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COMMUNITY MEETING TRANSCRIPT - FEBRUARY 20, 1990 HELD AT STRICKER'S GROVE

02/20/90

SPANGLER PUBLIC
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TRANSCRIPT

U.S. DEPARTMENT OF ENERGY

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REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

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COMMUNITY MEETING

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TRANSCRIPT OF PROCEEDINGS

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The above-styled meeting took place at 7:00 p.m. on Tuesday, February 20, 1990 at Stricker's Grove, Route 128, Ross, Ohio.

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Appearances:

Bobby Davis

Lewis Michaelson

Andy Avel

Catherine McCord

Graham Mitchell

Lisa Crawford

Pat Hopper

Bob Galbraith

- - -

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MR. MICHAELSON: Good evening. It's 7:00. I hate to interrupt everyone who's having fun conversing at the various poster sessions out there with the experts we have assembled here tonight. But we also have quite a few people sitting down and ready to go for the meeting, itself, the formal meeting, which is scheduled to begin at 7:00, which is what time it is now.

So if I could ask people to wind down their conversations and be seated, we'd appreciate it, so we can get started as soon as possible.

MR. DAVIS: We'll go ahead and get started. Good evening. My name is Bobby Davis. I'm the Environmental Manager for the DOE at the FMPC site office. I'd like to welcome you to tonight's Remedial Investigation/Feasibility Study, or RI/FS, meeting.

This is the fourth in a series of meetings being held to inform you of the environmental restoration activities at the site, and to seek your input into that process.

Before I turn the meeting over to the moderator for this evening, I'd like to discuss several issues and items that are not directly a part of the RI/FS process.

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First, as noted during the last meeting, we have been expanding the number of technical staff at the site office. The onsite group is now fully staffed, as shown on some handouts that I think were available in the back of the room.

There are a total of eight of us in the environmental group. I wanted to take a couple of minutes to introduce the staff members who are here this evening.

Andy Avel, who you'll hear more from later, is the Deputy Environmental Manager and is responsible for the day-to-day management of the RI/FS activities for us. I'll ask the staff to stand as I call their name.

Ken Brakken. Ken is also working the RI/FS area. Jack Craig, who is the senior member of our group, I guess, being on board for two years now, is handling RCRA removal actions, and he is the project manager for the K-65 activities and the sampling that you'll hear more about this evening.

Dave Rast. Dave's handling the water programs, and also is working in the hazardous waste management area. Behram Schroff, in the back, is handling air programs for us, National Environmental

1 Policy Act activities, and waste management activities.
2 Oba Vincent is handling industrial safety and
3 industrial hygiene activities for the group.
4 There are a couple of other new staff
5 members at the site office that are also here tonight.
6 Beth Osheim is the legal counsel for the office, and
7 John Sinak, standing in the back, is a new industrial
8 hygienist that's joined us recently.
9 We also noted during the last meeting
10 that Jim Reefsteiner would be leaving the site to take
11 a job in Oak Ridge, and he has done so. The new site
12 manager for the FMPC site office has not yet been
13 named.
14 Secondly, there are a number of things
15 I'd like to bring you up-to-date on. An issue that's
16 been around for a while is the Environmental
17 Monitoring Report for 1988. We had hoped to have it
18 out by this meeting. However, review is still going
19 on at headquarters, and we have not yet received
20 authorization to release the report.
21 As a reminder of something else going
22 on, the site siren procedures have been changed. I
23 think there was a press release and notices sent out
24 regarding that.

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The change there is the public announcement will now be made immediately following the tests instead of preceding the test as has been done in the past. This change has been made as a result of a recommendation by an outside expert who reviewed our program.

The new procedure will make this practice effort more realistic and more consistent with what goes on in the rest of industry. This procedural change will be in place for the tests which will be conducted next week on the 28th of February.

Important milestone in our water programs. We've recently received a new water discharge permit from the State of Ohio. This represents a significant milestone in our efforts and culmination of a lot of effort of a lot of folks at the site and with the State.

Another item which we got underway last Friday, we began the over packing of 212 drums containing thorium materials. These drums had been stored outside for a number of years and had deteriorated.

The start of this effort is the culmination of many months of planning, which were

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required to insure that this operation can and will be carried out safely.

Due to the deteriorated nature of some of the drums, some spills of material on the storage pad are likely. We have developed and practiced specific response procedures to insure that any spills will be cleaned up quickly so that no environmental impact occurs.

As of this evening, we have successfully moved six of the drums. The overall effort is expected to take about six weeks. Oba Vincent, I introduced earlier, is the project manager for the site office for that activity.

On a much less positive note is the recently found and announced weight discrepancies associated with a number of drums containing what we call mixed waste; that is, waste materials contaminated with both radiactive and hazardous materials.

We recently determined there were a number of such drums stored on the plant 1 pad. Since this pad does not meet the requirements for the proper storage of hazardous waste, efforts were initiated to move the drums to a proper storage location.

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1 As part of this activity, each drum is
2 weighed as it is over-packed, or put in another
3 container, and moved. The weighing activities have
4 shown that, for 232 of the drums, there was a total
5 weight loss of about 6,000 pounds, and for 372 drums,
6 there was a total weight gain of about 15,000 pounds.
7 These numbers were larger than those
8 recently reported in the media. The additional losses
9 and gains are the result of continuing efforts to
10 relocate the drums. We have moved all but six of the
11 drums that are involved in this particular activity.
12 The losses and gains are attributable
13 both to the forms of the waste material and the
14 deteriorated nature of the drums, which allowed leaks
15 of rain water into the drums, and leakage of water
16 contaminated with materials from the drums.
17 While environmental data indicate
18 there is not an immediate public health threat, the
19 leakage did result in some localized contamination, as
20 well as likely contributed to discharges to Paddy's
21 Run and the Great Miami River.
22 With respect to worker health and
23 safety, the ongoing radiation monitoring and bioassay
24 programs did not indicate any significant exposures to

plant 1 pad workers.

Since the hazardous materials are present in very small amounts compared to the uranium, it is unlikely that any significant exposure to the hazardous materials could have occurred.

Do want to take this opportunity to assure you and the regulatory agencies that we do take this situation very seriously from both the environmental and the regulatory compliance viewpoints.

We will continue to conduct inspections of the drums on the pad and continue our efforts to over-pack drums found to be leaking. We'll also be evaluating short-term measures that can be taken to provide better storage conditions for the radioactive contaminated but nonhazardous materials that are also stored on the plant 1 pad, as well as elsewhere on the site.

We will also continue to implement the longer range plans to improve the storage overall conditions and to dispose of the waste materials, the waste materials on site.

From a different perspective, you probably heard or read about most of these items I've discussed. As we commented last meeting, we are

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trying very hard to keep you informed of new findings, changes in existing conditions and activites of interest that are happening on site. We appreciate your continued feedback on how well we are doing.

Now, I'd like to bring the focus back to the subject for the meeting, the RI/FS, express my appreciation for your support and input to this process.

Your continued participation is necessary to insure that this process results in a selection of the best remedial action alternatives for the various operable units at the site.

At this time, I'll turn the podium over to Mr. Lewis Michaelson, our moderator for this evening. Thank you.

MR. MICHAELSON: Good evening. This is one in a series of regularly scheduled meetings held by the DOE to update the community on progress of the RI/FS, or Remedial Investigation and Feasibility Stu

My name is Lewis Michaelson, as Bob mentioned. I had the privilege to facilitate a meeting that was held last May, and those of you who were at the last meeting know Jim Bischoff, the school superintendent, was the facilitator for the meeting in

1 October.

2 We had intended to have Mr. Bischoff

3 facilitate again tonight. Unfortunately, he had

4 unavoidable schedule conflicts. We hope he can do it

5 again, and he hopes he will be available for the next

6 meeting. But for tonight, I will be filling in.

7 The format and ground rules for this

8 meeting are very similar to ones that were for the

9 last meeting in October. That is, as you'll see by

10 your agenda, after my introduction is finished, there

11 will be DOE and contractor presentations, a short

12 break, Q and A session. And we will again hold

13 questions until after the presentations.

14 We will also have two opportunities

15 for you to ask those questions, both orally at a mike,

16 as well as on the four by six cards that have been

17 scattered throughout the audience, although the

18 collection procedure will be slightly different

19 tonight. We're asking Graham Mitchell of the Ohio EPA

20 and Catherine McCord of the US EPA, if you would hand

21 your questions in to them. They're going to collect

22 them for us tonight.

23 We also, just like last time, have a

24 court reporter again tonight to make a transcript of

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1 the proceedings, of all of the presentations that are
2 made, all the questions that are asked, and answers
3 that are given. And the transcript from last October's
4 meeting is in the DOE reading room in the three
5 libraries and there, one will be available as well by
6 March 7.
7 Also, those of you who were at the
8 last meeting in October may recall that Ray Hanson,
9 the Deputy Site Manager, asked people for suggestions
10 on different ways or ways to improve how these
11 meetings are run.
12 Some members of the Fernald Residents
13 for Environmental Safety and Health took DOE up on
14 that offer, and as a result, there are a few changes
15 in tonight's format that I'd like you to be aware of.
16 For instance, someone suggested we
17 provide copies of presentation materials at the
18 beginning rather than the end so that you can follow
19 along. So for those of you who missed them, there's --
20 over on that table there, if you want any, and want to
21 be able to follow along -- there again are the
22 presentation materials, the same materials that will
23 be used for the presentations. So we've done that.
24 Some people also told us that they

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1 felt the use of video cameras for recording was
2 intrusive. So that will not be done tonight by DOE,
3 although of course the television crews are more than
4 welcome to do it.
5 The response to the meet the experts,
6 the poster session that was held the hour before, has
7 been generally favorable. So one modification is, not
8 only did we have the one before, but we decided after
9 the meeting tonight, those people will be available
10 again to have, again, a one on one interaction for
11 anyone who desires that.
12 We also received a suggestion to keep
13 the meeting as short as possible, particularly the
14 presentations. So the presenters have made a
15 concerted effort tonight to concentrate on new
16 information rather than going over old information so
17 that we can try and get everyone out of here as soon
18 as possible and also get to your questions as soon as
19 possible.
20 Someone also suggested we provide
21 postage for the comment card; the ones that you can
22 mail in. So you'll see we've taken care of that. We
23 now have 15 cent stamps on those for you.
24 Another modification for tonight's

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format, and this was actually a DOE suggestion, was to provide an opportunity for representatives of organizations to have a place on the agenda to make relevant remarks.

And so, as a consequence, tonight, we will hear from Catherine McCord, again of the US EPA, Graham Mitchell of the Ohio EPA, and Lisa Crawford from FRESH will have an opportunity to make some remarks or announcements relevant to the RI/FS directly after Andy Avel's presentation.

Some final small changes. If you'll notice on the back of the agenda, we've included the evaluation form. We really do pay attention to those, and have used them to make a number of changes in these meetings to improve them. So please fill those out and turn them in to us at the end.

My role as tonight's facilitator is simple; going to try to run this meeting as efficiently as possible, to get you out of here at early as possible. But on the other hand, to insure that everyone gets an equal opportunity to participate and to ask questions. My job is also to insure that you get the very best answers that are available to you tonight.

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And as usual, DOE is willing to stay here tonight as long as it takes to answer all of your questions. The ground rules are the same as last time. We simply ask for common courtesy; that people be allowed to finish what it is that they're saying, and that we only have one person speaking at a time.

We will answer questions as fully as they can be, but we will not ask people to speculate on things that cannot be known or are not known. And again, we will be holding questions until after the presentations. With that intorduction, I invite Andy Avel, the DOE Environmental Manager, to make his remarks. Thank you.

MR. AVEL: Thanks, Lewis. Good evening, and thank you for coming out. As Lewis had said, Bob said, my name is Andy Avel. I'm the DOE Site Deputy Environmental Manager.

I've been here since January the 1st on a permanent basis, and since a little bit before the last community meeting, between September and January 1st, I was on loan from Oak Ridge and saw such a great challenge here that I couldn't resist the opportunity to come up.

And I say that with all seriousness.

1 I think there's a job that needs to be done, and the
2 people that are up here are dedicated to getting that
3 job done, and I want to be a part of it.
4 Since the last meeting in October,
5 most of the progress that has been made on the site
6 has concerned the drilling operation, the installation
7 of monitoring wells, and the borings that have been
8 done in the plant and south of the plant to determine
9 the limits of the contamination and the level of the
10 contamination.
11 Just a brief update, we've drilled and
12 installed seven monitoring wells south of the plant in
13 the south plume area. We've also drilled 62 holes in
14 the production area.
15 And we found at least one -- I
16 shouldn't say at least -- but we found one area of
17 relatively high level of contamination of uranium
18 under plant 9, which we've had the opportunity to read
19 about in the newspapers.
20 The findings that we have reached and
21 what they mean are going to be the topic of Mr.
22 Galbraith's presentation a little later tonight, and
23 he's going to talk about that further.
24 Several of these findings have been

1 the subject of newspaper and television news stories
2 that were focused on the concerns that the
3 contamination in the ground water around and south of
4 the plant represent a problem that's impossible to
5 cleanup.
6 I'd like to just state and remind us
7 all that these holes were located in these areas to
8 determine what the boundaries of the contamination are.
9 In other words, in summary, we were looking for this
10 contamination in these areas, and we found it.
11 And we think that's good news, because
12 the data that we are getting back, the information
13 we're getting back from these holes that you read
14 about in the newspapers, are helping to drive our
15 investigation and to support the studies that we are
16 doing so that we will better be able to understand the
17 problem, and therefore, better be able to come up with
18 a recommendation, a successful remedy, to clean all
19 these areas.
20 I would like to mention one important
21 decision which has been made since the last meeting.
22 And this concerns the way we've divided the site into
23 different areas of study, called operable units. And
24 I believe there's a poster in the back that defines

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1 the operable units and gives you a location of them.
2 DOE, US EPA and the State EPA, Ohio
3 EPA, have all agreed to change operable unit number 6,
4 which was the south plume, to change that to a removal
5 action.
6 What that means is that the studies
7 will be done faster, and the cleanup for that area
8 will be able to begin sooner. It doesn't mean -- I
9 want to stress that it does not mean that the cleanup
10 will -- the cleanup effort will receive less attention.
11 In fact, later this year, a document
12 called and Engineering Evaluation/Cost Analysis, or an
13 EE/CA, will be out for public comment which will
14 contain information on what we found, and what can be
15 done about it, and how we intend to go about cleaning
16 it up. You can look for that in the public reading
17 rooms, like I said, later this year.
18 Just a note that the change of this
19 operable unit 6 to a removal action will be discussed
20 in a meeting that EPA will sponser. I look for it in
21 the next couple of weeks. That meeting will explain
22 the federal facilities consent agreement that has been
23 negotiated by the US EPA, DOE, and Ohio EPA.
24 Speaking of meetings that are coming

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1 up, there are going to be several opportunities for
2 community members to interact with site
3 representatives in the coming months.
4 This meeting is one, of course. And
5 like I said, within the next several weeks, I expect
6 EPA to schedule a community meeting much like this one,
7 but the sole topic will be the contents of the federal
8 facilities concent agreement. The agreement was
9 finalized in December, and it's currently awaiting
10 signature by DOE.
11 Another opportunity is one that
12 Westinghouse community relations personnel have
13 suggested, and DOE has agreed to. And that is to have
14 round table discusses with representatives of the
15 community to go into more detail on specific topics in
16 which you may express interest. The first of these is
17 scheduled for March 6th and will be attended by DOE,
18 Westinghouse and representatives from FRESH.
19 Mr. Pete Kelly is here. Pete, if you
20 could stand, right over here (indicating.) Pete will
21 be here after the presentations and will be glad to
22 talk to anybody about the round tables, and also talk
23 about a survey form that was sent out that I think
24 several you have already received.

