

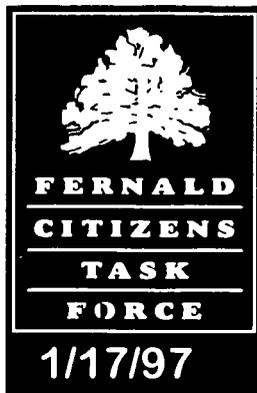
553

6-710.7

FERNALD CITIZENS TASK FORCE WEEKLY MAILING CONSISTING  
CALENDAR OF EVENTS, LETTER REGARDING RAIL OPTIONS FOR NEVADA  
TEST SITE, RESULTS OF INPUT TO RECYCLING METHODOLOGY, 1997  
WORKPLAN, TASK FORCE EMAIL ADDRESSES, AND NOA FOR SILO 3  
EVALUATION DOCUMENT

01/17/97

TASK FORCE      TASK FORCE  
12 10  
ANNOUNCEME



# FRIDAY MAILING

## INCLUDED IN THIS MAILING ARE:

- Letter to Tom Wagner from Jack Craig about Rail Options for Nevada Test Site
- Results of Task Force Input to Recycling Methodology
- 1997 Workplan
- Task Force E-mail Addresses
- Notice of availability for Silo3 Evaluation Document
- Newsclippings

## ANNOUNCEMENTS:

*Please note the following upcoming meetings:*

- SILOS INDEPENDENT PANEL:** A three day meeting of the Silos Independent Panel will be held from Tuesday, January 21 through Thursday, January 23, 1997, in the Alpha Building.
- FRESH MEETING:** FRESH will hold a meeting on Thursday, January 23, 1997 at Venice Presbyterian Church on Layhigh Road in Ross. All are welcome to attend!
- NATURAL RESOURCES COMMITTEE:** There will be a Natural and Cultural Resources Committee meeting on Wednesday, January 29, 1997, at 7:00 p.m in the Uno Building.
- WASTE MANAGEMENT COMMITTEE:** The Waste Management Committee will meet Wednesday, February 5, 1997, at 7:00 p.m. in the Uno Building.
- TRANSPORTATION COMMITTEE:** There will be a Transportation Committee Meeting held on Thursday, February 6, 1997, at 7:00 p.m. in the Uno Building.

Note: FRESH Meeting!

## QUESTIONS:

- Please call John at 556-0114 or Doug at 648-6478 with questions or concerns, or fax or e-mail us at:

John      FAX: 281-3331      E-MAIL: john.applegate@law.uc.edu

Doug      FAX: 648-3629      E-MAIL: djsarno@aol.com



## Department of Energy

Ohio Field Office  
Fernald Area Office

P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155



0552

NOV 1 1996

DOE-0058-97

Dr. Thomas E. Wagner  
Fernald Citizens Task Force  
P.O. Box 544  
Ross, Ohio 45061

Dear Dr. Wagner:

### **RESPONSE TO REQUEST FOR INFORMATION ON RAIL OPTIONS FOR NEVADA TEST SITE**

Reference: Memo from Tom Wagner to Jack Craig, "Rail Options for NTS," dated July 15, 1996.

The following provides information on the possibility of intermodal shipment of waste (i.e., rail/truck combination) to the Nevada Test Site (NTS) as requested by the Fernald Citizens Task Force (CTF) in the above referenced memo. The information that follows has been compiled from documentation supporting current remediation plans at Fernald, transportation studies done by various entities in Nevada, and through consultation with officials at both Fernald and the NTS.

The current selected remedies for the shipment and disposal of Fernald waste require the off-site disposal of several specific waste streams and, in general, all material that can not meet the waste acceptance criteria for the on-site disposal facility. As part of the Environmental Protection Agency (EPA)-approved selected remedies, only the waste material to be treated under Operable Unit 4 (OU4); a portion of the waste material from OU3; and a portion of the legacy waste that is still on-site will be shipped to the NTS for disposal. Material from all other OUs will be shipped by rail to a Permitted Commercial Disposal Facility (PCDF) for disposal.

