- What constitutes risk and how do we measure it – i.e., what are the comparative risks existing at the different sites, and how do the risks of keeping wastes at sites compare with the risks associated with transporting them to central facilities?

- What measures should or could constitute equity among site communities and toward Tribal Nations and environmental justice communities?

- How can DOE be prepared to secure the benefits of cost-saving measures to sites, when Congress determines federal budgets each year?

The two-and-a-half days allotted for the workshop did not afford the opportunity to work through these and other difficult issues. Rather, the workshop was an indicator of the potential of dialogue to engage people in an informed and purposeful discussion. The cross-site, cross-stakeholder exercise, with its hands-on tools adding dimension to the spatial relationships among the sites and the varying quantities of waste and material they hold, gave participants a focal point to try out ideas and to ask each other questions, or simply to absorb the information and listen.

In an extended workshop series or a series of meetings along the lines of the National Dialogue, participants could build communication over time. In addition, improvements in the direction and design of the decision exercise would ensure diversity of representation and a facilitated process that could help groups work through issues and trade-offs to fully reasoned decisions.

Nevertheless, even in the curtailed workshop experience, glimpses of the problems and impacts at different sites began to foster a shared sense of burden and responsibility. Common themes emerged in the insights and recommendations expressed by the participants. Some of these are presented in table form below.

TABLE 3. Participant Recommendations in Response to Identified Problems/Challenges

Problem/Challenge	Participant Recommendations
Contaminated sites affect Tribal nations that have treaty rights to use of the land.	Participants noted that DOE decisions to move or treat waste should be based on negotiations with Tribes. Tribes should receive just compensation and technical support. Also, there should be more opportunities for Tribes to participate in public discussion of these issues, both to learn about nuclear material and waste issues and to teach non-Tribal people about the sovereign rights of Tribal nations.
Congress and the Office of Management and Budget (OMB) have funding and program authority over DOE but may not be fully informed about the issues.	Participants want Congress and OMB to support funding for cleanup, environmental restoration and stewardship of the DOE complex sites, including site assessment and risk characterization, community involvement and emergency preparedness programs. In addition, participants want representatives of key congressional and OMB committees to participate with other stakeholders in workshops on these issues.
Many sites face a high magnitude of risk and contamination – sites such as the Hanford site, with its leaking tanks, and Oak Ridge, where cylinders of depleted uranium Hexafluoride are corroding in a high water-table area.	Participants want DOE to stabilize urgent risks at sites before undertaking any new mission in the DOE complex. Participants also want DOE to minimize transportation by: • handling as much waste and material on-site as possible; • minimizing waste through reduction, re-use and recycling wherever possible; • ensuring that the choice to transport material and waste is made only when it is confirmed that a net risk reduction will result.
Communities of color are experiencing low incomes and minimal job opportunities alongside DOE sites.	Participants want DOE to initiate more action in response to the concerns of environmental justice communities, including: • Visibly incorporating the President's executive order on environmental justice in DOE programs and relationships with site communities; • Forming an environmental justice

	advisory committee; • Offering expanded opportunities for all stakeholders to learn more about environmental justice concerns, including concepts of equity as envisioned by environmental justice representatives.
A high degree of uncertainty exists about the nature and extent of the risks posed by material and waste at the sites, and by moving material and waste to other areas.	Participants want DOE to conduct site assessments and risk characterizations complex-wide. If this has already been done, DOE should communicate its findings. DOE also should increase discussion among DOE site staffs to help workers understand the relative risks at each site and how each site fits into the DOE complex picture.
No comprehensive plan or continuing budget exists for a national cleanup, and people believe that money saved at one site will disappear rather than being reinvested in additional cleanup. This creates no incentive for site personnel to agree to defer their own needs to achieve efficiencies at other sites.	Participants want DOE, with congressional support, to investigate the effectiveness of setting a national cleanup standard and complex-wide priorities based on risk. Also needed are consistency in the approach to cleanup criteria and a national funding strategy.
A cohesive national cleanup plan requires support by the nation's people, which can't happen under the limited outreach guidelines of NEPA.	Participants want more opportunities such as the workshop. They also want to know how DOE will make use of the insights shared at dialogues such as these as the department makes decisions in the future.

