

## **Draft Minutes from the September 28, 1996 Meeting**

The Fernald Citizens Task Force met from 8:35 a.m. until 12:25 p.m. on September 28, 1996, at the Alpha Building, 10967 Hamilton-Cleves Highway, Harrison, Ohio. The meeting was advertised in local papers and open to the public. Time was reserved for public input.

Members Present:

- John Applegate
- French Bell
- Jim Bierer
- Marvin Clawson
- Lisa Crawford
- Pam Dunn
- Constance Fox
- Darryl Huff
- Guy Guckenberger
- J. Phillip Hamric
- Gene Jablonowski
- Gloria McKinley
- Graham Mitchell
- Jerry Monahan
- Thomas Rentschler
- Warren Strunk
- Robert Tabor
- Thomas Wagner
- Gene Willeke

Members Absent: none

Designated Federal Official Present: Ken Morgan

Task Force Staff Present:

- Deborah Dunstan
- Crystal Sarno
- Douglas Sarno
- Sue Walpole

About 22 spectators also attended the meeting, including members of the public and representatives from DOE, Fluor-Daniel Fernald, and FRESH.

## **1. Call to Order and Approval of Minutes**

Chair John Applegate called the meeting to order at 8:34 a.m. The June 8, 1996 minutes were noted as previously approved and accepted.

## **2. Announcements and New Business**

John Applegate announced that he and the committee chairs had met and agreed that, while the committee system was working well, quarterly Task Force meetings were too far apart to address all the issues in front of the Task Force. The Task Force will therefore now meet bi-monthly.

He also announced that the Task Force will address the issue of transportation, and of the impact of the K65 silos on the health risks at the Fernald site, at its November 9 meeting.

Applegate introduced David McWilliams, who is chair of the Community Reuse Organization (CRO), and mentioned that the CRO is now up and running -- they have had an initial meeting, a retreat, and a second meeting. Applegate spoke at the retreat about the Task Force recommendations to date. The CRO has been asked to look at specific land use decisions. McWilliams said that the Task Force is a challenging model to follow, and that the CRO must first focus on what its mission statement will be, before they can move forward. They meet again on 10/8 and 10/21, and will begin a study of the economic impact of the site. They ultimately want to help the community benefit from the resources found in that same community.

Applegate also addressed the issue of DOE's 10-year environmental management plan (which Fernald submitted in July of 1996). In the next week or so, letters will be coming from HQ to give some guidance on revising these plans. The issue is that there are many different plans, and these different plans don't always fit together neatly. The challenge is to get some harmonization among them. The Task Force endorsed the idea of an accelerated cleanup plan, but realized that there are some choices to be made. Fernald was one of just a few sites where some completion could be achieved in 10 years. The question was asked -- if many other sites decide on 10-year cleanups, would that affect our cleanup? Applegate explained that from HQ perspective, the cleanup at Fernald would mean "getting a site off the books," but that there are limited resources to get that accomplished.

## **3. Committee Reports**

### *Environmental Monitoring:*

Chair Pam Dunn said that the Committee has been looking at the Integrated Environmental Monitoring Plan. Doug Sarno explained that the site had put together the site monitoring plan, which pulls together all of the small specific monitoring projects. The monitoring committee will work on these project by project, until all are in place.

### *Natural and Cultural Resources:*

Chair Jim Bierer described how the Committee has had input into the Natural Resources Trustee process. The committee has been looking at restoration and protection of natural resources on the site. Bierer referred to the site map (attached). The northeast quadrant has been surveyed for any type of human remains, but the west production area was not surveyed because it had already been disturbed. The map also shows the key natural resource areas, and the proposed location of the onsite disposal facilities. Most of the

natural resources will not be impacted as the cell is being constructed, with the exception of the upper pine area.

The committee has also looked at the process for selecting a burial place for Native American remains. Pam Dunn and Lisa Crawford asked that Doug find out more about the process of working with the Native American tribes, and what exactly has happened thus far. Bierer said that a portion of the site will still be used as a burial place. He also said that the committee plans to visit these areas to become very familiar with what exactly is out there, and will meet with natural resource trustees.

Applegate indicated that the map very clearly indicates the vision the Task Force has of the site, and asked the opinions of the other Task Force members. The red lines on the map identify areas that will have the most disruption. The question is: how much will they be backfilled? What will the future use be? They could be leased to a private party for development, or for a green space.

*Transportation:*

Chair Tom Wagner explained that the Committee has also been involved in highway safety, traffic volume and management, off site disposal facilities, and rail activities; they have also gone to visit the Nevada Test Site. At NTS they were at first told that there was no site for unloading railroad cars, but now they find there may be a facility that can offload the waste. They are waiting for information from Jack Craig on intermodal options to transport waste to NTS. Doug said that he had just learned that some of the information they had requested would not be ready until November.