Currently, approximately 50,000 cubic yards of waste material are scheduled to be shipped by truck to the NTS for disposal. The approximate quantities of waste by source are provided in the following:

- Operable Unit 3 - 5,704 cubic yards over the next 10 years;
- Operable Unit 4 - 29,000 cubic yards over 6-7 years, starting in 1999; and
- Legacy Waste - 9,000 cubic yards over the next 3 years.

The remainder of the Fernald waste material that will not be disposed of on-site (436,496 cubic yards) will be shipped by rail to a PCDF. The approximate quantities of waste material to be shipped to the PCDF are as follows:

- Operable Unit 1 - 405,629 cubic yards;
- Operable Unit 2 - 3,100 cubic yards;
- Operable Unit 3 - 767 cubic yards; and
- Operable Unit 5 - 27,000 cubic yards.

Historically, shipments of waste going to the NTS have gone via truck due to the lack of a rail spur directly onto the site. Legacy waste material has been shipped to the NTS from the Fernald Site since the early 1980s. The possibility of using rail shipments to an intermodal facility was evaluated by Fluor Daniel Fernald and the Department of Energy (DOE) as a possible scenario for shipments of the vitrified material from OU4 in a 1995 Waste Container and Transportation Study. This study evaluated the intermodal method versus the "truck-only" method of shipment and determined that the truck-only scenario was the preferred alternative. The results of this study (summarized below) were published in a Final Path Forward Summary Report which was made available to the public in early 1995.

The results of the Waste Container and Transportation Study determined that risk levels to workers and the public were slightly higher with the truck-only scenario; however, the lifetime cancer risk for the maximally exposed individual was well within the acceptable range under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The evaluation of the costs associated with both alternatives determined that the cost of the truck-only scenario would be approximately \$6.8 million less than the intermodal option for all OU4 material. The difference in cost resulted from having to place the containers used to ship the OU4 waste material into sea/land containers to satisfy railroad requirements. The purchase of the sea/land containers and the subsequent need to recycle and reuse the sea/land containers at the Fernald Site once the waste reached NTS (which would be more cost effective than burying the sea/land containers with the waste), makes the use of intermodal transport less desirable.

The DOE did sponsor a Value Engineering (VE) Study completed as a joint effort by a number of federal agencies (including the Department of Interior (DOI) and DOE) and other consultants that was completed in January of 1996. The VE Study did identify a \$3.8 million cost savings if OU4 material was shipped by rail as opposed to being shipped by truck to NTS. The assumptions that were used in the study did not consider several factors that required consideration in the original Waste Container and Transportation Study such as required on-site storage and additional packaging for rail shipment (discussed below) which may explain the difference in the findings. DOE is considering the potential for integrating with OU1 rail shipments in an effort to optimize resources and reduce risks and costs. Additional information will be provided as the results of those evaluations become available.

A number of other implementation problems associated with intermodal transportation were also raised in the OU4 evaluation. The rate of production associated with the vitrification process makes rail shipment impractical. Forty rail cars are required for a "dedicated train" to ship waste from Fernald to the NTS. Intermodal transportation using a dedicated train would require that additional storage space be created on the Fernald Site so that enough vitrified material could accumulate to fill 40 rail cars. Subsequently, the duration of storage would result in additional exposure to workers.

Shipping a few rail cars at a time, as part of another train to Nevada, results in DOE having less control over the waste material. A "non-dedicated" train may stop a number of times in other locations prior to arriving in Nevada thus resulting in the potential for additional exposure to the public.

The intermodal scenario would also take longer to get waste material to the NTS versus the direct truck shipment. Many of these issues would also apply if intermodal transfer of OU3 material or legacy waste were considered.

#### Intermodal Transfer in Las Vegas, NV.

An intermodal transfer facility does currently exist in North Las Vegas. The facility was built by Union Pacific Railroad and is currently used primarily for the shipment of automobiles. Although the site was designed for other uses, concerns related to the proximity of the facility to local populations make the facility undesirable for use in the transfer of hazardous substances from rail to truck. An additional concern (which would apply to any intermodal facility) relates to Department of Transportation regulation 49 CFR 174.16(b) that requires that all material would have to be unloaded from the train, loaded onto trucks and transported to the NTS within 48 hours of its arrival at the intermodal facility. This requirement creates logistical problems due to the quantity of the waste and the number of trucks that would be needed to transport the waste.