1 Another meeting that's going to be
2 coming up is the scoping meeting for the Environmental
3 Impact Statement, or the EIS. This is a new study
4 that will address the impacts to the environment from
5 the cleanup of the site, and I know there's a lot of
6 questions about that, and a lot of confusion. So I'd
7 like to take just a few minutes to explain that in a
8 little more detail.
9 Approximately three years ago, EPA
10 held a scoping meeting, an EIS scoping meeting, which
11 addressed the renovation of the plant. This EIS has
12 been reviewed by DOE and is expected to be released in
13 draft form for public comment within the next few
14 months.
15 The distinction between this EIS and
16 the one that deals with the RI/FS, or the one that the
17 scoping meeting will be coming up pretty soon, is that
18 the earlier EIS, the one that's due out soon in draft,
19 deals with the environmental impacts concerning the
20 renovation to modernize the plant; whereas, the other
21 EIS deals with environmental impacts from the cleanup
22 of the site. So they're two distinct EIS's. Both of
23 them will be completed.
24 There's been a lot of discussion

1 concerning the need to prepare an EIS for the site
2 cleanup because the RI/FS addresses most major
3 environmental issues.
4 The DOE has taken the position that
5 we're required to develop the EIS for the RI/FS
6 process because the cleanup is a major federal action.
7 That's the key term. Whenever a key federal action is
8 undertaken, an EIS is required.
9 DOE is going to combine the RI/FS and
10 the EIS so that the information to satisfy CERCLA for
11 the Superfund law, or the law which requires the RI/FS,
12 so that that work will also be used to satisfy NEPA,
13 or the EIS law. So what we're doing is trying to
14 integrate these documents so that we're holding down
15 cost to a minimum and duplication to a minimum.
16 There's a poster in the back of the
17 room that will explain this in a little more detail.
18 And Suzanne Gray -- Suzanne, if you could stand.
19 Suzanne Gray will be glad to address any questions you
20 may have. She's our NEPA expert.
21 The schedules and locations for all
22 these meetings will be announced in the newspapers
23 much the same way the time and location for this
24 meeting has been announced.

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1 We've also been doing some work on the
2 Administrative Record. That's the collection of
3 documents that concern cleanup which are required to
4 be developed by the site. The documents make up the
5 official record of the decisions on cleanup, how they
6 were reached and why.
7 The Administrative Record is located
8 in two places -- well, I should say two places for
9 public access. One is at the site, and we have a room
10 set aside in the administration building that contains
11 the Administrative Record and some additional reading
12 material. And this room is open, I believe, during
13 working hours, at least, and probably beyond that.
14 Again, Pete Kelly can give you more
15 details on the hours. And you're welcome to come in
16 and use it anytime. Nobody monitors that. There is a
17 booklet to sign up, or to register, but you're not
18 required to.
19 We are required by the law to have
20 that book in, but you're not required to sign that.
21 If you want to go in, nobody is going to be monitoring
22 you. There's no record of -- unless you want there to
23 be one -- of your use of the facility. There's a copy
24 machine; is that right? There's a copy machine in the

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1 room that's available free of charge to make copies of
2 whatever material you might like to make copies much.
3 The other location is in the main
4 library. And both of these are available and open to
5 the general public. The Administrative Record is also
6 explained a little bit further on a fact sheet, which
7 you can pick up in the back of the room; is that right,
8 Sue. Where is Sue? Is that right? Okay. We've got
9 them back there, okay. Thank you.
10 We've been working on ways to make
11 these reading rooms and documents easier to access and
12 easier to use. Our plans include separating out the
13 Administrative Record from all the other reading
14 material to make it obvious which portion of it is the
15 record.
16 We're also indexing the record, the
17 Administrative Record, so that you'll be able to find
18 any information that you might require and make it a
19 lot easier to use. We hope to have this
20 reorganization done by the next community meeting.
21 Finally, I'd like to mention an
22 incident that occurred a couple of weeks ago. The
23 drilling contractor that installs the wells in and
24 around the plant had a piece of heavy equipment, a

bulldozer, get stuck on the side of Paddy's Run Road.

This occurred on a Sunday evening, and the individuals that were working this had on white coveralls, merely to protect their clothing. But because it occurred on a Sunday evening, some of the neighbors were concerned, or expressed a concern, that they might be working on some emergency situation, a release, something like that.

Well, the people that work for the drilling contractor work ten days, and then they're off four days. So it's not unusual for them to be working during the weekend. These workers also typically wear the white coveralls, and they wear them simply because they're working in the mud, and it protects their clothing.

Since they -- the hours that they work and the clothing they wear have been mistaken for possibly working on an unusual occurrence, we have instructed all the contractors, anybody that's working either off site or near the boundaries of the plant, if they have any unusual occurrences, to inform the guard duty station so that, if there is an occurrence that you have a question about, you can call gate security. And I have the number. It's 738-6295. And

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1 that's 738-6295. I'll be glad to give it to you later
2 on in the evening. And you should be able to find out
3 what is going on. That's all I wanted to say. So
4 with that, I'll turn the microphone back over to Mr.
5 Michaelson, and again, I thank you for your attention.
6 MR. MICHAELSON: Thank you, Andy. By
7 the way, we were doing some introductions. There was
8 a person I neglected to mention. Bob Owen, if you
9 would stand up. He is with the Ohio Department of
10 Health, and he's here tonight, also to hopefully
11 answer any questions that relate to his area.
12 We have three opening statements on
13 the agenda you can see here. I must confess they're
14 in no particular order. Sorry, Catherine, but you are
15 up first. So this is your time.
16 MS. MCCORD: Good evening, everyone.
17 My name is Catherine McCord. I'm the Remedial Project
18 Manager for the US Environmental Protection Agency out
19 of Chicago. I see many faces I've seen at meetings
20 before and talked to many of you.
21 I'm here today to provide sort of US
22 EPA's perspective on the update of the Remedial
23 Investigation and Feasibility Activities and the
24 removal actions at the FMPC.

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At your last public meeting in mid October, I discussed the imminent listing of this site on the Superfund national priorities list. That did occur since the last meeting. It occurred in late November.

To be honest with you, there's not a lot of significance of that event for the site or all of you in that we had already been proceeding with the investigation and the cleanup activities as if the site was already on the national priority list.

For community groups, one significant part or result of the site being listed on the national priority list is that any citizens' group would be eligible, through an application process to US EPA, for community technical assistance grants in our TAG program.

If anyone has any particular questions about that program, I'm willing to discuss that, or we've got several community relations specialists from my agency here this owning.

As you all know, this whole process of the investigation and the cleanup of the Fernald site is being driven by a 1986 federal facility compliance agreement between the US Department of Energy and the

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1 US EPA.

2 Because of some changes in the

3 Superfund law and because things have changed here at

4 the site, we know more about the problem. This 1986

5 agreement is really outdated.

6 And in the October meeting, I

7 discussed us, US EPA, entering into a new cleanup

8 agreement with the Department of Energy. As Mr. Avel

9 said, we, the Department and the Agency, have

10 concluded our negotiations for the cleanup agreement.

11 Our two agencies had a target date of

12 December 22nd for signature of the document. US EPA

13 is currently disappointed that US DOE has not been

14 able to get their signature on the document. And

15 we're awaiting receiving that back from them hopefully

16 in the next week or two. So right now, we're still

17 working under the framework of the original cleanup

18 agreement.

19 Probably the biggest changes that you

20 all will see when we finally move into the new cleanup

21 agreement is it will finalize an extension in times

22 for the remedial actions. And the remedial actions,

23 again, are the long-term cleanups under the Superfund

24 law.

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1 The new cleanup agreement also
2 provides for several removal actions which are, again,
3 are the shorter cleanup actions under the Superfund
4 law. And the cleanup agreement provides US EPA
5 oversight of these activities.
6 I'm not going to go into detail of
7 what the operable unit scheme is. I think we've heard
8 that in the past, and some of the graphics in the back
9 of the room go over that.
10 But the four removal actions that will
11 currently be in this cleanup agreement involve the
12 K-65 silos, the south contamination ground water plume,
13 the collection of storm water in the waste pit area
14 that's contaminated once it comes in contact with
15 soils, and also the collection of contaminated perched
16 water which is under some of the production buildings.
17 The last removal action has already
18 started. Pumping under plant 6 building has been
19 going on for quite a while. And some of the new
20 information that we've received about contamination
21 under plant 9 and plant 2/3 indicates that we have
22 asked US DOE to submit a proposal for removal actions
23 to be initiated under those buildings also.
24 As Mr. Avel also mentioned, US EPA

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1 will be holding a public information meeting, or a
2 comment meeting, on our new cleanup agreement. After
3 US DOE signs the agreement, US EPA will sign the
4 agreement.
5 We have to send the document to the US
6 Department of Justice for their concurrence of the
7 document. Within 15 days of their concurrence, we
8 will be putting out a public notice of the document
9 and availability for comment.
10 And then a 30-day public comment
11 period will open. We plan on holding a public
12 meeting where testimony or questions may be presented.
13 And that public meeting will be held sometime mid the
14 30-day period, probably 2 weeks into the 30-day
15 comment period, which would allow people to learn a
16 little bit about the document and then still have some
17 time to put some written documentations or written
18 comments together and submit them to US EPA.
19 I do have a few comments about the
20 discussion of NEPA, the National Environmental Policy
21 Act, and the need for doing environmental impact
22 statements. It has been US EPA's position and
23 continues to be US EPA's position that the documents
24 generated under the investigation, the proposed plan

1 and the records of decision, which US EPA has laid out
2 as being the decision making documents, these will be
3 the documents that will select the remedy, the cleanup
4 strategies, and the techniques that are to be used.
5 The environmental impact statements are not going to
6 be used in that decision making process.
7 And then, as in the past, I encourage
8 again that everyone that has concerns about what's
9 going on at Fernald, has questions, that you
10 participate in these forums.
11 US EPA is willing to take questions at
12 any time. I will be involved with Graham Mitchell
13 from Ohio EPA at the FRESH meeting on Thursday evening,
14 being available to answer questions. If anyone feels
15 a need to set up any other individual meetings or any
16 other forums, either with DOE or without DOE, we are
17 perfectly willing to do so.
18 I'd also like to mention that a few
19 other representatives from US EPA are here tonight.
20 They've got name tags on. Ms. Sheri Bianchin, who's
21 an environmental engineer with US EPA, is here, also
22 Suzanne Kircos from Office of Public Affairs.
23 And we have also several US EPA
24 contractors. I believe you do have name tags on. I

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1 know we've got a lot of contractors involved. But if
2 you see PRC, there are three folks from a consulting
3 firm which supports efforts in US EPA's oversight of
4 the facility.
5 So if I am unavailable, these other
6 people will be available this evening to answer
7 questions, or they can get any messages back to me
8 that you'd like to forward. Okay. Thank you.
9 MR. MICHAELSON: Your turn, Graham.
10 MR. MITCHELL: Good evening. My name
11 is Graham Mitchell, and I'm the Remedial Coordinator
12 for the Ohio EPA for the Fernald project. Since last
13 meeting in October, a number of things have occurred.
14 During the week of November and --
15 during the month of November and part of December,
16 technical negotiations occurred that have already been
17 mentioned towards reaching an agreement between DOE
18 and US EPA concerning the studies and cleanup of the
19 FMPC.
20 This schedule includes new dates for
21 records of decision and other deliverables relating to
22 this project. It also includes stipulated penalty
23 amounts if deadlines are missed. DOE is supposed to
24 be close to signing this agreement. and the State of

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1 Ohio hopes this signing happens soon.

2 The other issue I wanted to bring up

3 is that we are still continuing to find levels of

4 contamination on and off site. We view this as

5 encouraging. It's important to identify these areas

6 of contamination before we can clean them up.

7 That's why the enormous amounts of

8 funds are being expended at this site to find these

9 problems. Knowing the past history of this site, I

10 would be more concerned about it if we weren't finding

11 any problems with this investigation. I suspect that

12 there will be additional areas of contamination as

13 work continues in the production areas and the south

14 plume.

15 One area of contamination that has not

16 been encouraging to hear about occurred last week.

17 This is the news that drums of RCRA mixed hazardous

18 waste had, during the past seven years, leaked almost

19 6,000 pounds of waste on the plant 1 pad.

20 One thing that we do not need at the

21 site is additional ongoing releases of contamination.

22 Controlling such releases is usually one of the first

23 things that is done at a Superfund site.