*Waste Management:*

Chair Gene Willeke mentioned that three members of the Waste Management Committee also visited the Nevada Test Site. In their opinion the site seems to be very well operated, and is a good location to dispose of the waste material. The Committee's concern is that there was a great lack of communication from HQ to the site -- issues that the committee were worried about, the site didn't even know were items of concern because HQ had not relayed that information. They also said that the facility will be closed to receipt of new waste in 25 years. The local stakeholders' issues relate to transportation, Yucca Mountain, and the fact that they really don't want Nevada to become a dumping ground. Guy Guckenberger wondered what the significance of the 25 year time period was to us, and Willeke replied that it would mean that NTS would not be removing radium from the waste.

Another issue before the Committee is the fact that the disposal cell design at Fernald calls for the waste to be reduced to small pieces, but some of the remediation plans do not. Willeke believes that there is a communication problem -- the waste acceptance criteria and the acceptance plan must agree on the state of the waste. The Committee does not want for the site to become a "moonscape," and wonders how badly the site will be affected. Sarno said that they have had feedback, and that, while the plan was originally scheduled for 10 years, now they will be done in three. There is also an excavation plan, grazing plan, phasing plan, and natural resource restoration plan.

Willeke mentioned that the briefing on Recycling was useful but had one problem: it suggested mixing things that should not be mixed.

There have been two public meetings held concerning OU4, and the possibility of treating the materials from Silo 3 separately from those of Silos 1 and 2. The Waste Management committee also held a meeting on this issue on September 11, as well as a number of telephone discussions. Willeke explained that Silos 1 and 2 contain radium, while Silo 3 contains a dry powdery metal oxide which could be very dangerous if it escaped into the environment in its current form; the current ROD requires that the materials from Silos 1, 2 and 3 be combined for treatment. The new report recommends separating Silo 3 materials for cement stabilization. It could then go to NTS in large blocks, or to Envirocare in small pellets. Either was impossible without cement stabilization. The disposal options are therefore doubled. One other benefit would be that the process can be speeded up, and cementation could occur when other things are going on. There also might be a cost improvement in transporting the materials.

Jack Craig said there may be some testing done on humans on the harm caused by radium. It is a two-part approval process, and has been approved in the first part, but not the second. Radium has been used to treat cancer since the early 1920s, and is therefore very valuable.

Tom Rentschler noted that Fernald should be more involved in the radium issue. Craig responded that DOE does not have money to sidetrack into the radium issue, and that the medical community should be paying for this process. After much discussion Applegate said we need to identify the points at which we are making irretrievable commitments. Sarno suggested that this whole issue be deferred to the Waste Management committee, as this issue is integral to their decisions, and they must be aware of what the scientific community is doing.

#### **4. DOE Report on Progress Towards Task Force Recommendations**

Jack Craig reported on DOE's progress towards the Task Force Recommendations:

*Nuclear Materials Disposition:* DOE has signed a memorandum of agreement to sell the uranium from the site. Half of the uranium inventories have a purchaser, and will be used to make fuel rods for nuclear reactors overseas.

*Legacy Waste:* DOE is currently on schedule to have the waste offsite by the end of 1997; safe shutdown should be completed by FY99.

*Ongoing Maintenance:* DOE has ceased most of what was unnecessary. Sarno asked what that was saving us in dollars; Craig explained that DOE has searched for work that is redundant and now has streamlined the work on site. This summer they completed the cell cleanup plan. The current end date is now 2007, which makes it an 11-year plan -- Lisa Crawford noted that EPA should therefore stop calling it their 10-year plan.

The last ROD for the site was signed by EPA this week.

#### **5. Proposed Changes to Silo 3 Remediation**

Problems with the vitrification pilot plant caused DOE to announce a 17-month delay in evaluation of vitrification technology in November 1995, and resulted in an investigation of ways to improve performance. An independent value engineering study was released in

January 1996 which identified four recommendations for technical simplification, cost savings, and overall schedule improvements. It included four recommendations:

1. Upgrade the pilot plant to allow for full-scale operation, and build a second melter rather than the single large melter originally planned (\$57 million potential savings).
2.
  - A. Use solidification/stabilization for Silo 3 (\$68 million potential savings).
  - B. Use solidification/stabilization for all silos (\$96 million potential savings).
3. Use rail and truck rather than trucks alone (3.9 million potential savings).
4. Give further study to the following:
  - Exploit potential of vacuum extraction and stabilization technologies.
  - Robot success has been limited, use should be carefully evaluated.
  - Use of a cage around slurry intake may avoid plugging.
  - Meet with Hanford personnel to learn from their experience.
  - Continuously vapor strip material to reduce in-situ radon levels.
  - Remove Silo 3 and bentonite caps from consideration for vitrification.
  - Use off gas system data from Western Environmental Technology Office.
  - Separate high activity wastes to remove "hot" wastes from bulk material.
  - Privatize the project's feature components.