#### Intermodal Transfer at Envirocare/Salt Lake City, UT.

There is the possibility of moving the Intermodal Transfer point onto the Envirocare Site for the purposes of intermodal transfer only. However, their permit does not allow the Silo material classified as 11(e) (2) byproduct material to be received at the site for disposal. In addition, an intermodal facility does exist in Salt Lake City that could potentially be used for the transfer of Fernald waste material. However, these options would require shipment and/or transfer in a densely populated area which would create concern among local stakeholders. In addition, intermodal transfer in Utah would require that waste be transported hundreds of miles out of the way with the same logistical problems resulting from 49 CFR 174.

#### Intermodal Transfer in Caliente, NV.

The use of the Caliente, NV., location has been considered by the DOE-Nevada Operations Office (DOE-NV) related to the NTS and the Yucca Mountain Projects. However, Caliente does not currently have an intermodal transfer facility. A rail transportation study was conducted as part of the ongoing Environmental Impact Statement for the Nevada Test Site. The study indicates that the location could be utilized for the intermodal transfer of waste but does not identify the use of a "back road" through Nellis Air Force

Base as a possibility and officials at Nellis Air Force Base were unable to confirm a back road that would prove beneficial for the transport of material to the NTS. The study does identify an alternate route around Nellis that would require truck trips several hundred miles out of the way. DOE-NV officials indicated that past attempts to negotiate the use of a road through Department of Defense property have proven unsuccessful. The transportation study done by DOE-NV also pointed out that the use of any roads in Nevada for the shipment of hazardous materials by truck would have to be approved by the appropriate state permitting agencies. Restrictions on roads used for hazardous substances require that they have a maximum 4-5% grade. In addition, unpaved roads are not recommended and could have seasonal restrictions. These types of issues led to the consideration of only two truck routes to support intermodal shipment of hazardous materials in the DOE-NV study. One route would pass directly through Las Vegas, specifically through a very heavily traveled interchange and was considered undesirable. The second route would pass through populated areas of Pahrump, NV. No other routes were identified as feasible due to the above mentioned concerns or because the route added excessive length to the truck trips.

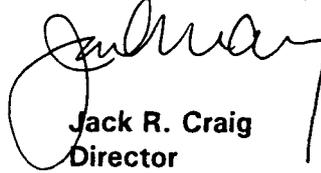
A transportation study considered by the Yucca Mountain Project in Nevada considered a number of potential routes for the shipment of high level waste to the Yucca Mountain/NTS area. Shipment of high-level waste would require either rail shipment or the use of "heavy-haul" trucks. The study identified a number of truck routes to the Yucca Mountain/NTS area to minimize exposure to the Las Vegas area. The study also identified four feasible alternatives for constructing a rail spur to the Yucca Mountain/NTS area. The alternatives ranged in cost from \$483 Million to \$1.05 Billion to construct the rail spur and would not be implemented for a number of years based on the current Yucca Mountain schedule.

The transport of material from the Fernald Site to NTS via intermodal shipment would require the resolution of a number of significant issues related to rail shipment. The ability to establish safe storage onsite until a dedicated train could be filled or the ability to have better control over a non-dedicated train would have to be established before rail shipments would work for OU4.

In addition, modifications at existing intermodal facilities or the construction of a new intermodal facility near the NTS site would be necessary and may prove cost prohibitive. Risks would have to be minimized in the Las Vegas area through utilization of an alternative (road) route (as evaluated in the recent Transportation Strategy completed for the Yucca Mountain/NTS area) as it does not appear that the installation of a rail spur directly to NTS will occur in the near future.

If you have any questions, please contact David Rast at (513) 648-3138.