24 Obviously we will be demanding steps

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1 being taken immediately to eliminate or control all
2 releases of hazarous mixed or radiological waste at
3 the plant 1 pad, or anywhere else on site.
4 As of today, we are requiring DOE to
5 submit a written explanation of these events to the
6 State of Ohio. Any further action will depend on Ohio
7 EPA's review of this action, along with the review of
8 the Ohio Attorney General's Office.
9 As usual, we are here tonight to
10 answer your questions. With me, I have Mike Starkey,
11 who works on this project and is also the Remedial
12 Project Manager for the Paddy's Run Road site, which
13 is located just to the south of the Fernald site. We
14 will be available to answer your questions throughout
15 the evening. Thank you very much.
16 MR. MICHAELSON: Lisa has her choice
17 of using the microphone or not, but I think she's just
18 going to speak from this, is that correct? She has
19 the flu. So bear with her, and she can't speak as
20 loudly as she might like.
21 MS. CRAWFORD: My name is Lisa
22 Crawford, and I'm the spokesperson for the Fernald
23 Residents for Environmental Safety and Health. I have
24 six remedial investigation issues that I would like to

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comment about tonight. The first one is the compliance agreement between the US EPA and the Department of Energy. And I think Ohio EPA fits in there somewhere.

I'm very distressed about this. It's my understanding that it's been laying on somebody's desk up in Washington DC since the 20th of December. I received a letter from them, being the DOE up in DC, and basically they tell me there's really not a hold up. So my big question is where is this thing and why can't we get moving with it? Again, we feel like there's some dragging of the feet here.

The second thing I want to address is the delay in the notification to the residents. You've informed us tonight that there's some on site wells and off site wells that are contaminated and some contamination underneath buildings, and then this RCRA release in the buildings, damage on the on site buildiings.

Some of it has been released to the residents very quickly, and other times months or even weeks. I just want to tell you all that it discourages us when there's a time lapse when the people are notified.

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1 Our suggestion to you is to notify
2 people as quickly as possible. I mean that day other
3 very next day, and not wait until these kind of
4 meetings come up, or until we've got approval out of
5 Washington, DC, and those kinds of things. It's very
6 important -- We feel like we need to be told
7 immediately.
8 One of the other things I have is the
9 Environmental Monitoring Report for 1988. I have a
10 copy of it; nobody else does. I think it's very
11 important that you supply these people with a copy of
12 the EMR.
13 For God's sake, I'm tired of being
14 called and asked for a copy of this thing that is
15 thick, and I don't want to make people copies, and I
16 don't think I should have to make people copies.
17 Again, I asked that question of Mr. Whitfield in
18 Washington. He told me that they are waiting on a
19 companion guide.
20 My suggestion to them and to this
21 Department of Energy on site is the hell with the
22 companion guide. Give the people the EMR, and when
23 the companion guide gets done, then give that to them,
24 and when the rest of the stuff is done, you can give

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1 that to them.

2 But we cannot continue to hold on to a

3 document because two other documents are not ready to

4 go with that document. So I'd like you to provide

5 these people with an EMR as soon as possible, mainly

6 so they'll leave me alone.

7 The next thing I have is -- I think it

8 was Mr. Davis who was talking about Mr. Reefschneider

9 is now gone, and the new head has not been announced

10 for over here.

11 I have a newspaper clipping right here

12 that tells me that Mr. Gerald Westerbeck will be our

13 next DOE site manager. I'd like for Mr. Davis to

14 explain this to me sometime this evening. I mean

15 you're telling me we don't have a new site manager,

16 and I've got a newspaper clipping telling me we do

17 have a new site manager.

18 One of the other things, the

19 Environmental Impact Statement, I want to concur with

20 Catherine McCord and say I think it's a big waste of

21 time, energy and money. I think the RI/FS should

22 cover the Environmental Impact Statement.

23 The other thing is, about three or

24 four years ago, FRESH participated in scoping hearing

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on the EIS, and we wasted a whole Labor Day weekend. We prepared testimony; we came to a meeting; we spoke.

It's my understanding that's all going to be thrown out, and we're going to start over again. I have a real problem with that. The money you're going to spend on Environmental Impact Statement, I think could be better utilized in moving forward with the RI/FS and moving ahead with cleanup of the site.

The last thing I want to announce is FRESH will hold its monthly meeting this coming Thursday at 7:30 at the church in Ross, the Vance Presbyterian Church.

And the Department of Energy will be there to talk to us about the National Environmental Policy Act, or of NEPA, Mr. Avel spoke about a few minutes ago that deals with the Environmental Impact Statement law. Anybody is welcome to attend this meeting. It starts at 7:30. We try to wrap up early. We don't always get to do that.

MR. MICHAELSON: Where is it, Lisa?

MS. CRAWFORD: At the Vance Presbyterian Church in Ross right behind the antique mall. The last thing I would like to say to you, when I spoke with Mr. Whitfield up in Washington DC --

1 after seven phone calls up there, I finally got to
2 talk with somebody -- I encouraged him that I felt it
3 would be very encouraging for somebody in a three-piece
4 suit to come down here from Washington DC and sit
5 through some of these meetings and talk to some of
6 these people that live in this community.
7 And he assured me that he would have
8 somebody here tonight. And I'd like to know if there
9 is anybody in this room representing the Department of
10 energy from Washington, DC, not from this site. I
11 didn't think there would be. Thank you.
12 (Applause.)
13 MR. MICHAELSON: Thank you. As I
14 noted before, this is a departure from past meetings,
15 having other presentations by other people. I hope
16 people have found it useful and interesting and not at
17 all a waste of time.
18 It has carried us a little bit longer,
19 but if this is to be a public meeting and a public
20 forum, it seems is to me that this has been a very
21 important way fo getting a lot of information out to a
22 lot of people and having the dialogue go more than one
23 direction.
24 If you will look on your agenda, we

now have a presentation to be made by Pat Hopper regarding the removal actions. He's WMCO's Removal Action Project Manager.

MR. HOPPER: Good evening. Tonight, I'm going to give you an update on four near term cleanup actions that are in progress at the FMPC. These actions are called removal actions.

First, we need to revisit two important definitions before we go any further. A removal action is a near term cleanup action that is initiated prior to the final action to reduce hazards or potential hazards which may, if left alone, increase in severity. An Engineering Evaluation/Cost Analysis, or EE/CA, document is a determination of the appropriate solution to fix the near term problem.

The waste pit storm water runoff control removal action will collect contaminated storm water from the waste pit area, reducing the potential contamination of Paddy's Run.

This project remains on schedule, and the analysis of alternatives document, or EE/CA, is nearing completion. This document will be available for regulatory agency and public review in May of this year.

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1 The south plume removal action will
2 control the contamination found in the ground water
3 directly south of the FMPC. This project remains on
4 schedule, and the analysis of alternatives document,
5 or the EE/CA, is also nearing completion. This
6 document will be available in April of this year.
7 The contaminated water beneath FMPC
8 buildings is another removal action which addresses
9 the removal and treatment of contaminated water found
10 in pockets in the clay above the auquifer.
11 Since November, three pumping systems
12 have been installed in plant 6, and greater than 5,000
13 gallons of water have been removed and treated at the
14 plant's waste water treatment facilities.
15 Pumping will continue until the
16 contamination is eliminated. The ongoing site
17 investigation has also recently identified two
18 additional buildings that have pockets of water
19 beneath them, plant 9 and plant 2/3.
20 We are currently working with both the
21 US and Ohio EPA to determine the appropriate actions
22 to take. Got a problem with the lights? Must be
23 revolutionary.
24 Several key activities related to the

1 K-65 silos have been completed or are in progress
2 since the last meeting. An independent structural
3 analysis of the silos' integrity has been completed by
4 engineers from Bechtel Nationl, Incorporated.
5 The independent risk assessments of a
6 possible dome failure is being performed by the
7 University of Cincinnati and is progressing on
8 schedule. The analysis of alternatives for a removal
9 action has been initiated, and plans for resampling of
10 the silo contents have been evaluated.
11 The conclusions of the independent
12 structural analysis basically confirmed the previous
13 evaluation performed by Camargo Associates. Bechtel
14 obtained concrete samples from the empty silo, silo
15 number 4, and performed testing to determine
16 engineering properties.
17 Based on this data and the structural
18 calculations, the following conclusions were drawn:
19 While the domes are not in immediate danger of
20 collapsing, the exact remaining life cannot be
21 precisely calculated; the calculations did show,
22 however, that the domes are susceptible to collapse if
23 directly hit by a tornado; the calculations also
24 confirmed that, in the event of removal of the

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contents, that the silo contents and the surrounding earthen berms must be removed simultaneously. These are important factors in evaluating proper solutions for a removal action.

The probability of a tornado hitting the silos, as well as other possible causes of failure, such as an earth quake or concrete fatigue, are being calculated by the University of Cincinnati.

Approximately 30 failure scenarios are being evaluated and assessed for risk. Both the probability of failure and the resulting consequences on public health and the environment are being evaluated.

The results of these studies will be used as they become available to develop and analyze alternative removal actions. The final report is scheduled for regulatory agency and public review in August of this year.

While we're talking about the K-65 silos, I'd also like to update you on the plans for resampling the silo contents. Resampling of the silo contents is necessary since the sampling efforts to date have only been partially successful.

We need to get samples the full depth

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of the silos. We did not get samples from both the top and bottom of the silo contents as we anticipated.

Modifications to the sampling device are necessary to insure completion of the sampling in a safe manner. Resampling the silos will provide additional quantities of sample for laboratory analysis, and will make sure that we have an adequate representation of the total silo contents. This information is important in the proper selection of any remedial action.

To help insure a successful resampling effort, a team of sampling experts have been assembled to enhance the sampling techniques used to date and to develop the best approach to resampling. Members of this team have been involved in complicated sampling efforts throughout the world.

The recommended sampling plan will be finalized this month. All of the previously obtained samples are currently being analyzed. This data will provide some of the needed information.

To aid in our resampling effort, a special miniature camera will be used to closely inspect the silo contents. This may help tell us why the previous sampling was only partially successful

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1 and may aid us in determining the condition of the
2 silo contents.
3 Modifications to the sampling device
4 are proposed. A new vibracore sampler, which has been
5 used successfully in other applications, is being
6 purchased. Consultation with the inventor of this
7 device has provided additional assurance of the
8 success of the resampling.
9 In addition to resampling with the
10 vibracore, a backup plan is being prepared using an
11 alternate sampling device in the event the vibracore
12 is not successful. Resampling is expected to be
13 complete in June of this year.
14 In summary, the technical difficulties
15 associated with sampling the silos, such as moisture
16 content, the depth of the materials, material
17 stratification, inadequate work space and worker
18 exposure limitations make the resampling a real
19 technical challenge.
20 We feel confident that the resampling
21 work plan that has been developed will give us the
22 samples we need, and that we can meet the schedule for
23 providing data to the feasibility study process.
24 Thank you.

MR. MICHAELSON: We might as well leave the lights where we are since we have one more up. So far, we're right on schedule, although -- even though we started a couple minutes late, which I think is good news.

We have just one more presentation, which will be the longest one of the night, and although again the focus is on new information, and that will be offered by Bob Galbraith, the senior geologist on the RI/FS. And here's Bob.

MR. GALBRAITH: Thank you, Lewis. My super laser here. I get to shoot at everybody. It does work. Okay. Good evening, ladies and gentlemen. I'm going to present a brief overview of the feasibility study, and then a much more longer overview of what we've been doing in the remedial investigation since our last public meeting.

And since I've got limited time and a lot to talk about, let's get right into it. The feasibility study, as was explained to you in great length last public meeting, contains a variety of activities which go in a logical sequence.

And at this point all the feasibility studies for all operable units, all five units, have

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been initiated. We're doing the initial screening of alternatives; we're doing the baseline risk assessment, and we're starting or in the middle of the writing the remedial investigation reports for each of these operable units.

And you'll be getting information on the results of some of that work probably in the next public meeting. And with that, I'm going to move on to the remedial investigation.

Remedial investigation is really the things on site, the drilling operations, the sampling operations, the activities that you see our crews doing. And tonight I'm going to focus in on three particular areas where we've made some progress in the field activities.

One is the suspect areas investigation, then the production area investigation, and then lastly I'll talk about some of our findings in the regional auquifer.

I'm going to use two screens here, if the other slide projector is on. Now, it's coming to light. I'll get the backup one here. Okay. The photograph on the right --

MR. MICHAELSON: Excuse me, Bob. I

1 think we're going to have to get those lights.

2 MR. GALBRAITH: That would help if we

3 could turn off the first bank of lights here. This is

4 an air photograph that shows the production area,

5 which is basically the white area here in the center

6 part of the photograph.

7 And then south of that are some of the

8 suspect areas that we've been looking at. And then

9 further to the south, down in this area (indicating)

10 is the south plume.

11 Here's the Great Miami River flowing

12 down this way. Miamitown is at the bottom of the --

13 not Miamitown -- New Baltimore is at the bottom of the

14 photograph here. Ross is in the northeast corner of

15 the photograph, and here's the site in the middle.

16 The suspect areas are areas in which

17 we suspect that something happened. We don't know for

18 sure, but there's a suspicioun. And that suspiscion

19 is based on interviewing long time employees,

20 reviewing records of activities that have occurred

21 over the years at the site, and also looking at a

22 series of historic air photographs.

23 And many of the investigations that we

24 do are based on activities that showed up on 1954 air

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photograph down here in what we call the south field area in the south part of the FMPC.

The other suspect areas are the possibility of a buried vault around the flag poles in front of the administration buildings, some pits where we know laboratory equipment was buried at one time, some rubble piles adjacent to the K-65 silos, and the rafinate line that went between the K-65 silos and the production area, the fire training area up here, and an area on the northeast of the production area where the ground was disturbed during construction.

We're not sure exactly what was going on there. It may just have been part of the activities for constructing the site. So these are the type of areas we had for suspect areas.

To look at these, since we knew there were burial activities or places where some metal container could be, we looked in the areas first with geophysical methods, and those consisted principally of ground magnetic surveys and ground gravity surveys.