Doug Sarno provided background details on each of the recommendations:

1. Rather than building the proposed 25-ton-a-day melter, the recommendation suggests adding a second melter to bring the project back on schedule. The proposed 25-ton-a-day schedule is actually unrealistic -- the largest working melter in the world is only doing 3 tons a day. It would be better to have two smaller units; this would help keep the project moving if one of the melters is down for repair.

2) The removal of Silo 3 from the vitrification process was further studied, and it has some potential. The materials in Silo 3 are less hazardous, and with solidification DOE thinks they can be managed safely. However, the July 1996 report recommending the change from vitrification to solidification just for Silo 3 is a fairly significant change in the ROD. To change a ROD there are two options: an Explanation of Significant Difference (ESD), or an amendment to the ROD.

Sarno further explained the cementation process. After solidification, the cement would be poured directly into the white metal box and buried that way at NTS. In reality the actual design and process, the means of transportation, and the decision on which disposal facility to use would be put together by the independent contractor. The contact would be awarded in 5 phases:

- 1) Documentation and proof-of-process testing
- 2) Design and equipment specifications
- 3) Mobilization, construction and operational readiness review
- 4) Treatment options
- 5) Demobilization

It would be a firm, fixed price. The selection would be based on the treatment concepts proposed, and on a proven track record that had been accomplished at another site. Vitrification has not been done on this type of material before, but solidification is a proven process. Waste handling requirements, disposal requirements, and transportation requirements would all have to be met.

Perhaps too rosy of a picture was painted when vitrification was considered. Now we are hearing a very opposite story -- that vitrification is very experimental, and that stabilization is a previously used, and well known process. Other differences between the two processes include:

- The necessity for additional buildings for solidification -- vitrification can use the existing facilities.
- Solidification is faster than vitrification, and could be started 4 years sooner and completed 6 years earlier.
- The volume of material resulting from solidification is much higher than the volume of materials for vitrification.
- The containers will be heavier and larger if Silo 3 materials are mixed with Silos 1 and 2, so there would be much greater transportation costs.

The Task Force asked several questions of Don Paine (Fluor Daniel Fernald). The question was asked what would happen if vitrification doesn't work for Silos 1 and 2. Solidification is an option for Silos 1 and 2 but DOE is committed to getting vitrification to work. Silo 3 contains sulfates which drive the melting temperature up, and cause foaming in the melter which makes vitrification difficult.

Another question concerned why Silo 3 was included in the vitrification process to begin with. Nina Akjunduz said it was a cost driven decision. If there is one treatment for all silos, then the cost is lower than if there are two separate treatments for the three silos. She explained that we are not certain if vitrification will work for Silos 1 and 2, but that we would know the answer by March 1977. At that time we will make a much wiser decision when we have all of that information to determine our path forward.

Additional bentonite will be going into the silos in the summer of 1997 to control radon emissions. The current plan is that this bentonite will be vitrified.

Graham Mitchell said that Ohio EPA agreed in part with DOE. He thinks it may be all right to make the decision regarding solidification earlier than March, but that today would be too soon. He wants full public involvement and there has not been time for that to happen. Willeke said that he had not been aware, prior to this meeting, that DOE would be pushing the Silo 3 issue for decision today. EPA does not agree that it's a good idea at this time -- but they might agree to it later. EPA still believes that vitrification is the best solution for Silos 1 and 2, and for that reason they want to wait for more information.

Applegate suggested that the Waste Management committee put together a matrix of all the possible issues, as we need materials that are a lot more focused on these options.

Guckenberger suggested that the different agencies need to share information better. Applegate added that we need to be very clear about the decision process. Willeke said that their recommendation is that cement stabilization continue to be considered as an option.

Willeke feels that we need to be sure that we are all reading off the same page. Crawford reminded everyone that the deadline for comments was September 9th, and that it was now the end of September. She added that since there have been major problems in these cleanups, she would like a list of the mistakes other sites have made, because it would be difficult to make a decision without all of the information. There were problems with these processes at Rocky Flats, Oak Ridge, and Hanford.

Jerry Monahan added that there was a lesson to be learned from the Hanford experience. He explained that part of the decision process to use grout on the site on a massive scale came about when DOE announced that a decision was made and therefore stopped the process of having public input on decisions. The decisionmaking process, while it was good, leaves a message for us that once you make a decision you still have to keep your mind open to other options.

EPA said that they are going to look very carefully at all of the information, promises, and recommendations being made regarding this technology. Therefore, EPA is unwilling to be rushed on this decision.

Applegate said asking questions is what the Task Force is about. He would like to leave it that this is a promising possibility and we will address it at the November meeting.

## **6. Public Comment**

The floor was opened to public comment. No public comments were offered.

The next meeting is scheduled for November 9th in the Alpha Building.

## **7. Adjournment**

The meeting was adjourned at 12:25 p.m.

I certify that these minutes are an accurate account of the  
September 28, 1996, meeting of the Fernald Citizens Task Force.

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John S. Applegate, Chair  
Fernald Citizens Task Force

Date

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Ken Morgan  
Deputy Designated Federal Official

Date