Sincerely,



Jack R. Craig  
Director

FEMP:Rast

cc:

- N. Akgunduz, DOE-FEMP
- J. Craig, DOE-FEMP
- J. Hall, DOE-FEMP
- D. Rast, DOE-FEMP
- J. Reising, DOE-FEMP
- V. Daub, FDF/16-2
- C. Esselmen, FDF/52-2
- M. Frost, FDF/66
- L. Goidell, FDF/65-2
- T. Hagen, FDF/65-2
- M. Jannelli, FDF/52-1
- D. Paine, FDF/52-4
- T. Patton, FDF/65-2
- J. Rowe, FDF/16-2
- T. Walsh, FDF/52-2
- B. Weddendorf, FDF/52-1
- E. Woods, FDF/65-2
- AR Coordinator/78
- EDC, FDF/52/7
- J. Applegate/CTF
- D. Sarno/CTF



## RESULTS OF TASK FORCE INPUT TO RECYCLING METHODOLOGY

January 11, 1997

### Criteria Rankings

Based on 11 responses.

Total Cost	15.5%
Schedule	16.4%
Local Economic Impacts	14.5%
Institutional Preferences	4.5%
Local Social Preferences	23.6%
Protectiveness of Environment	25.5%

### Disposition Alternatives Ranking

Based on 10 responses.

Alternatives	OSDF	FEMP MRF	Vendor MRF	Recycle 2000	Private FEMP MRF
Local Economic Impacts	Range: 1 - 5 Average: 2.3	Range: 1 - 5 Average: 3.4	Range: 1 - 4 Average: 2.0	Range: 1 - 5 Average: 2.5	Range: 1 - 4 Average: 2.7
Institutional Preferences	Range: 1 - 5 Average: 3.2	Range: 1 - 5 Average: 3.4	Range: 1 - 4 Average: 2.6	Range: 1 - 5 Average: 3.0	Range: 1 - 4 Average: 3.3
Local Social Preferences	Range: 1 - 5 Average: 2.6	Range: 1 - 5 Average: 3.8	Range: 1 - 5 Average: 3.0	Range: 2 - 5 Average: 3.3	Range: 2 - 5 Average: 3.4
Protectiveness of Environment	Range: 1 - 5 Average: 3.4	Range: 2 - 5 Average: 3.8	Range: 1 - 5 Average: 2.7	Range: 2 - 5 Average: 3.5	Range: 1 - 5 Average: 3.2



# 1997 WORK PLAN

## Organization

The Task Force will continue to use its committee structure to conduct most of the Task Force business. Committee activities may include:

- 1) formulating a direction and questions on issues prior to a regular meeting;
- 2) monitoring developing issues to keep the Task Force informed; and
- 3) providing informal input on actions that occur before the next full meeting.

A total of five committees are currently in place:

- 1) Transportation
- 2) Environmental Monitoring and Recycling
- 3) Natural Resources
- 4) Waste Management
- 5) Membership

In addition to the committees, the Task Force will continue to maintain formal liaisons to other local and national groups including the CDC/ATSDR board, Community Reuse Organization, and other SSABs.

## Schedule

The Task Force plans to conduct six full meetings during calendar year 1997. All meetings are Saturday at 8:30 a.m. at the Alpha building.

### Full Meetings

January 11, 1997

March 15, 1997

May 10, 1997

July 12, 1997

September 20, 1997

November 15, 1997

000006

Committee Meetings

Schedules to be determined by the committees.

**Nature of Input**

Task Force actions will take the following forms, tailored to specific issues:

**Recommendations:** the Task Force develops detailed advice on an issue and anticipates a formal response from DOE, USEPA, and OEPA. Recommendations must be discussed by a quorum of the Task Force require agreement of the members as provided in the charter.

**Informal Comments and Information Requests:** the Task Force comments on ongoing activities, provides summary advice on an issue, and/or requests clarifying information. This advice is for the benefit of clarifying a situation or providing needed input in a timely manner, and it reflects the general opinion of the Task Force as generated from specific discussion. However, as it does not require formal agreement, it does not carry the weight of a recommendation and may be formulated in committee.

**Active Monitoring:** this include the collection and use of data and regular discussion of site and national activities to ensure that the intent of previous Task Force recommendations is being met. These activities will generally be performed in committee.