Since the radioactive materials are very dense, and drums and containers are dense, we could look for differences in either the magnetic field at these sites or differences from normal in the

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1 gravity field at these sites and find what we call
2 anomalies. These are unusual readings that don't fit
3 with normal readings.
4 We did these surveys in the entire
5 area in front of the administration building all along
6 the parking lot to look for the buried vault that may
7 be out there, and we didn't find a thing. There was
8 nothing to lead us to think there was anything buried
9 there and no reason to proceed with any investigation
10 there.
11 We also look at an area right in here
12 where there's a clearing in the trees where it was
13 thought there might be some trenches that went
14 north-south back in 1954.
15 We had a very small anomaly, something
16 that could just be a piece of scrap metal just under
17 the ground surface. We dug a trench perpendicular to
18 the direction of the suspected trench down to a depth
19 of 8 feet and a length of about 50, 60 feet long and
20 didn't find any evidence either of metal, for the
21 anomaly, or of any trenching there in the past. So
22 it's another area that was then written off as not
23 having need for further investigation.
24 We do have, in the very northeast

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1 corner, two very small magnetic anomalies, and we'll
2 be going out with hand tools, since this is right in
3 the very dense part of the southern edge of the trees
4 there, and making some excavations in there to see if
5 we can come up with the reason for the magnetic
6 anomalies.
7 Adjacent to the laboratory, right in
8 this area (indicating), we suspected that there were
9 some drums buried way back in the early days of
10 operation. We did a magnetic survey over that area,
11 and a gravity survey, to see if we could find drums.
12 We couldn't find any.
13 We did have a small magnetic anomaly.
14 So we dug a series of trenches there to a depth of 12
15 feet over about 100 foot long lengths. And we found
16 one piece of steel cable that had come from a crane.
17 And that was apparently the reason for the magnetic
18 anomaly. We didn't find any evidence of any burial
19 drums or any drums in that area.
20 Similarly, we had done trenching close
21 to the K-65 silos, next to the rafinate line down here
22 in the south field area. And I'll come back to the
23 south field area later on.
24 The south field area is a large area

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in which there was some construction rubble disposed of early in the operation of the facility. And we knew from the photographs in 1954 the size of the area that was where the burial or the dumping of the material went along. But we had no idea what the thickness of the material might be; we didn't know how deep the burial went.

So we put a series of six tranches into this field, and we trenched our way through the fill material. And we found that the fill was fairly uniformly about five feet thick.

So there was only about one truckload dumped and then spread, and one truckload rather than truckload after truckload making a big pile in that area.

And also our field sampling methods indicated very little possibility that this is a significant source area for uranium or other organics. And we're now starting to get some of the laboratory results back. And indeed the laboratory results are confirming that there's just very low levels, tens of parts per million uranium, in there.

So that's the overview of the trenching program and the geophysical program. We

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still have some borings remaining to do in this area. We have the waste water treatment area, which is over here on the east side of the facility, and we have the laboratory equipment burial pits, which are right along there. This thing is amazingly precise, if I wasn't so nervous.

And then we have the south field area 1, which is the area right down here off the corner here where there are three pits we'll be putting borings into. We'll be completing all these in the next few weeks, next two weeks probably.

To move along to the production area, and this is a map that we showed you last time. It's updated a little bit. The scale over here goes from 1 part per billion, that's part per billion, average level in uranium down to 100,000 parts per billion uranium in perched ground water. This is the water system that's in the clay, in the till, above the water table. It's not part of the auquifer.

And we've had to add this bottommost dot, this greater than 100,000 level, because of this point which was in the newspaper a week or so ago where we got 669,000 parts per billion, or tonight to make my tongue work easier, we'll just call it 700,000

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1 parts per billion uranium in one boring right here.

2 The important thing to note here is

3 that we put the same number of borings in this area as

4 we have, say in this area over here, but there's only

5 three or four that have been completed as piezometers.

6 This map shows the piezometers where

7 we found some ground water in the till. We installed

8 a small well, two-inch PVC, a well screen and casing,

9 in order to take water samples. And for the most part,

10 there isn't much ground water in this area.

11 And when we examined the soil analysis

12 from this boring, as well as the adjacent borings

13 along the south side of plant 9, it seems fairly clear

14 at this point that what we're looking at is an

15 overflow of water from a sump that was near the ground

16 surface, and then a spreading of water underneath the

17 pavement, but on top of the soil. And that's soaked

18 downward.

19 So we put together a program to put in

20 additional borings right in this area to try and

21 define the lateral extent of the contamination in that

22 area and confirm whether or not it's principally a

23 soils problem, or indeed there may be some ground

24 water involved. Right now, my feelings are it's more

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likely a soils problem with very little ground water involved.

The plant 6 data you've seen before. This is where the wells that Pat talked about are pumping water from this boring, this boring and this one down here.

The real area of interest is the plant 2/3 area and the rafinate plant area. And I don't expect you to distinguish all the colors on this map, but you can see clearly this is where we have more orange, yellow and red dots, which are the highest values here, here and here (indicating.) The greater than 100, greater than 1,000, greater than 10,000 parts per billion uranium are in this area.

And we're in the process now of putting together various maps and data packages of the water table elevation map, average of uranium in perched water, which this is a representation of, and uranium in soil at five different depths maps, in order to figure out what to do next and how to structure a removal action for this area.

In part in this conversation tonight, I want to bring you into how we go about putting together the jigsaw puzzle that a remedial

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1 investigation is. And each one of these spots
2 represents a piece in the puzzle. And you can see we
3 often have big gaps between the pieces.
4 We use these various types of
5 information, the water table elevations; we use the
6 concentrations of materials in water, whether it be
7 uranium or some other chemical, and then we also use
8 the concentration of material in the soils as parts of
9 the puzzle to use in our investigation just like you
10 would use, not just the shape of the piece, but you
11 would also use the color and the pattern of the piece.
12 In plant 2/3, as I started to talk
13 about, is an area where we expected to find some
14 contamination. We didn't know what the area would be
15 or how much it would be. But it was a place where
16 soluble forms of uranium were used, and so that's a
17 likely candidate for finding materials.
18 That's why there are so many more
19 borings per square foot in this area because there
20 were acid brick floors where acids did encounter the
21 floor, were put on the floor.
22 We did have the presence of floor
23 drains and sumps. And these are things that could
24 leak over time. These are things that are out of

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1 sight and generally out of the mind in terms of
2 maintenance and testing. So these are candidates,
3 especially in old plants, that often leak. We also
4 had the presence of large above ground storage tanks
5 So all of these things combined led us
6 to plan more borings in here. And all the borings you
7 see on here were planned initially. They weren't
8 based on any findings so far.
9 So the findings of high levels of
10 uranium in perched ground water that is present is
11 really a confirmation of our suspicion from the
12 initial part.
13 And the possible presence of other
14 radionuclides and chemicals in perched ground water
15 came out of knowing what was in the various tanks on
16 the north of plant 2/3 and what was the history of
17 operations on these various things.
18 So we start with a suspicion of what
19 we're going to get. We do our investigation. We see
20 whether or not our suspicions held up. And then we
21 look at the significance of them. We did find things
22 where it's expected, which is this area basically.
23 And this is a little unexpected. It
24 goes a little farther up here until we went back and

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1 looked at some of the materials that were in above
2 ground tanks here. And they turned out to be soluble
3 uranium forms stored there at one time, but not
4 currently. And then we looked at the data in the
5 other facilities around here.
6 There are some areas where we still
7 have to do further investigation. There's some yellow
8 things down here. So we'll be putting more borings in
9 out beyond these at some time.
10 And there are some yellow up here.
11 This is around plant 1 pad. And this area, you can
12 see here we do have a little bit of uranium that has
13 washed off that pad and has been collected in these
14 borings. So we'll be, in our data analysis, we'll be
15 recommending further work to define the extent of
16 these things.
17 Okay. Moving on, plant 9, as I guess
18 I've talked about that fairly much now here, we did
19 expect to find some uranium here because there is a
20 large sump, and there are some outside above ground
21 tanks out in this area at the south end of the plant.
22 So we put the borings in there. We
23 got higher levels than we expected. But as I say, it
24 doesn't look like it's a ground water problem. It's

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more of a soils contamination problem, much less mobile and, therefore, probably easier to deal with. Okay. We'll move on.

We moved to the south plume wells, and you've seen this information in the newspapers. And this is the south plume map that we showed in the last public meeting.

And the newspapers contain new information from well 2125, 3125, where we got 66 and 86 parts per billion. The wells are located right here, this yellow dot right adjacent to Paddy's Run. It's where Paddy's Run Creek, itself, comes the closest to Paddy's Run Road down here between Willy Road and New Haven Road to the south.

And we installed these wells based on predictions from our computer model. We have a computer model, which is a use of the computer and some very fancy equations in that computer which try and allow us to predict how ground water is going to move in the model, based on what we know on data in wells further north up in this area (indicating) and also allows us to predict the ground water transport. That is, how fast radionuclides, or any contaminant for that fact, might be moving through the ground

1 water system.

2 Unfortunately, there are a lot of

3 variables that Mother Nature has in her bag of tricks

4 to influence the flow rate of things, and the movement

5 of contaminants in ground water.

6 So what we do is we refine the model

7 and calibrate it as best we can to the known

8 information we have, say up in this area, use that

9 information to predict where the uranium may be moving

10 down in this area, and then we have to put in a few

11 wells to confirm whether or not the prediction is

12 accurate.

13 And where the prediction is not quite

14 accurate, we have to go back to the model and change a

15 few numbers. And where the prediction's very accurate,

16 we pat ourselves on the back and strut around quite a

17 bit, and say, aha.

18 Then we got a real lot of confidence

19 to put the next hole in and cross our fingers that

20 we're going to be right again. Very scientific

21 process. Well, in this case -- Yeah.

22 UNIDENTIFIED SPEAKER: Show me where

23 those four wells are on the map.

24 MR. GALBRAITH: Sure. Actually the

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1 wells represented on the map, there's this well, 2125,
2 is that yellow dot right there (indicating.)
3 UNIDENTIFIED SPEAKER: Okay.
4 MR. GALBRAITH: And you can see these
5 wells out there between Paddy's Run Creek and Paddy's
6 Run Road. They're bright orange pipes sticking up out
7 of the ground right there.
8 The next two wells, and only one of
9 the two wells is depicted on this map, but it's 2128
10 where we have 8 parts per billion. That's the green
11 dot right here. And this is right on the north side
12 of the great big water tank that sits north of the
13 industry that's down here in this area along Paddy's
14 Run Road.
15 So this well has 8 parts per billion.
16 This well had 66 parts per billion. Now, our model
17 told us to expect somewhere on the order if 200 parts
18 per billion on this map.
19 So the model was predicting a little
20 bit high for that one, and the model also predicted
21 that we would get something on the order of 30 parts
22 per billion for the same, the well that's in this
23 location that's in the middle part of the auquifer.
24 It's deeper. And what we actually got was 86. So we

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1 hit a little low on this one, and we hit a little high
2 on this one.
3 So we'll adjust the model to
4 compensate for this because we were guessing in part
5 as to what the concentration had to be in order to get
6 the values in the pumping well, the industrial pumping
7 well that's here. And we have records for the last
8 eight or nine years.
9 So in order -- We knew what wells
10 there were. And in order to come up with a way to get
11 those values, we had to suppose some values in here.
12 And then we put the wells in to confirm our
13 supposition.
14 Let me just go ahead a second and show
15 you -- oops, the wrong way -- this is a diagram that
16 shows the model prediction. And the area we're
17 looking at is down in this corner right here where
18 Paddy's Run, the creek, comes closer to Paddy's Run
19 Road (indicating.)
20 And in order to get the values -- In
21 order for the model to predict the values we had in
22 this production well that's down here, we had to put
23 in values such as these 200 and 30 back up in here in
24 these two wells.

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1 Now, we found out what the numbers
2 really are. So we're adjusting the model accordingly
3 to better fit the way things really are from what our
4 predictions were to hopefully improve the predictions
5 on the rest of the model.
6 Now, you'll see that the model is
7 predicting that the southern end of the plume is
8 somewhere down in this area just north of New Haven
9 Road.
10 And probably early next week, a drill
11 rig will be moving onto this site down here to test to
12 see whether or not the model prediction is accurate at
13 this point.
14 Back in October, we showed different
15 models in the poster session that at that time the
16 data we had suggested that the plume might be further
17 to the south.
18 So our approach now is to put this
19 model -- or this well -- in at this location, do a
20 very quick analysis on the water from that well, and
21 see whether this version of the model more accurately
22 represents what's going on, or the October version --
23 I'm sorry -- yeah, the October version more accurately
24 represents what's going on, and then base our drilling

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1 program by either moving this way to get the center
2 part of the plume, or this way to get the leading edge
3 of the plume, depending on whether these numbers are
4 high or low. Again, it's part of this jigsaw puzzle
5 process that we have to go through.
6 I want to go back actually. Going
7 back to this map, I also want to talk about -- I think
8 we've done all this. We've talked about the model
9 showing its consistency and whatnot.
10 And now, each time we get data that
11 helps support the model, we gain confidence in the
12 model, or we understand better where the model is weak,
13 and we need to improve those parts of it. We either
14 do that with changing the numbers in the model or
15 drilling new wells to get better information.
16 The whole hope of this process is that,
17 by using a few wells and the computer model, we can
18 get to a resolution of where the problem really is out
19 in this area without having to go through the process
20 of drilling a lot of wells, which take much longer.
21 And also the model would allow us to
22 predict the impact of pumping from various places so
23 we can figure out the best way in terms of cost
24 effectiveness and getting the most plume out of the

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1 ground the quickest out in this area.

2 So the model will help us very much in

3 predicting what's the best way to get rid of things

4 once we've got it calibrated and we have a lot of

5 confidence in it. We've got all that covered.

6 The south field, and this is what

7 always confuses people; we have the south plume which

8 is the area from really Willy Road to the south, and

9 the south field, which is this northern area on this

10 map, which is really the south field that I talked

11 about earlier, the area where we did the trenching.

12 The south field was thought to be a

13 potential source for uranium out there. So we have a

14 series of wells that are installed around it. And in

15 the process -- oh, I've forgetten exactly when; maybe

16 it was before Christmas -- I heard about a well that

17 had an 850 micrograms per liter uranium.

18 Well, that's this orange spot that was

19 on the map in the last public meeting. This is the

20 well that produced that high value. This is well 2046,

21 and this is well 2045, which had a 300 value in here.