Concerns About DOE's Leadership

In other observations, participants expressed frustration regarding the turnover of leadership at DOE, noting that most of the senior officials present served in an "acting" capacity. The turnover at the Secretary of Energy's position was an often-repeated concern – an obvious reflection, many felt, that the office is used for political gain rather than as an opportunity to lead the nation on critical issues.

"I most appreciated the opportunities to share information and differing perspectives. I was able to meet new people, hear new perspectives and gain some understanding of some of the other issues that exist around the DOE complex. At the same time I was given plenty of opportunities to share perspectives about Hanford and about transportation issues.... Most of us involved with any one particular site certainly fixate on our issues and believe they are far more important than issues at the other sites. It's useful for all of us to have a better understanding of the total picture.... I guess we'll see what the result is from these workshops and whether DOE is willing to

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build upon this work."
State Official, Oregon

Furthermore, some participants and facilitators commented about the varying behaviors of the DOE participants at the workshop. With a rare but notable exception, DOE headquarters managers demonstrated interest in fellow participants' perspectives and actively listened in on discussions. During the Chicago workshop, a top DOE headquarters official listened to environmental justice representatives during their discussion – a reflection of interest that was much appreciated.

Participants encountered some managers from DOE sites, however, who were uninterested and even combative, exhibiting such behaviors as snickering or rolling their eyes at participant comments. One even "high-fived" a colleague after they jointly rebuked a participant.

Participants appreciated the fact that many DOE managers stayed in the dormitories and fully participated in the workshop activities. However, they also noted that some DOE managers did not stay in the dormitory facilities that the LWVEF arranged for the workshop. Those participants and facilitators who made note of these lapses recommended further training in working with citizens for the DOE managers who need it.

Workshops a Success as a First Step

Overall, however, the LWVEF's assessment of the workshops is that they succeeded in demonstrating the ability to bring people of diverse interests together to address very complex and controversial issues. Further, these workshops clearly demonstrated that individuals and organizations can and will focus on nuclear material and waste issues at the national level in a constructive way without limiting their ability to address site-specific problems.

The workshops also began to frame the issues in a way that reflects both DOE and stakeholder concerns. Due to the limits imposed on the process, the workshops did not achieve all of the goals set forth for the National Dialogue as originally envisioned. However, within the final scope and scale of the workshops, the LWVEF considers them to be a success.

V. Recommendations

1) The Secretary of Energy should initiate a National Dialogue on Nuclear Material and Waste.

Workshop participants resoundingly affirmed the need for ongoing education and dialogue regarding nuclear material and waste management. Participants believe that the resolution of key issues and concerns is achievable, but in order for DOE to make decisions that have widespread public support, it is imperative that inclusive, open and two-way dialogue occur. Therefore:

- The Secretary of Energy should lead a National Dialogue effort, beginning with a summit that includes all DOE senior executive officers, congressional representatives from the affected states, Tribal leaders from nations affected by those sites, key congressional Appropriations Committee members and staff, OMB decision makers, business leaders, and leaders from environmental advocacy, environmental justice and peace organizations. This summit should be designed, in part, to produce a vision for defining the mechanisms for identifying and resolving issues in a participatory manner.

- Congressional leaders, and the DOE Secretary and senior managers should carry forward the momentum and insights from the summit in structuring a National Dialogue incorporating the following elements:

  -- A two-year program funded by Congress and/or financed through private foundations, to be *designed and implemented by an independent entity*, that provides interactive opportunities for education, issue discussion and debates at the local, regional and national levels. The program should cover all nuclear material and waste issues relating to the weapons complex, as well as the commercial use of nuclear materials. The objective of the program should be to develop a holistic, nationally supported framework within which decisions about nuclear material and waste management can be made. A successful completion of this National Dialogue would provide a framework that enables decision makers to develop sustainable, permanent solutions.

  -- DOE-funded pass-through grants to grassroots organizations, state and local governments, Tribes, environmental justice organizations, and Site-Specific Advisory Boards to be used to convene dialogues. These could be modeled on the cross-site, cross-stakeholder exercise used in the InterSite Discussions and could take place either within or among site communities, with a focus on the development of an integrated national nuclear material and management program. An important supplement to the National Dialogue, these local and regional activities would provide a greater opportunity for individual governmental and advocacy organizations to further educate their constituents and refine their understanding of issues and needs in the development of a national solution.