Expected issues and actions are summarized in the table below:

**000007**

ISSUE	EXPECTED ACTIONS	STATUS/APPROACH
Cost and Schedule	Recommendations on overhead and landlord cost reduction, reengineering, and subcontracting issues.	Issue will be evaluated by the full Task Force.
Waste silos	Recommendations on course of action for three silos.	Work with independent panel and provide formal recommendations to DOE in March 1997.  Waste Management Committee
On-Site Disposal Facility	Make recommendations on material acceptance requirements, schedule, and cell management practices. Comment on final design and material handling requirements.	Will monitor design protocols, and provide comments as appropriate.  Waste Management Committee
Waste Transportation	Will continue to pursue intermodal transportation options to NTS, and local roadway and traffic impacts.	Follow-up on issues and information begun in 1996.  Transportation Committee
Environmental Monitoring	Will make recommendations on both construction and post-construction monitoring plans and work with DOE to identify a protocol for verifying that remediation goals are met.	Review of project specific monitoring plans as they become available.  Monitoring and Recycling Committee
Natural Resources	Work with natural resource trustees and site personnel to ensure natural resource goals are met.	Interface with natural resource trustees, review and comment on excavation, grading, and restoration plans.  Natural Resources Committee
Recycling and Reuse	Recommendations and/or comments to ensure that waste disposal cell size and total waste generation is minimized through cost-effective use of recycling, treatment, and disposal.	Review site recycling protocol and make specific recommendations as appropriate.  Monitoring and Recycling Committee
DOE 10 year plan	Monitor progress of DOE planning effort. Identify priorities where needed.	
Radium Extraction	Monitor progress of research.	
Economic Development	Ensure that the intent of the Task Force's future use recommendations are maintained.	Will let the CRO take the lead and coordinate and support as appropriate.

000008

## FCTF E-Mail Addresses

NAME	E-Mail Address
John Applegate	john.applegate@law.uc.edu
French Bell	LFB0@ATSDTO1.EM.CDC.GOV [REDACTED]
James Bierer	RO_BIERER@PO.SWOCA.OHIO.GOV
Jack Craig	[REDACTED]
Lisa Crawford	fresh@igc.apc.org
Pam Dunn	pamdunn@igc.apc.org.
Guy C. Guckenberger	[REDACTED]
Gene Jablonowski	JABLONOWSKI.EUGENE@EPAMAIL.EPA.GOV
Graham Mitchell	graham_mitchell@central.epa.ohio.gov
Doug Sarno	[REDACTED]
Tom Wagner	Thomas.Wagner@UC.EDU
Sue Walpole	swalpole@ferald.gov
Gene Willeke	GEWILLEK@MIAMU.MUOHIO.EDU

000009

PLEASE CALL THE TASK FORCE OFFICE AT (513) 648-6478 WITH ANY ADDITIONS OR CORRECTIONS

Current as of 1/16/97

DOE logo here

FEMP logo here

0553

**FERNALD DOCUMENT AVAILABLE**

**Revised "DRAFT FINAL Evaluation  
of Silo 3 Alternatives"**

The Department of Energy (DOE) is re-examining the selected remedy for the remediation of the contents of Silo 3 of Operable Unit 4 at the Fernald Environmental Management Project. DOE is evaluating alternative stabilization technologies to vitrification for the remediation of the Silo 3 residues. The revised "*Draft Final Evaluation of Silo 3 Alternatives*" evaluates the ability of the stabilization technologies to treat Silo 3 residues and addresses comments received from stakeholders, the U.S. Environmental Protection Agency (EPA), and the Ohio EPA. It also includes data provided from the continuing testing at the Vitrification Pilot Plant.

The revised report is available for public inspection at the Public Environmental Information Center (PEIC) located at 10845 Hamilton-Cleves Road. Following are the PEIC's hours: Monday, 7:30 a.m. to 7:00 p.m.; Tuesday, Wednesday, and Thursday, 7:30 a.m. to 5:00 p.m., and Friday, 7:30 a.m. to 4:30 p.m.

Although not a formal comment period, the DOE will accept public input on the document. All stakeholder comments are requested to be submitted in writing to Gary Stegner, P.O. Box 538705, Cincinnati, OH 45253-8705.

For more information, please call Gary Stegner, DOE-FEMP Public Affairs, at 513-648-3153.

000010