22 As I've said, this was an area we

23 expected uranium to occur, and these are the actual

24 values we've had in three samplings that were done in

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1 these three wells.

2 2045 is shown at 283 in January of '89,
3 then in May of '89 had 291, and in June of 1989, it
4 had 341. That's this location right here. So that
5 just shows a slightly increasing trend with time.

6 2046 is a little different animal. It
7 has a 309 parts per billion the first time, then 851
8 parts per billion, and then 232. So we've got a peak;
9 we've got a rise and then a fall in here.

10 So something different is happening in
11 the area of this well than is happening in the area of
12 that well. This is not the only well in which we have
13 strange things happening.

14 This is well 2049 and 3049, which are
15 located right in here (indicating.) And they show --
16 First, this is a hydrograph. This is showing time
17 across the bottom. These are the letters for the
18 months starting in January of 1988 and extending
19 through until August or July of 1989. We're seeing
20 water levels plotted against this side. This is the
21 elevation of the water table in just one well with
22 time.

23 So it shows here a rise in the water
24 table as we go through the Winter into Spring, a drop

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in the water table as we go through until December, and then a rise in the water table again.

And here in December, we had drilled a second well. We had drilled well 3049. So we now have two wells at this spot. It's showing the same pattern here except for this point.

This is somebody has misread a reading or something like that. We don't think that's a real reading, because this is matching the trend in the other well very nicely.

So you can see this is a cycle that goes up and down, and this cycle goes up and down like this because it rains in the late Fall. And in January, February, March, April, May, time frame, we get flow in Paddy's Run. And that flow sinks into the auquifer down below. And lo and behold, the water table rises as a result of that.

Summertime, Paddy's Run stops flowing, and the water table goes down again to this level. Then last year, we had a very wet Fall. And again in the January, February, March, April, May, June time frame -- actually peaked out in June -- we had the rising water table because ground water is entering the subsurface.

1 Well, there's something else going on
2 in this chart, and that's the yellow line, which is
3 the total uranium in parts per billion as plotted
4 against this scale on this side over here
5 (indicating.)
6 And you can see that we had a high
7 sample, oh, about 130 parts per billion, in the first
8 sampling of this well. And then in the next sampling,
9 and the one after that, and the one after that, we
10 actually had less than 10 parts per billion in here.
11 In the normal course of events, if
12 this was all the data we had had, we might have said
13 well, gee, something went wrong with this first sample
14 out here; the sampling crew didn't clean their
15 equipment properly, or they got the sample numbers
16 mixed up and the sample came from somewhere else, or
17 maybe the laboratory made a mistake, or any one of a
18 dozen possible things. We might have said well, gee,
19 that value is no good.
20 But what we have here is three values
21 that are low, a value that's high, and then we have
22 two more values which go high again. And it's
23 interesting that these high values occur at the same
24 time we've got high values in the water table.

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And when we looked at another set of information -- again, this is like looking at the shape of the water table -- or looking at the shape of the jigsaw puzzle -- is the distribution this way of uranium values.

And looking at the color of the jigsaw puzzle is maybe looking at information like this. If we look at the third piece, which is the pattern on the jigsaw puzzle, which is the direction in which ground water flows through this area, we find that the influence of Paddy's Run, the recharge of Paddy's Run in this area, causes the direction of ground water flow to change to the east for some of time, and to the southeast and to the south for other parts of the time, depending on where we are on this rise and fall in the water table.

So this is how we're putting the pictures together in order to come up with the answers for what's really going on here. It's very important because we might have overlooked this as an area that requires cleanup if we hadn't continued monitoring and noticed the relationship between these flows.

Okay. So we do have large value in well 2046, and it does seem to correlate with wet

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1 conditions. I showed a different well simply because
2 I had a longer record in that different well. But the
3 idea is that same for both of these locations.
4 And we had thought originally that the
5 local source would be the south field area because it
6 was an area where construction rubble was dumped in
7 the early part of the operations, and that could have
8 contained contaminated material.
9 And now, it looks like it has to be
10 more related to historic releases from Paddy's Run.
11 We do have a long stretch, east-west stretch, of
12 Paddy's Run in here where infiltration we know was
13 occurring, and that could be what we're seeing over
14 here.
15 One of the most interesting parts of
16 this, though, is it does raise a concern that there's
17 a similar plume that may be present to the east of the
18 storm water outfall ditch, and the storm water outfall
19 ditch is over here.
20 And if we go on to the next map, all I
21 want you to do is be aware of the purple symbols on
22 here, the location of the purple symbols on here.
23 We're proposing to DOE that we need more deeper wells
24 here to define the vetical extent of contamination at

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1 the site of well 2046 and at other sites in here.
2 We're also proposing another set of
3 wells here, a pair of wells in here, because, very
4 clearly, the plume that we're dealing is with
5 extremely narrow.
6 And we know this is connected down
7 here (indicating.) We know that we have uranium in
8 water up here. But we've got a gap in our information.
9 And this well here, we hope will fill in there.
10 But since we have this eastwardly flow
11 occurring when Paddy's Run is recharging and there's
12 lots of flow going into the aquifer, we're also
13 proposing a series of wells along the east side of the
14 outfall ditch because we now realize that, during part
15 of the year, the flow in this area is from west to
16 east; whereas, when we started the investigation, it
17 was assumed the boundary was up in here given the data
18 we had at that time, and that from here north,
19 everything went east; and from here south, everything
20 went to the south.
21 So we now know that, from here north,
22 things will always go to the east, Summer, Winter,
23 Fall; and here, they always go to the south. But in
24 this area, we got a transition; we get some confusion

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1 going on because of the influence of water coming into
2 the Paddy's Run. And sometimes we get flow to the
3 east; sometimes we get flow to the south; and
4 sometimes it's in between.
5 I'm now being kicked in the shins for
6 having talked too long. And being talked to death is
7 a horrible death. So we're finished with those slides.
8 This map also does show the additional wells we plan
9 to be putting in down in the southern tip of the south
10 plume. And this operation will be starting, as I say,
11 next week.
12 All of these diagrams are available in
13 the poster session in the back, and I'll be happy to
14 talk with any of you if you want further information.
15 Thank you.
16 MR. MICHAELSON: If you will bring the
17 lights up. One person actually started to clap for
18 you, Bob.
19 MR. GALBRAITH: I appreciate that.
20 MR. MICHAELSON: That's a good sign.
21 We're going to take a real short break here. Again,
22 there are 4X6 cards -- I'm not sure why we're getting
23 that all of a sudden; it must be my baritone voice.
24 There are the 4X6 cards. If you have

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1 questions that you'd rather submit written to be
2 answered tonight rather than answered from microphone --
3 asked from a microphone -- please go ahead and fill
4 those out. We prefer one question to a card. It's
5 easier.
6 And again, if you would hand them
7 during the break to either Graham Mitchell or
8 Catherine McCord, Ohio and US EPA's. We'd like to
9 keep this break to no more than 15 minutes, 10 if
10 possible, so that we can get back here and get started
11 as soon as possible. Thank you.
12 (Brief recess.)
13 MR. MICHAELSON: If I could get your
14 attention, please. Because we've tried something new
15 tonight, which was having some other people on the
16 agenda, such as Catherine McCord, Graham Mitchell and
17 Lisa Crawford, a number of issues and questions were
18 actually raised during this particular presentation,
19 all of them which were important, and which responses
20 were asked to them.
21 As a consequence, to try and take care
22 of some of those that we already know that are out
23 there right away, Mr. Davis is going to come up and
24 take just a couple of minutes to address those, some

1 of those issues that are raised, some of those
2 questions that were asked.
3 And I think Andy Avel has a couple
4 that he's going to address. We're going to keep that
5 real short and sweet, and then get into the rest of
6 the questions and answers. Mr. Davis.
7 MR. DAVIS: Two or three items I want
8 to touch on that Lisa raised in her remarks. The
9 federal facilities agreement, we're very anxious to
10 get that document signed as well.
11 My understanding is that there are
12 still some discussions going on among a lot of the
13 agencies at headquarters regarding some final language
14 in one of the sections of the document. And as soon
15 as that's resolved, we expect to get authorization and
16 various things to sign the document.
17 With respect to what we're doing in
18 terms of actual progress of work, we're proceeding
19 onward as if that document has already been signed in
20 terms of the action, taking the actions that are
21 identified in the FFA dealing with actions, proceeding
22 with the RI and the FS activities.
23 With respect to the new site manager,
24 in the article that appeared in the Wright Pat

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1 newspaper, I did want to comment on that. The
2 position that the site manager will have has been
3 elevated from what's called a Mary Clay position to a
4 senior executive service level.
5 And that's the government lingo. It
6 really means that's senior management level positions
7 within the government. Those positions require not
8 only selection by the particular agency involved, such
9 as Department of Energy, but also require the
10 individual to be approved for entrance into the senior
11 executive service by another federal organization,
12 called the Office of Personnel Management, which has
13 oversight of the personnel activities of all federal
14 agencies.
15 We have selected Mr. Westerbeck as the
16 candidate for, or as the person for the site manager's
17 position. What we are waiting on is approval from the
18 Office of Personnel Managment on acceptance into the
19 senior executive service. While we don't anticipate
20 any problems in that, it does take some time for that
21 process to occur.
22 So yes, from DOE's perspective, we
23 selected someone, but before the official announcement
24 is made by DOE, at this point we're waiting on the

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1 approval of Office of Personnel Management, and that
2 will go forward.
3 You mentioned some delays in
4 notifications. And I think we, over the last eight or
5 nine months that I've got some history, although I
6 won't be involved with it quite that long, we've had
7 some successes and some failures in that regard.
8 I think recently, I believe we've been
9 doing a pretty good job. As indicated earlier, if
10 there are times that you feel like we're not doing the
11 job that we need to be doing, give Andy or myself a
12 call and let us know.
13 For example, the information tonight
14 where it talked about the additional weight gains and
15 losses was information I received about 3:30 this
16 afternoon. Felt like this would be a good opportunity
17 to go ahead and provide that information to you
18 tonight.
19 I certainly agree with Lisa; we would
20 like to get the Environmental Monitoring Report out
21 for 1988 as soon as we can. And from the site office
22 perspective, as soon as we get the go ahead, we'll do
23 our best to get that out very, very quickly. But at
24 this point, again, I've not received authorization to

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1 release the document.

2 MS. CRAWFORD: I think it just clearly

3 shows, when you hold on to a document that long,

4 something that has a June 1989 date on the front of a

5 document, here it is February, 1990, I think it

6 clearly shows that there's a problem here. The daggone

7 thing was printed and is ready to go, and I don't

8 understand what the damn hold up is on it.

9 MR. DAVIS: The only answer I can

10 provide to that is the one we provided earlier; that

11 the reviews aren't completed.

12 MS. CRAWFORD: -- to provide me, and

13 Washington DC said the same exact thing. I don't

14 think -- It just clearly shows a lack of

15 responsibility. On my part, if we don't even have

16 1988 in February of 1990, when in the world are we

17 going to have 1989? In 1992 or what? It's just

18 ridiculous.

19 MR. DAVIS: And your concerns have

20 been conveyed by myself and several others at the site

21 office directly to headquarters. And I don't know

22 what else I can say on that particular issue.

23 There was one other that came up, and

24 I'll let Andy speak to that, on dealing with the

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1 Environmental Impact Statement. I think some
2 clarification to some of his earlier comments are
3 needed there. Andy.
4 MR. AVEL: Thanks, Bob. Too late now,
5 I got up. The EIS's are a source of confusion, but
6 three years ago, we did have a scoping meeting for the
7 EIS, the Environmental Impact Statement, that would
8 address the impacts on the environment for the site
9 restoration for the modernization of the site.
10 And now, three years later, we're
11 about to issue that document for public comment. So
12 within the next couple of months -- and I don't know
13 when -- the document will be made available to the
14 general public.
15 And a meeting will be held to go over
16 what the document contains, and comments will be taken,
17 and also the document will be out, I think, 45 days
18 for you to read, to comment on.
19 And then we'll take those comments
20 back and develop the final Environmental Impact
21 Statement based on comments that we've received. But
22 that is the earlier EIS that was done three years ago.
23 It will be completed. Again, the other EIS that we,
24 in the next -- just --

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UNIDENTIFIED SPEAKER: What's EIS?

MR. AVEL: Environmental Impact Statement. It's a document that's required by the National Environment Policy Act that evaluates the impacts of a major federal action on the environment.

And again, the next couple of weeks, maybe month and a half, we'll be notifying you of another meeting. And that will be an EIS scoping meeting for the EIS to address the site cleanup. And I think that explains -- that will be the start of the EIS for the site cleanup.

But just to summarize, the first EIS will be completed, and you should see a draft of it within the next couple months. Second EIS for the cleanup, we'll kick that process off in the next couple weeks.

MS. CRAWFORD: The first one deals with modernization, and the second one deals with the cleanup?

MR. AVEL: That's right.

MS. CRAWFORD: Why are we doing an EIS; why do we need an EIS when we're doing an RI/FS to address the cleanup? That's the confusing part to everybody.

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1 MR. AVEL: The reason we're doing
2 these two documents is that we're complying with two
3 laws. NEPA, or the National Environmental Policy Act,
4 requires that a federal agency, when it's getting
5 ready to do a major federal action, that they do an
6 Environmental Impact Statement.
7 CERCLA, the cleanup law, it has the
8 process which is known at the RI/FS process. Now,
9 you've heard Catherine say that EPA feels that the
10 RI/FS process satisfies all the requirements that NEPA
11 puts forth, the EIS law.
12 The Department of Energy feels
13 differently; that there are requirements in NEPA that
14 are not met by the RI/FS process. I can go into some
15 of those if you'd like. But I think that's the bottom
16 line.
17 MS. MCCORD: I guess the big factor is
18 probably participation. US EPA, and we're supported
19 in this position by the US Department of Justice, is
20 that, says that the CERCLA, or Superfund law, includes
21 a process which would parallel or meet the
22 requirements of the National Environmental Policy Act
23 so that we don't have to specifically follow that NEPA
24 or Environmental Impact Statement process.