  -- Participation by young men and women of high school age. Today's youth will inherit the responsibility of managing nuclear material and waste and can provide insights not typically found among adults who are immersed in these issues. Equally important, because the work of managing nuclear material and waste will require decades to complete, inclusion of these future decision makers and opinion leaders offers the opportunity to maintain the continuity of involvement that is necessary for successfully completing this work. Thoughtful attention must be directed to providing students with a meaningful role in education and dialogue.

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Any organization that is called on to implement the above recommendations must exhibit the following characteristics. It must be:

- Independent from any agency or organization that directly makes decisions on nuclear material and waste,
- Independent from any organization that directly lobbies decision-making bodies on nuclear material and waste;
- Focused on applying principles of equity and inclusiveness over a broad range of issues (multi-issue based) as opposed to focusing resources on a single issue;
- Credible among the diverse interest groups that compose American society.

The LWVEF does not propose itself as the organization through which these recommendations should be carried out, but we will, as resources permit, assist DOE and other organizations in making it happen.

2) The Secretary of Energy should develop a National Material and Waste Management Strategy.

Workshop participants recognized the complexities associated with making permanent management decisions on nuclear material and waste. It was clear that a piecemeal approach to these decisions is not the most effective way to proceed. Further, due to the impacts that decisions at one location have at other locations, it is vital to have a strategy that incorporates all locations and opinions. Therefore:

- Congress, OMB and DOE should commit to a long-term national strategy for the integrated management of nuclear material and waste, using an approach consistent with the National Dialogue framework. From this strategy, regional and site-specific decisions that affect other communities can be made.
- Congress must back this national plan with long-term funding covering all of the elements noted above, as well as intra- and intersite dialogues involving DOE and affected publics, Tribes, states and local governments. A dedicated portion of each year's funding should go to dialogue efforts that are fostered by Tribal nations, or organizations of Tribes, and by environmental justice communities.

As stated above, the LWVEF believes that the InterSite Discussions Workshop was an indicator of the potential of dialogue to engage Americans in an informed and purposeful discussion of nuclear material and waste issues. And we are confident that a larger dialogue, if properly designed and executed, could play an integral role in the development of a viable National Material and Waste Management Strategy that is supported by the American public.

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February 1, 1999
Weapons Complex Monitor
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"Fernald contemplates sending uranium to Oak Ridge"

FERNALD CONTEMPLATES SENDING URANIUM TO OAK RIDGE

Department of Energy Ohio Operations officials are shopping for a new home, albeit a temporary one, for about 3,800 metric tons of uranium currently housed at the Fernald Site. The department has promised state environmental regulators it will remove Fernald's uranium inventory by the end of Fiscal Year 1999. A spokeswoman for Fernald contractor Fluor Daniel Fernald told *WC Monitor* site officials are eyeing four facilities managed from the Oak Ridge Operations office in Tennessee—including the Y-12 nuclear weapons plant, the East Tennessee Technology Park, and the gaseous diffusion plants at Paducah, Ky., and Portsmouth, Ohio as possible receptor sites. Y-12 and Portsmouth are likely to take at least some of the Fernald materials into their storage units, although DOE officials will not settle on a preferred sites until after assessments of potential environmental impacts at each site are complete. Those assessments are scheduled to be available for public comment in February. The Fluor Daniel Fernald spokeswoman added the final decision on a receptor site will be based on the environmental assessments, comments from the public, regulators and other stakeholders, and technical evaluations of each site. "This is a real good-news story for us," she declared. "Shipping this uranium off site moves us closer to shutting Fernald down." After the 3,800 metric tons of uranium leave the site, Fernald officials will be left with 940 metric tons of uranium which, the spokeswoman explained, has been characterized as waste. A disposition plan for that material is being developed.

Steve Wyatt, a DOE spokesman in Oak Ridge, said the Fernald uranium cache varies in chemical form and in enrichment levels. He added that the two Oak Ridge, Tenn. facilities already house vast tons of uranium, as do the Portsmouth and Paducah gaseous diffusion facilities, which are now operated by the U.S. Enrichment Corp.

Wyatt said DOE is looking for an indoor storage site for a couple of years until other uses can be found for the uranium. He said DOE does not have an estimate on how much it will cost to move the uranium from Fernald. One possibility DOE officials are contemplating is that some of the material could be used in operations at the Y-12 plant, Wyatt reported. Asked whether moving the uranium out of Fernald and then again possibly two years later to another site would not be a waste of taxpayer money, Wyatt said DOE officials consider the project a money-saver. He explained that if the uranium stayed at Fernald, it would have to be disposed of as waste in order to comply with current orders and regulatory agreements. "That would be extremely expensive," he declared. ◂

February 8, 1999
Weapons Complex Monitor
Page 8
"Fernald waste-shipment decision still needs approval"

FERNALD WASTE-SHIPMENT DECISION STILL NEEDS APPROVAL

The plan to resume shipments of low-level radioactive waste from the Fernald Site to the Nevada Test Site still had not been approved by headquarters officials as *WC Monitor* went to press last week, and it appeared there might be more to the delay that previously reported (*WC Monitor*, Vol. 10 No. 1). A DOE spokeswoman characterized the agreement signed by Ohio Field Office Manager Leah Dever and Nevada Operations Office Manager Gerry Johnson as being "pre-decisional" and awaiting the signature of upper-level Department mangers.

According to a Fluor Daniel Fernald spokeswoman, however, the citizens advisory board at the Nevada Test Site is not convinced DOE can safely resume the shipments and has requested more information on the steps the Department is taking to prevent a leak similar to the December 1997 leak that precipitated the halt in shipments (*WC Monitor*, Vol. 8 Nos. 50 & 51). Fluor Daniel Fernald officials flew to Nevada last week to meet with advisory board members, the spokeswoman reported. Bob Loux, executive director of the state of Nevada's Nuclear Waste Project Office, confirmed the Test Site advisory board is concerned about the shipments, but pointed out DOE does not need CAB permission to resume the shipments.

In addition, a spokesman at NTS told *WC Monitor* headquarters officials had not approved the shipments because the Nevada and Ohio Congressional delegations had not yet signed off on the plan. The official said DOE had agreed to Congressional approval for the resumption of shipments in the weeks following the 1997 leak. Members of Congress from Ohio, however, reported they were not involved in any reviews of the shipping plan. A spokesman for Rep. Rob Portman (R-Ohio), whose district includes the Fernald site, told *WC Monitor* the Congressman has been kept informed about Fernald's shipping plans but has "no approval authority" over those plans. ◂

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February 24, 1999
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Overall, 1998 good year for Fernald cleanup

Issues linger for former uranium-processing plant

By Nicholas G. Jonson
Journal-News

ROSS TOWNSHIP

With the cleanup of the former Fernald uranium processing plant at full steam, the words on many people's lips at Fernald are coordination and integration.

Environmental engineers with the U.S. Department of Energy and its principal cleanup contractor, Fluor Daniel Fernald, are hoping that timelines for various areas of the cleanup can be coordinated.

They're also hoping to integrate cleanup activities at Fernald with those of other DOE superfund sites and waste management facilities.

So far, efforts have been fairly successful, according to officials at Fernald.

Last year was an active year for cleanup of six waste pits containing about one million tons of low level radioactive waste.

Contracts were awarded to a Pittsburgh company for design, construction and operation of a waste treatment facility. Once treated, the waste will be sent to the Envirocare facility in Clive, Utah.

Johnny Reising, senior DOE official overseeing the cleanup, said most of this year will be devoted to shipping soils from the site to Utah.

were put on hold, activity resumed after the suit was resolved in Envirocare's favor. Construction of an eight-cell on-site disposal facility went forward last year. Each cell will hold contaminated soil and construction debris taken from various buildings around the site.

Contaminated soils were placed in the facility's first completed cell in December of 1997. Since, a second cell was constructed and soil was placed in that cell in November.

Terry Hagen, director of strategic planning for Fluor Daniel Fernald, said the placement of soils in Cells 1 and 2 went better than expected.