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1 You have to go back to what the
2 purpose of the Environmental Impact Statement is.
3 It's for public -- it's for evaluation of the action
4 that the government wants to take, on whatever project
5 this is, and to allow the public to participate.
6 So here again, it's US EPA's position
7 that the public participates in the remedial process
8 through this -- through their commenting on the
9 proposed plan once a remedy has been selected for the
10 site. And we do have support of the Department of
11 Justice on that point.
12 To be fair to DOE, they are looking to
13 an organization, a government organization, called a
14 Council For Environmental Quality, CEQ, which is the
15 institution granted the authority to administer this
16 NEPA, or National Environmental Policy Act.
17 And CEQ supports DOE's position that
18 they have to do the Environmental Impact Statements.
19 Well, of course, that's the main reason for their
20 organization, and I can understand why they have that
21 position.
22 But we think the attorneys in the
23 Department of Justice, which represents US Government,
24 do support our position. So I would suggest that, if

1 you have got comments on DOE's expenditure of funds in
2 this, that you write the Department of Energy; you
3 write your congressman, and you provide written
4 comments at that scoping meeting that it's not
5 necessary to do any EIS, and you don't want government
6 funds used for such a document.
7 MR. MICHAELSON: Okay. Great.
8 Getting to hear from all the sides on this tonight. I
9 believe that we're going to go to the question and
10 answer period now.
11 And we do have the microphones up on
12 here and here (indicating), which I know a lot of
13 people don't like to use them. However, it's really
14 hard for people to hear your questions unless you do
15 speak from those.
16 We did, in talking with this gentleman
17 here -- I think it's Davidson -- has to get himself
18 and some students that came up with him. And so he
19 asked if he could be allowed to go first, Dr. W.A.S.,
20 and he's going to take a few minutes.
21 MR. DAVIDSON: Thank you. I feel kind
22 of awkward. I'm going to just turn around this way a
23 little bit more. I guess you can hear me. My name is
24 Jerry W.A.S. Davidson. They call me Dr. W.A.S.

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1 I'm the executive director and founder
2 of an unusual group called Water, Air, Soil, better
3 known as the W.A.S., a new super group that's coming
4 along.
5 We are political neutrals, and we have --
6 we do not ask for any money or donations, which is
7 unusual. So you don't have to worry about W.A.S as
8 another group asking for money. We do not do that.
9 We don't even accept donations.
10 What we're trying to do is use the
11 Great Miami River basin as the model in this area for
12 the Ohio River basin. We're trying to say to
13 Presdient Bush -- and we're going to be staying to
14 President Bush and the Congress, preparing a video --
15 that we would like to use one of the most miserable of
16 rivers, the Great Miami River, as the river where we
17 stop all forms of pollution. Okay. And that includes
18 Fernald and their problem, along with a lot of other
19 things. And it includes the farmers with their nonpoint
20 pollution.
21 Now also, I'd like to say that we have
22 a special project called Zolach. I'm presently
23 organizing University of Cincinnati and Northern
24 Kentucky University into this new W.A.S. system where

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1 we're going to try to get students and faculty
2 interested in participating in the environmental
3 problems that we have in this area, in other words,
4 what are the highest environmental priorities of the
5 area, and we're going to try to do something about it.
6 In the case of Fernald, we have a
7 project called Zolach. Zolach is an objective group,
8 and what we're going to try to do there again -- we
9 have no vested interest.
10 You've got to remember where we stand
11 on this thing, no vested interest. We're not trying
12 to get a consulting fee out of these people. We're
13 not accepting anything. It's free thought trying to
14 solve problems objectively, pure science and fact.
15 That's real important because a lot of
16 these people are carrying baggage. They have vested
17 interest, and what they're trying to do, they're
18 trying to sell you something, or they're trying to
19 make some money on these things. And some of them
20 deserve to have some money.
21 If you're interested in objectivity,
22 you gravitate to W.A.S and the Zolach project. And
23 here's what Zolach says so far. The first stage --
24 you can call this one if you want -- we're saying what

1 you should do at Fernald is (one) you should start
2 with the hottest material you've got at the silos, not
3 study, study study.
4 There's too much study, study, study.
5 I mean, you've got to have study, study. Too much red
6 tape. We say look, start encapsulating, right now,
7 those silos. Encapsulate above the ground. Get it --
8 and let's get it away from the environment. Let's put
9 it under roof.
10 But let's do it and keep it in place
11 right here at Fernald. Let's keep the problems at
12 Fernald on Fernald for right now. But let's get them
13 out of the weathering, out of the ground water.
14 So we want to encapsulate; we want to
15 reentomb the silos. Okay. Then what we want to do,
16 we want to rate from 1 to 10 the priorities. We start
17 with the hottest priority, the silos, encapsulate them
18 and get them above ground, get them under cover.
19 Don't wait for the damn domes to fall.
20 That's ridiculous. This is the common sense approach.
21 And they've got a problem, too, then encapsulte, pump,
22 do whatever you've got to do to.
23 Treat it, but do it now. We should be --
24 they should be giving us a presentation of how many

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1 hundreds of thousands of gallons they have pumped out
2 each day, and how much they have treated.
3 That's what -- In other words, you've
4 got to have immediate action, and we want that done
5 now. We keep study, study, study. Meanwhile, the
6 cancer spreads, spreads. Each and every day, it
7 spreads and spreads and spreads.
8 You've got to take care of the hottest
9 stuff first. You've got to get it out of the
10 environment. You've got to encapsulate, keep it on
11 site, and above ground, and covered up.
12 So this is the type of thinking that
13 we're trying to get crystal clear persuation, if you
14 want to call it that. We think it makes sense. If
15 you don't like our ideas, you come to us and tell us
16 what's a better idea.
17 But let's work together. W.A.S. is
18 objective. We're political neutals, and we like the
19 opportunity. I'm going to leave a little literature
20 out here if you're interested in helping us clean up
21 the Great Miami River.
22 We've got to stop pollution somewhere. Did
23 you ever think about where we're going to stop it?
24 I'm talking about water, air and soil pollution.

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1 Great Miami River. It's now and in the future, and
2 we're going to try to do something about it, and we
3 want you to work with us. And thank you.
4 (Applause.)
5 MR. MICHAELSON: Okay. Thank you, Dr.
6 W.A.S. I saw someone raising their hand in the
7 audience. Is that because you prefer not to come to
8 the microphone.
9 UNIDENTIFIED SPEAKER: I don't mind.
10 MR. MICHAELSON: If you don't mind, it
11 saves time because then we don't have to repeat
12 questions.
13 UNIDENTIFIED SPEAKER: The DOE's
14 February 15th media advisory on the leaking waste
15 drums that are covered by RCRA refers to a waste
16 packaging operation for the 15,000 drums that were on
17 pad 1.
18 And Mr. Davis opened the meeting
19 tonight by referring to that, mentioned that the drums
20 were being moved from pad 1 because they were not
21 appropriate storage sites.
22 He spoke of the weight and the volume,
23 gains and losses, which indicated leakage and
24 contamination, and that it was a matter of great

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1 concern.

2 I'm particularly interested in the

3 time line for this operation. I heard six weeks

4 mentioned. I'm not sure if you were referring to the

5 amount of time it would take to move the drums or to

6 repackage.

7 I'm interested in the technology being

8 used and the primary contractor involved, and I'd like

9 to know if you would provide the public with a written

10 plan for this operation.

11 MR. MICHAELSON: Okay. I think that

12 would be your question, Andy. And I think there were

13 two actually sets of repackaging operations going on;

14 is that correct?

15 MR. AVEL: Yes.

16 UNIDENTIFIED SPEAKER: Do you need any

17 help with that question, if you'd like?

18 MR. AVEL: First of all, the drums

19 that were mentioned in the news story, there are 740.

20 And they are mixed waste. And that mixed waste means

21 that they are RCRA, or hazardous waste, mixed with low

22 level radioactive waste.

23 All but six of those drums have been

24 over-packed. And when you talk about the technology,

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1 what we have done is just picked the drums up, the
2 existing drums, and placed them in another larger drum,
3 sealed them, and then taken them to a warehouse that
4 is constructed and permitted by the State for storage
5 of that type of waste. The prime contractor is
6 Westinghouse. Did I answer all of the --
7 MR. MICHAELSON: So for that
8 particular operation, it's all done but six?
9 MR. AVEL: All done by six, and our
10 plans are that we hope to get those six drums
11 completed tommorrow.
12 MR. MICHAELSON: You were talking
13 about a six-week time frame.
14 UNIDENTIFIED SPEAKER: Yeah.
15 MR. AVEL: There are 212 -- is that
16 right -- 212 drums of thorium, which are currently
17 being stored outdoors, and they are in drums that are
18 in various conditions or various stages of
19 deterioration.
20 We started -- was it Friday, Joe -- we
21 started moving these drums from the outdoor storage
22 facility indoors, placing them in new containers,
23 which are essentially metal boxes that hold up to --
24 Joe, how many?

1 MR. GRUMSKI: Six.

2 MR. AVEL: -- up to six barrels. And

3 they're placed in the boxes. And, Joe, what do we do

4 with them?

5 MR. GRUMSKI: They'll be stored in a

6 warehouse, all that we have on site.

7 MR. AVEL: Then they'll be stored in a

8 warehouse that's designed to hold this thorium waste.

9 Again, the prime contractor is Westinghouse. The

10 technology deals -- that deals with this -- stems from

11 robotics to standard packaging procedures.

12 We have a fairly elaborate setup that

13 includes a shielded forklift, fork truck, that the

14 person inside receives virtually no dose from the

15 thorium. He goes outside, picks the material up,

16 brings it in and then places it in a -- in the box.

17 And in a case that a drum is so

18 deteriorated that it will fall apart when we pick it

19 up, we have a special scoop attachment to pick those

20 drums up.

21 The schedule, well, we started on

22 Friday. We've got three -- Did we get three or four

23 in the boxes today?

24 UNIDENTIFIED SPEAKER: Four.

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MR. AVEL: Four, so there's a total of four as of the close of business today. So we're looking at maybe two drums per day. So we're talking about 106 days maybe.

And I need to let you know that the drums that they've picked up so far are probably in the best condition. We haven't gotten to some that are pretty badly deteriorated.

MR. MICHAELSON: Does that answer your question that there's a distinction between two different sets of drums and on two different schedules.

UNIDENTIFIED SPEAKER: Yes, it answers all but just one little part of my question. Thanks for the information. And that, I guess, is maybe the real question.

Is there a possibility that the public can have access to operational plans before the operation, itself, begins? There are plans made before an operation begins.

MR. AVEL: Not to avoid your question, but the plans that were developed have been reviewed, presented and reviewed, by both Ohio and the US EPA. The reason I'm hesitating --

UNIDENTIFIED SPEAKER: But the public

1 has no access to them.

2 MS. MCCORD: Just for clarification,

3 they're in the Administrative Record --

4 UNIDENTIFIED SPEAKER: That was my

5 next question. Okay.

6 MS. MCCORD: -- which is a subset of

7 the reading room. It's not really -- I don't know how

8 many people have gone to the reading rooms. And we've

9 had many discussions with DOE and Westinghouse about

10 how that's to be set up.

11 But the Administrative Record is

12 really the documents which are the decision documents.

13 It's the work plans, and then the reports generated

14 from the actions. So those are the Administrative

15 Record.

16 But the advisory on the 15th had to do

17 with the leaking drums on the plant 1 pad. So the

18 second part of Andy's answer dealt with that thorium

19 packaging, which is totally separate.

20 The plant 1 pad situation is really

21 much more complex than what it first appears. There

22 are many more drums out there than just the few that

23 we're talking about here today. That's an eight-acre

24 pad. There are many concerns about the lack of --

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1 UNIDENTIFIED SPEAKER: Is it more
2 appropriate to use the number, 15,000?
3 MS. MCCORD: No. What's the inventory
4 of drums on pad 1?
5 UNIDENTIFIED SPEAKER: You're talking
6 45,000 drums on that.
7 MS. MCCORD: Total, right? Okay.
8 forty-five thousand. Let me clarify. There are
9 several classifications of materials out there. There
10 are materials that are deemed to be subject of the
11 Resource Conservation Recovery Act, RCRA, which is the
12 law governing hazardous waste generation, treatment,
13 storage and disposal.
14 And that material, in what we think
15 most cases, is maybe mixed with radioactive materials,
16 which means it's also under the jurisdiction of the
17 Atomic Energy Act. That's what it means, it's mixed
18 waste.
19 We have the possibility that some of
20 it may be just subject to RCRA. There's also material
21 out there that would be considered residues that could
22 still be processed. So they'd be considered product.
23 And there's also low level waste out
24 there, which is not subject to the hazardous waste

1 laws. So, we actually have got several categories of
2 materials.
3 Now, since the RCRA hazardous waste had
4 been stored in various parts of this pad, we are not
5 able to determine if only sections of the pad are
6 subject to the hazardous waste laws under RCRA.
7 That entire pad is the subject -- one
8 of my issues -- subject to the ongoing enforcement
9 action that US EPA has against Westinghouse for
10 hazardous waste violations.
11 That pad is subject to the closure
12 requirements under RCRA, which means that closure
13 document will be put out for public comment once it is
14 received by the State of Ohio. The public will have
15 the opportunity to comment on that closure.
16 The other environmental law which is
17 sort of governing out there is the Superfund law
18 because RCRA, the hazardous waste law, does not cover
19 the radioactive constituent, the radionuclides. The
20 radionuclides are regulated under the Superfund law.
21 So there are areas that have received
22 the contaminated rain water that has run off the pad.
23 The pad, itself, is in terrible condition. Many
24 cracks. So the RI/FS, the Superfund, the cleanup

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1 authorities, kick in when we're dealing with those
2 constituent.
3 So there are going to be opportunities
4 to comment, you know, even today at these forums. But
5 at any point in time, you can comment on some document
6 which is in the Administrative Record.
7 MR. MICHAELSON: But apparently what
8 was missing for you was notification that something
9 was in the Administrative Record to look up.
10 UNIDENTIFIED SPEAKER: I'm glad to
11 know that it's in the Administrative Record.
12 MS. MCCORD: Or will be.
13 UNIDENTIFIED SPEAKER: If we don't
14 know what operations have begun, then I suppose -- in
15 order to see the work plan, or the schedule, or the
16 technology be used, or the time line, then I suppose
17 what we have to do is be in that reading room looking
18 for it. I assume it would be there before the
19 operation began.
20 MS. MCCORD: Something that Ohio EPA
21 and US EPA discussed with DOE in the meeting that Lisa
22 participated -- this was, I guess was just last week --
23 was that there needs to be some kind of an update to
24 the inventory documents in the Administrative Record.

1 And there has to be an easy way for people to get ahold
2 of that.
3 I believe DOE agreed that the updates
4 to the Administrative Record will be sent to the FRESH
5 organization and anybody else who would like to
6 receive the updates to the Administrative Record,
7 which will be continuing monthly so you can see what
8 documents have been added. Would give you the
9 opportunity to go in and look at the documents you
10 want to see.
11 MR. MICHAELSON: Who would be
12 responsible for keeping that list of people for
13 receiving updates?
14 MR. AVEL: Right now, Westinghouse is.
15 If you would like to be on the mailing list, we have
16 some --
17 UNIDENTIFIED SPEAKER: I am.
18 MR. AVEL: We have some cards that
19 already have postage on them in the back of the room
20 if you want to take them with you. Just write a
21 question or a comment, and your comment is that you
22 would like to be on the mailing list for the RI/FS
23 material. We'll be glad to put you on.
24 MR. MICHAELSON: It's the same mailing

1 list that already exists.

2 MR. AVEL: You can be added on that.

3 UNIDENTIFIED SPEAKER: I'm already on

4 that.

5 MR. AVEL: Wait a minute. Let me

6 straighten something out here. The thorium project,

7 the repackaging of the thorium drums, you need to

8 understand that that thorium is a product out there.

9 It's not a waste; it is a product.

10 You would not see it -- you would not

11 see any documents on this repackaging operation in the

12 reading rooms. And, that's primarily because that's

13 not covered under the RI/FS.

14 UNIDENTIFIED SPEAKER: But it's

15 covered by RCRA.

16 MS. MCCORD: No, it's not.

17 UNIDENTIFIED SPEAKER: No, not the

18 thorium. I understand.

19 MS. MCCORD: I don't mean point,

20 counterpoint here, Andy. But there's a little

21 clarification. A product, once it's released in the

22 environment, is no longer a product. It's something

23 that was either disposed or released. So it was

24 disposed under RCRA or released under the Superfund

1 law.

2 So you've got drums out there that

3 have been sitting outside for 17 years, and you can

4 see into them; you can see the waste, and sampling

5 indicates that material has leaked into the ground,

6 you've got a release of hazardous constituents, and

7 the Superfund law does kick in.

8 Originally it was thought, in our

9 cleanup agreement and negotiations, that the thorium

10 was a material that we could sort of leave out of the

11 agreement because the repackaging effort was going

12 forward.

13 There has been some rethinking of that.

14 And that is why there has been involvement in these

15 last few stages of the regulatory agencies, again,

16 this repackaging.

17 I don't know if you remember back in

18 the original compliance agreement in '86, there was a

19 repackaging of thorium that was bins and silos, but

20 for some reason, these drums were not a part of that

21 agreement.

22 I don't think that people were aware

23 of how bad the conditions were. And they're not good.

24 So at this point, while as Andy said, true, there may

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1 not be in the Administrative Record; we have not
2 officially considered it part of this cleanup process,
3 that the regulatory agencies have stepped in in the
4 last few months and gotten their fingers in it because
5 we are very concerned on lack of progress and the way
6 things were be done.
7 So I guess maybe there needs to be
8 some discussions between our two agencies. Maybe this
9 really is considered possibly a removal action, which
10 means you're dealing with imminent threat, and there
11 may have to be some kind of record created.
12 MR. AVEL: And Catherine, I just
13 didn't want to leave her with the impression that you
14 could go to the reading room and find the plan for
15 repackaging the thorium. We don't have any problems
16 sharing that information with you.
17 UNIDENTIFIED SPEAKER: Maybe if just
18 those people who are on the mailing list and want to
19 be informed just know what's there before the
20 operation begins. It may be six lines of newly added
21 to the Administrative Record.
22 MR. AVEL: That's a good point. And
23 we are, as we meet and as we go down the path towards
24 cleanup, we're trying to take whatever steps are

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1 necessary to get information out to you.

2 And there's a lot going on at the

3 plant and a lot that we need to decide how we get the

4 message out to you and to whom we get the messages out

5 to. We are working on that. And, I would just ask

6 you to be patient a little bit longer. I know you've

7 been patient for a long time, but we are trying to do

8 better.

9 MS. MCCORD: I think, if you feel like

10 you need more information on certain things, this is

11 definitely the forum, and those cards to be submitted

12 are the forum to do that because there are these

13 quarterly newsletters that are required under the work

14 plan to be presented to the public. There's been a

15 lot of change in formats on that, and there is still

16 discussion.

17 UNIDENTIFIED SPEAKER: It's usually

18 news of something that has already happened or is in

19 the process of having happened, and we have no advance

20 notice. We have no work plan of operations bein taken,

21 nor the technology being used. So how can the public

22 have any input on that? And there are a lot of

23 experts out there who have something to offer.

24 MS. MCCORD: Those are good points.

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1 And I think maybe, then we've got to look at the
2 contents of those quarterly newsletters and talk about
3 maybe future activities more. So that's a very good
4 comment.
5 UNIDENTIFIED SPEAKER: The media
6 advisory also refers to, quote, an ongoing inspection
7 program to identify and repackage all drums found to
8 be deteriorated or leaking. Is this program, the
9 inspection program to identify or characterize, a
10 matter of public record as well?
11 MR. AVEL: I think we're looking at
12 the same situation here, aren't we Joe? We've
13 developed documentation. We have a plan. Bobby Davis
14 would like to address that. And the reason is --
15 we're getting a little outside of the RI/FS portion,
16 and that's my responsibility. And this goes up to
17 Bobby's responsibility.
18 MR. DAVIS: As for the comments on the
19 inspection, what Bob's referring to is weekly
20 inspection by WMCO staff. It's a walk around
21 inspection where they observe the drums and identify
22 any which may develop leaks.
23 The drums typically are not in a
24 situation where they're solid in the hole today, and

1 tommorrow they've got a large hole in them. A more
2 typical situation is where you start seeing weepage
3 and as the metal gets thinner, you start seeing small
4 amounts coming through of things on the sides of the
5 drums and so forth.
6 So, particularly the drums that
7 contain liquid materials, you're able to find out the
8 information about the leaking well in advance of major
9 holes occurring in the drums.
10 JT Grumski, who's Manager of the Waste
11 Operations for Westinghouse, can give you some more
12 detailed information than I can relative to where we
13 are in terms of over-packing and what the plans are
14 for the rest of the year if you'd like.
15 MR. MICHAELSON: Do you have a series
16 of questions?
17 UNIDENTIFIED SPEAKER: I'd be happy to
18 submit them in writing. But I think it's very
19 important that the public hear the questions.
20 MR. MICHAELSON: I do, too. I'm just
21 concerned -- I know you've been standing there.
22 UNIDENTIFIED SPEAKER: I don't mind
23 being interupted and having other people ask questions.
24 UNIDENTIFIED SPEAKER: Some of my

1 questions are about the drums also.

2 MR. MICHAELSON: Do you want her to

3 continue, or do you want to trade off, or what?

4 UNIDENTIFIED SPEAKER: Trade off. I

5 think that'll be fine.

6 MR. MICHAELSON: That'll give eveyone

7 a chance to answer a question.

8 UNIDENTIFIED SPEAKER: Okay. Now that

9 I've found out Westinghouse is the one who's packaging

10 the drums, what is it, they have to weigh the drums

11 before they package them, right?

12 MR. GRUMSKI: That's correct.

13 UNIDENTIFIED SPEAKER: Then the

14 findings are either the weight of decrease or increase.

15 MR. GRUMSKI: Or remain the same.

16 UNIDENTIFIED SPEAKER: Okay. When

17 they do this, how long do they have before they can

18 notify, let's say Andy?

19 MR. GRUMSKI: We're doing this almost

20 on a daily basis now, especially the drums. The 740

21 that were subject to RCRA requirements, we are in

22 daily contact with the site office. And the last

23 drums we just got weighed up except for six.

24 UNIDENTIFIED SPEAKER: I'm talking

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about the drums that were first in the paper last week. There was something like two days went by before Westinghouse notified someone at DOE. And then DOE took two or three days before they decided to notify the citizens. Now, why do we have this time limit here?

MR. AVEL: The initial notification, I think was made by people that were working under you to you. And I guess the operation had been going on for a couple of days prior to notifying you.

And on the same day, Joe then notified me. And then on that same day, we made a decision, a realization that well, this is information we need to get out to the community.

That kicks off a typically two- to three-day process of writing up a news release, making sure that anybody in our office in Oak Ridge and headquarters that may get a call once the story is in the paper and be asked to explain the situation is knowledgeable of what's going on.

MR. GRUMSKI: I think a key, too, is that a drum, when you sit a drum out on a pad, it will typically change weight even if it doesn't leak or even get material in it because, if you put a salt out

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1 in humid conditions, that will absorb water and gain
2 weight. The reason that I even took this to DOE is
3 because I thought the numbers were unusually high.
4 UNIDENTIFIED SPEAKER: Did you know
5 what was in the drums at the time?
6 MR. GRUMSKI: Yes.
7 UNIDENTIFIED SPEAKER: So you knew
8 either it was absorbing water or losing moisture?
9 MR. GRUMSKI: Right. Some of these
10 were salts. Some of these were --
11 UNIDENTIFIED SPEAKER: What kind of
12 salts?
13 MR. MICHAELSON: Excuse me, JT. The
14 stenographer is using a tape backup that runs off the
15 mike as a backup for the transcript. So if you're
16 going to be answering questions, it would be nice if
17 you came up to the mike so we make sure we get it all
18 in the transcript.
19 MR. GRUMSKI: Potassium and lithium
20 salts were the salt we had. They were furnace salts.
21 MS. MCCORD: Be fair here, though. I
22 think there's some agreement that some of these
23 materials can lose some moisture and gain moisture,
24 but they are supposed to be sealed drums. They're not

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1 vacuum tight; that's true.

2 But not all these drums are 55 gallon

3 drums. Some are smaller drums. And I think you have

4 to be fair to say that it wasn't just moisture loss to

5 account for the water. Okay.

6 MR. GRUMSKI: I agree with that.

7 UNIDENTIFIED SPEAKER: Thank you,

8 Catherine. And then some of the pad that they're

9 sitting on, this is outside, right?

10 MR. GRUMSKI: Right. That one pad is

11 outside.

12 UNIDENTIFIED SPEAKER: Has the ground

13 been tested for contamination since all these drums

14 have been sitting there and leaked out?

15 MR. GRUMSKI: We have done a lot of

16 sampling along the west edge of the pad where the

17 water run off from these drums would have gone. And

18 we've taken a lot of samples for EP toxicity, which is

19 looking for RCRA constituents, or the hazardous

20 consitutents.

21 And we haven't found any of the soil

22 samples that came above the limits that mean we would

23 have to box up that soil because it was a hazardous

24 waste at that point.

1 That's not to say that some of the
2 material didn't leak there. We're going to do further
3 testing and what we call looking for total metals,
4 which will give us an indication a little bit better
5 if any of the material had leaked because EP toxicity
6 is a very sensitive test, and it would be done
7 primarily on the waste, itself.
8 MS. MCCORD: They will have to do
9 testing both the pad materials, areas where the pad is
10 is degraded, which is in quite a few areas. And again
11 the storm water, as it hits this eight-acre pad, was
12 not being collected. Some of it ran into storm drains;
13 some of it ran off the pad.
14 So any area that could have
15 potentially received contaminants will be tested both --
16 you've got those two regulatory programs governing
17 here, both the RCRA, the hazardous waste laws, the
18 closure plan, and still the RI work will have to be
19 completed. So that becomes essentially a suspect area,
20 and preliminary field work indicates there's some
21 contamination.
22 UNIDENTIFIED SPEAKER: Thank you.
23 MR. MITCHELL: So you will be seeing
24 more boring drills around the plant 1 pad, as in other

1 production areas.

2 UNIDENTIFIED SPEAKER: Why did they

3 build that plant over the auquifer, and why did they

4 build the one in Utah over an auquifer, or Idaho over

5 an auquifer.

6 MR. MICHAELSON: We have a question

7 here. Is anyone here going to try to field that one?

8 MS. MCCORD: A lot of DOE locations

9 were selected for security reasons. I've been told

10 Oak Ridge was selected to be in a valley because it

11 would be harder -- but I've not -- I've never heard

12 the reason why.

13 UNIDENTIFIED SPEAKER: They needed

14 water for production. They used millions of gallons a

15 day.

16 UNIDENTIFIED SPEAKER: But there was

17 also a 1951 US geological from we have a letter to the

18 Atomic Energy Commission saying don't build here.

19 This is the biggest auquifer in the midwest. And that

20 USGS survey was ignored.

21 UNIDENTIFIED SPEAKER: Like everything

22 else is.

23 MS. MCCORD: Should we take any of the

24 questions that are in written form to alternate a

1 little?

2 MR. MICHAELSON: Yes, we were talking

3 about doing that. Do you want to pass those up to me.

4 MR. MITCHELL: We have about five or

5 six of those, and we'll alternate those. These are

6 the written questions. We're going to intersperse

7 them with the ones --

8 MR. MICHAELSON: Also, you had a

9 question, and then we can go back to you. Would you

10 go ahead and go to the mike, please.

11 UNIDENTIFIED SPEAKER: Sure. Do you

12 want me to go now?

13 MR. MICHAELSON: Yes.

14 UNIDENTIFIED SPEAKER: Two quick

15 questions. I promise they're quick. The first is,

16 given that there's waste on the Fernald site now that

17 cannot be moved; it's mixed radioactivity with

18 solvents, given that, my concern is that Fernald,

19 itself, will become a repository for other such waste

20 from around the country. Could you comment on that.

21 MR. MITCHELL: I think from a

22 regulatory standpoint, you're going to see the

23 regulatory agencies very much vehemently against

24 bringing any material from off site to this site.