> **'When it all comes together, it really is a complex job.'**
>
> Terry Hagen
> Strategic planning director

While contractors continue to place soils and debris in those cells, soils are expected to be placed in Cell 3 beginning in November, Hagen said.

Meanwhile, several plants and buildings were safely decontaminated and dismantled last year, Reising said. This year, a large portion of the former uranium production area is scheduled to come down.

A former metals production and metals finishing complex, — two of the largest buildings on site — as well as a large maintenance building and tank farm are scheduled to be dismantled.

Although treatment work on waste stored in three silos on site began slowly last year, progress has since been made, Reising said.

A contract to treat waste stored in Silo 3 was awarded in mid-December, Reising said.

In addition, Fernald officials will soon evaluate four technologies proposed to treat waste stored in Silos 1 and 2.

The results of those evaluations, along with DOE and Fluor Daniel's recommendations, will be sent to regulators at the U.S. and Ohio Environmental Protection agencies, Hagen said.

Reising said "It's satisfying to know we've come a long way in the Silos Project."

Attempts to restore the Great Miami Aquifer which runs under the southern portion of the site also have been relatively successful, Reising said.

Last year, five reinjection wells were brought on line in the southern half of the site to control the flow of the aquifer. Those wells, in addition to 10 extraction wells that pull water out of the aquifer for treatment, prevent the flow of contaminated water south of the site.

"A lot of people take the aquifer for granted," Hagen said. "Primarily because it's not visible. But here it's a major priority."

Engineers also expanded the

Journal-News Special Section: "Progress'99 EXPLOSION Butler Boom Continues"

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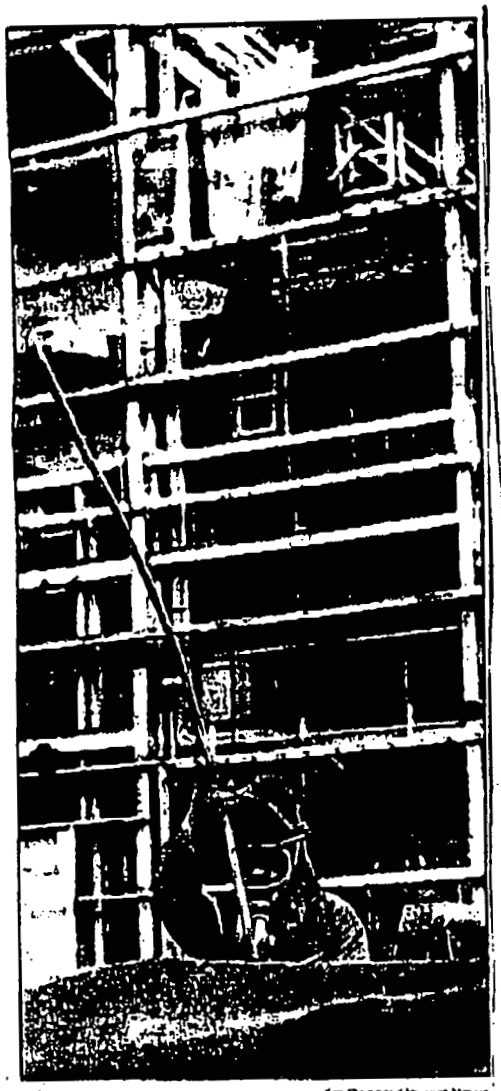

Jim Denney/Journal-News

A worker removes parts of the boiler plant at Fernald in Ross Township in Butler County in April of 1998.

pumping capacity of an advanced wastewater treatment plant from 1,100 gallons per minute to 2,900 gallons per minute. Water treatment will continue to be a priority, Reising said.

Meanwhile, placement of soils from an active fly-ash pile in the southern portion of the site into the on-site disposal cells continues.

Fernald engineers are currently developing plans to treat between 4,000 to 5,000 cubic yards of mixed-radioactive waste on site.

In addition, DOE headquarters recently determined that 938 metric tons of nuclear material on site was waste and could be shipped for disposal. Fernald officials have sold some nuclear materials to other companies.

"When it all comes together it really is a complex job," Hagen said.

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While plans for shipment were put on hold, activity resumed after the suit was resolved in Envirocare's favor. Construction of an eight-cell on-site disposal facility, seen above in the aerial site, went forward last year. Each cell will hold contaminated soil and construction debris taken from various buildings around the site.

Solicitations

REQUEST FOR INFORMATION

Fluor Daniel Fernald
Availability of an Off-Site Treatment Facility

Fluor Daniel Fernald is seeking information from qualified sources on the availability of an off-site treatment facility for the 6,800 cubic meters of radioactive materials from silos 1 and 2 at the Fernald Site. The facility must be capable of providing chemical stabilization or vitrification treatment and must be able to treat the entire 6,800-cubic-meter inventory within a two- to three-year period. The facility also must currently possess documentation granting approval for treatment of CERCLA waste in accordance with the Environmental Protection Agency Off-Site Rule, and must currently possess a Nuclear Regulatory Commission or Agreement State license, in good standing, that allows for receipt, management, and treatment of 11(e)(2) byproduct material. Facilities operated by the government or by a government contractor on government property must currently possess a National Environmental Policy Act Record of Decision stating the treatment of the Silo 1 and 2 material at this facility would be protective of human health and the environment and that the public is supportive of this determination.

The results of the request for information will be used to determine the viability of treating Silos 1 and 2 material at an off-site facility as part of the revised Feasibility Study for Silos 1 and 2, as the basis for the detailed analysis of alternatives and, ultimately, to support the CERCLA amended record of decision. Information on available treatment facilities should be submitted in writing (original plus three copies) to: Fluor Daniel Fernald, Attn.: Ms. Jodi Gordon (MS 52-3), P.O. Box 538704, Cincinnati, OH 45253-8704, by Feb. 25.

FERNALD CITIZENS ADVISORY BOARD

Report Summary: Environmental Assessment for the U.S. Department of Energy, Oak Ridge Operations Receipt and Storage of Uranium Materials from the Fernald Environmental Management Project Site

The Environmental Assessment (EA) focuses on the receipt and storage of uranium materials at various DOE-ORO sites. The material would be packaged in U.S. Department of Transportation-approved shipping containers and removed from the Fernald Environmental Management Project (FEMP) site and transported to another site for storage. Five DOE site alternatives, Portsmouth Gaseous Diffusion Plant (PORTS), Paducah Gaseous Diffusion Plant (PGDP), Oak Ridge National Laboratory (ORNL), Y-12 Plant (Oak Ridge), and the East Tennessee Technology Park (ETTP), were considered for receipt and storage of the uranium materials. The no action alternative is to leave the uranium at Fernald. No buildings or spaces were identified for storage of uranium materials at the Oak Ridge National Laboratory that would not conflict with the research mission of the Laboratory. ORNL was not considered further as a potential site.

Evaluated Item	Fernald (no action alternative)	Portsmouth Gaseous Diffusion Plant (PORTS)	Paducah Gaseous Diffusion Plant (PGDP)	Y-12 Plant at Oak Ridge	East Tennessee Technology Park (ETTP) at Oak Ridge
Public and Worker Risk	Worker exposure due to routine operations is expected to be less than detectable levels.	The highest estimated dose for a maximally exposed individual from airborne radionuclides is 0.260 mrem.	The highest estimated dose for a maximally exposed individual from airborne radionuclides is 0.0045 mrem.	The highest estimated dose for a maximally exposed individual from airborne releases is 0.33 mrem.	The highest estimated dose for a maximally exposed individual from airborne releases is 0.59 mrem.
Proposed Setting	Stay in current containers, including 55-gallon steel drums, T-hoppers, half-high boxes, and sea-land containers.	Eight locations are being considered. Building X-3001 currently used for equipment storage. Building X-3002 is empty. Building X-7725A currently used as a Toxic Substance Control Act building. X-7745R Storage Yard currently storing lithium, which would be moved. Lithium storage buildings could be used with some construction to them. Building X-744K is currently used to store National Guard military vehicles. Building X-744G used to store uranium oxide and contaminated materials. Building X-3346 is currently leased to National Guard for vehicle maintenance and storage.	A greenfield/brownfield site inside the Paducah site would be used.	Two Buildings, 9204-4 and 9720-33, are proposed. Building 9720-33 has material in it, which will have to be moved before storing uranium.	Three sites are being considered. K-1066F site is an open lot on which two TSSs would be constructed to store the uranium. K-131 and K631 Buildings' basements are being considered. Two TSSs could be constructed on K-861 Open Area.

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Evaluated Item	Fernald (no action alternative)	Portsmouth Gaseous Diffusion Plant (PORTS)	Paducah Gaseous Diffusion Plant (PGDP)	Y-12 Plant at Oak Ridge	East Tennessee Technology Park (ETTP) at Oak Ridge
Hydrology and Geology	Greater Miami River Valley Aquifer underlies the site. Dominant soils are silty loams of glacial origin, which drain poorly.	The site is 130 ft above the Scioto River. The major rocks are shale and sandstone. Roads, parking lots, and buildings mainly cover the soils. The other soils are well-drained upland soils.	Ohio River is less than 2 miles from the site. Four groundwater sources near site. Two major plumes of groundwater contamination extend offsite. Two nearby active seismic zones result in earthquake potential.	The Y-12 Plant is about 2 miles form the Melton Hill Reservoir and Clinch River. The site is located near an inactive fault.	The site is directly adjacent to Clinch River. Water table is encountered within several feet of the surface. The major rocks are carbonate or clastic bedrock. A major fault is located near the site; however, the probability of future seismic damage is moderate.
Ecological Resources	No federally protected threatened or endangered species have been seen on the site. Potential habitat for the Indiana Bat in woodlands; ten species of plants and animals listed by Ohio as threatened or endangered occur, or could occur.	Federally protected and endangered Indiana Bat has been identified in the vicinity of the site, but no threatened or endangered species have been located onsite. Several state-listed species have been seen in the vicinity but none onsite.	Several federally listed endangered or threatened species have occurred or could occur in the vicinity of the site, including Indiana Bat, the Interior Least Tern, Bald Eagle, Evening Bat and five species of pearly mussels.	No federally protected or endangered species are known on the site. There is a small wetland (0.45 acres) in a small wooded area near the site.	No federally protected plant or animal species have been seen on the site. Suitable habitat does exist for the Bald Eagle on Melton Hill Reservoir and the Clinch River, which are near the site. The Lowe Poplar Creek Rookery is an environmentally sensitive area within the EETP.
Socioeconomic & Environmental Justice	No federally recognized Native American tribes are present near the site. There are no minority or low-income populations within 5 miles of Fernald.	No federally recognized Native American tribes are present near the site. There are no minority populations within a 20-mile radius of the site; however, there are low-income communities.	No federally recognized Native American tribes are present near the site. Both low-income and minority populations are near the plant site.	No federally recognized Native American tribes near the site. The community bordering the site is predominantly populated by African-Americans.	No federally recognized Native American tribes are present near the site. There are low-income populations adjacent to the site.
Land Use	The site covers 1050 acres, of which 275 acres are developed. Land around the site is mostly agricultural. The site has 42 recorded archaeological sites, standing structures, or traditional cultural properties. Sixty-one percent of this site has been subject to a comprehensive cultural resources survey.	The site covers 4003 acres, of which 800 acres are developed. Land around the site is mostly rural. The site has no recorded archaeological sites, standing structures, or traditional cultural properties. The property has not been subject to a comprehensive cultural resources survey.	The site covers 3425 acres, of which 750 acres are developed. Land surrounding the site is mostly undeveloped natural area. The site has 3-recorded archaeological or historic site and others have been identified in areas near the site. The site has not been subject to any systemic cultural resource surveys.	Land use with 50 miles of the Y-12 Plant. The land surrounding the plant is primarily agricultural, except the cities of Knoxville and Oak Ridge. A Cultural Resources Survey identified a historic district with 93 contributing buildings that is eligible for inclusion in the National Register of Historic Places.	The site covers 1500 acres, which is all developed. The K-24 Site was established as part of the Manhattan Project. A cultural resources survey of the former K-25 Site was identified a "Main Plant Historic District" with 120 buildings which are eligible for inclusion on the National Register of Historic Places.