1 I think your supposition may be
2 correct that some waste will remain on this site in
3 the future. But I don't think there's any way that
4 additional waste will be brought to this site.
5 I think that the State of Ohio and
6 probably US EPA would both be very much against that.
7 This is not a good location for this site to have ever
8 been here, and so, it's definitely not a good site to
9 bring additional waste in here.
10 UNIDENTIFIED SPEAKER: The second
11 question kind of follows that. And that is, given
12 that there is going to be this waste on the site, and
13 given we don't seem to know exactly the long-term
14 effects of what's going on now at Fernald, what are
15 the prospects for the use of that land in the future?
16 For example, will it be fenced in; will it be sealed
17 off; will it be blown up? What is going to happen to
18 that 1,000 acres of land?
19 MS. MCCORD: I think it's fair to say
20 it's always going to be an industrial site. It's like
21 any other place that was used for some kind of
22 production. It's not ever going to be pristine.
23 The goal of this whole process and the
24 projection of the millions of dollars that DOE's

expected to be spending over the next probably 30, 40, 50 years is that it has to be cleaned up to the point to essentially eliminate that threat.

And I think any of the people involved in the project can make some, draw some, or suppose what might happen as far as the cleanup. So we might have some ideas.

But really, the decisions will be made in those documents in the proposed plans and the records of decision for each of the operable units. And I think we're not going to fool anybody by saying that we think it's going to be used for cow grazing forever. It's going to be an industrial location, the remnants of an industrial activity.

MR. MITCHELL: Be monitored for a long time. And one of our goals on the site is to make sure that the remediation we do is not a 30-year remediation so that in 30 years we have to do it all over again.

MS. MCCORD: Because the Superfund law mandates a final remedy. It's not going to be building a shed and sticking drums it. That's not going to be acceptable.

And then, the problem with what

1 happens to the drums we've got now today depends on
2 what the classification of that material is. Is it a
3 low level waste which could possible be shipped off to
4 a low level facility that could receive it.
5 Is it also subject to hazardous waste
6 laws, which severely narrows the possibility for off
7 site shipment. Some of the materials have been in a
8 liquid form. And our ignitables have gone down to the
9 Oak Ridge facility, which is in the process of trying
10 to get a hazardous waste permit. They unfortunately
11 have their storage facilities filled, and they cannot
12 accept more until they get their final permit.
13 And also EPA, through the current
14 enforcement action under the hazardous waste law, has
15 been pushing for DOE to start -- and Westinghouse --
16 to start coming up with the remedies for this material.
17 And I think one of the biggest
18 problems DOE has, you know, if long-term plans for the
19 disposal and treatment of this hazardous waste. And
20 there are some technologies that could be applied to
21 some materials now. They'd need to be tested. And
22 some new things need to be developed.
23 UNIDENTIFIED SPEAKER: Thank you.
24 MR. MICHAELSON: We're going to take

one of the written questions here. What efforts are being made to monitor water wells south of Fernald, in particular the wells near the Ohio River in Cleves that supply the public water supply for the Miami Township and the White Water Township? He must have asked the question everyone wanted to know the answer to. Thank you. Go ahead. Okay.

MR. AVEL: Again, the question is what efforts are being made to monitor water wells south of Fernald. Currently, we have one more round of monitoring in the wells that we installed. They are not drinking water wells, but they are wells that we've installed. And we plan to monitor them at least one more time to get a better picture of what the plume is doing.

And then, the new wells we install, we'll be monitoring them in the future. There are several drinking water wells and several private wells south of the plant that are monitored on -- Linda, are you -- Linda England, are you around? Can you help me out on this question? What are plans -- Linda --

MR. MICHAELSON: Linda, come up to the mike.

MR. AVEL: -- is head for the

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environmental monitoring for the site. And then if you don't mind, you might be able to explain a little bit better what the plans that we have are for monitoring the wells south of the plant.

MS. ENGLAND: Just like ground water, it's a moving target. We are devising a new program that we just submitted a plan, and it's been approved, and we're implementing a long-term continuing ground water monitoring program.

And what that is, once the RI/FS has sunk their wells and they've gone ahead and got their snapshot in time; they feel they know what they've got, and they're finished with the well, it's important then for somebody to come along and do the continuing monitoring, to not just walk away and leave it.

And that's where my group comes into play. We'll take all the wells that exist, and as the RI/FS puts in new wells, we'll take those into account. And then from there, we've devised a long-term program that will go on until EPA or the DOE tells us to stop, which we anticipate being many decades.

So that program is a living program; in other words, we don't just pick a well, and it's forever on the program. As far as the south plume

goes, or the south field, any of those wells, they will be a part of program.

As we find data, any contamination in those wells, we may bump those wells up to a monthly program, or even some sort of continuing quick remonitoring. If we find that we're getting the same numbers over and over again, it may be more expdeitious to go ahead and put them on a quarterly program.

If nothing is showing up at all, and we've got several wells in the area, we may put them on a yearly basis. Residents' wells, if you're already on a monthly basis, then we'll leave them on a monthly basis for now.

Again, over a long period of time, years and years, we'll come back and look at that data. And we may decide that, again, the data shows that we can put that on a quarterly basis. Or if you're on a quarterly, we may put on you on a monthly. It's not a static program.

If anybody has questions about that, they're welcome to call me at the FMPC, 738-6747. I'll be glad to talk to you about what area you live in, and what kind of program we have, and where we're

1 going to be monitoring according to where you are and
2 what you need.
3 MS. MCCORD: I think this question
4 particularly asks for, in particular, wells near Ohio
5 River in Cleves that supply public water for Miami
6 Township and White Water Township. They're asking
7 what monitoring is being done.
8 With respect to the contamination here,
9 unless there's been a request to test a water supply
10 by a private resident, none of the monitoring wells
11 cover that far south.
12 We have no indication that
13 contamination in the ground water from FMPC has gone
14 that far. So really the program Linda is speaking of
15 is not covering these locations because there are no
16 ground water monitoring wells down there.
17 MS. ENGLAND: What we do have is we
18 have some controls samples that may not be those
19 particular ones. But we will go further away from
20 just the known contaminated wells for drinking water
21 sources further away from the site of the control
22 program. But no, we wouldn't go as --
23 MS. MCCORD: We're only talking south
24 to New Haven Road. We aren't talking that far south.

MR. MICHAELSON: I think he has a clarification.

UNIDENTIFIED SPEAKER: I'm a Miami Township trustee. My name is Joe Sykes. And all the articles in the paper deal with the Bolton plant drilling north of us. And now they're dealing -- they're saying that that no water sources are affected because the City of Cincinnati derives their source of the water from either Bolton north of Fernald or out of the Ohio River.

And they speak as if there are no other wells south of Fernald. And I'm constantly getting calls; our wells are pulling out of the auquifer, and we're south of Fernald, and they keep ignoring it.

We called the Water Department. They said they only monitor it once a year, they get the water tested. And people are -- They're saying it should be done more often; whose responsibility is it to see to it that these wells are checked periodically. That's the thing.

MR. MITCHELL: I believe one thing that Ohio EPA public water supply did in the Fall of 1988 was to sample all public water supplies within a five-mile radius of Fernald. I'm not sure if Cleves

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1 was included in that or not.

2 Part of the reason for that is we

3 don't feel there's a reason for impact there in Cleves.

4 Another thing that Department of Health has is a

5 sampling program that Mr. Owen may want to talk about

6 for interested residents, as well as communities, I

7 believe; is that correct?

8 UNIDENTIFIED SPEAKER: This supplies

9 like 20,000 people.

10 MS. MCCORD: I think the key is that

11 you're down gradient and far enough down gradient that

12 you're not right now in the study area. And we have

13 no reason to believe that you even really will be;

14 that contamination will not be allowed to go that far.

15 MR. MITCHELL: If it gets down there,

16 we have not done our job.

17 MR. OWEN: Just to answer your

18 question quickly, we do have an environmental

19 monitoring program that pretty much parallels what

20 Fernald is doing. And we do this on a periodic basis

21 well. And in fact our plans are not to diminish but

22 to enhance that environmental monitoring.

23 As far as any requests for sampling,

24 that can be forwarded to the Ohio Department of Health.

1 We'll certainly be glad to do that. Unfortunately, we
2 do charge a fee because it does cost to do the
3 sampling. And for uranium sampling, I think the fee
4 is around $100. That's just to cover the cost of the
5 laboratory analysis. So it is available.
6 MS. CRAWFORD: They're going to have
7 to pay for it?
8 UNIDENTIFIED SPEAKER: That's the
9 concern of a lot of people saying somebody should be
10 responsible to test these wells. It's coming
11 downstream. We're south.
12 MS. CRAWFORD: Clarify what you just
13 said. I was talking to somebody. What did you just --
14 MR. OWEN: One hundred dollars.
15 MS. CRAWFORD: One hundred dollars a
16 person to have their well tested. Clarify that for me.
17 MR. OWEN: It's per sample. That's
18 correct, $100.
19 MS. MCCORD: Not the public water
20 supplies because Ohio EPA is covering that in their
21 public water supply; they're doing that testing.
22 These are private water -- Right.
23 MR. OWEN: Originally that was a
24 special sampling program to provide, I guess these

tests free of charge. That's long since gone by the wayside. In fact we went well past that in still providing that free of charge at our expense. There's no money to that.

MS. CRAWFORD: I think the State of Ohio should send the bill to the DOE.

MS. MCCORD: I believe that actually they paid the ODH to do the private well sampling.

MR. OWEN: The initial sampling, but that money is no longer available.

MS. CRAWFORD: I think they need to make more money available for that because -- I don't know about anybody else that lives here -- but I certainly don't have $100 to pay to have my water tested.

UNIDENTIFIED SPEAKER: How do we know the D of H is qualified to test our drinking water? They've never been qualified to do anything else for us in the last five years.

MR. MICHAELSON: If I could ask people to come to the microphone to ask their questions.

UNIDENTIFIED SPEAKER: See, that was one of the complaints that our local water suppliers had. They said it cost like $100 to have it sampled,

and they only do it once a year.

And the residents feel that it should be done more often than that. And they feel that somebody else should be paying for it other than the local water plant due to the fact that it was caused by someone north of us.

MR. MICHAELSON: Linda had one thing to add to that.

MS. ENGLAND: I would be glad to come down and talk to the trustees down in your area. Or any other group that would like more information and wants to discuss this further, I'd be glad to come down and talk about the sampling program.

And we can make some plans, or we can look at the program and see where you might have input to the program. I'm willing to listen. I say, it is a living program. So I'll give you my card.

MR. AVEL: Let me add one thing to that, and that's in the area where we have reason to suspect that there may be contamination in or near drinking water wells, we've been very liberal about sampling people's drinking water sources.

UNIDENTIFIED SPEAKER: And you should be.

1 MR. AVEL: And we have been. And I
2 agree with you. But somewhere, we have to draw a line.
3 And when we're talking about the areas that are as far
4 as away as Cleves that don't have any technical reason
5 to suspect that the contamination is that far, then
6 I'll just be blunt with you, if we were to pay for
7 sampling in that area, we would have to take sampling
8 away from the people who actually need it that are in
9 the area where the contamination is generally located.
10 You know, we don't have an unlimited
11 source of funds for sampling. So we've concentrated
12 that sampling that we've done in the area where we
13 feel is technically justified.
14 And the reason that we haven't done --
15 we haven't offered any sampling for your area is that
16 we just don't think that there's any reason to suspect
17 that contamination is that far.
18 MS. MCCORD: Cleves -- correct me if
19 I'm wrong -- it's about 15 miles, 15 miles? We just
20 have no reason to believe that the contamination has
21 gone nearly that far. And we'd be happy -- Graham
22 Mitchell would be happy to come speak with the
23 trustees or whomever if you want to discuss the
24 concerns about that. We have no indication of

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1 problems.

2 UNIDENTIFIED SPEAKER: Mr. Mitchell
3 was saying that no one gets water of the Ohio River
4 south of there.

5 MS. MCCORD: That's a wrong bad
6 statement.

7 UNIDENTIFIED SPEAKER: Well water.

8 MS. MCCORD: That's right. And
9 there's a lot of bad statements in the press about the
10 Miami auquifer. And people in Dayton, should they be
11 concerned. I think people just don't understand the
12 relationship, and how big that auquifer is, and which
13 way the water is flowing.

14 MR. AVEL: The statement that we've
15 made, and it's still accurate, is that we know of no
16 wells, drinking water wells, that are located in the
17 contamination in the south plume.

18 We don't know. And we have done very
19 extensive canvasing of wells. We've gone to every
20 resident, knocked on doors, and done what we feel is
21 the best job possible to locate all of the wells, not
22 only just the drinking water wells, but all of the
23 wells, and identify what purpose they're being used
24 for and sample them.

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1 MS. CRAWFORD: I think that there's a
2 misconception there sometimes because, now maybe
3 nobody does drink from those wells, but they used to.
4 And nothing makes me angrier than for somebody to say
5 nobody drinks from these wells because, damn it, five
6 years ago people did drink from them. They might not
7 today. But I still have a question as to whether some
8 of them don't.
9 MS. MCCORD: That's been something
10 that we are concerned about because people might have
11 an extra well on their property behind a garage or
12 barn, and maybe they had concerns because maybe they
13 didn't meet -- they had some maybe fecal coliform
14 problems and weren't meeting drinking water standards
15 imposed by the Health Department.
16 But we are very concerned about that,
17 not because we want to get those people in trouble for
18 using those wells, but we're concerned because we want
19 to make sure that they're safe. And that's why there
20 has been the offer to go out and test any of those
21 wells.
22 So if people do know of it, an
23 additional well on their property that might be used
24 just occasionally for watering animals or such, the

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1 offer has been made in those areas that are part of
2 the study area to go out and sample them.
3 MR. MICHAELSON: You said you wanated
4 to ask a couple questions.
5 MS. CRAWFORD: Yeah.
6 MR. MICHAELSON: Then I think we're
7 going to bop back to you because we told you you'd get
8 another question.
9 MS. CRAWFORD: That all right, Linda?
10 UNIDENTIFIED SPEAKER: Sure.
11 MS. CRAWFORD: Mine mostly deal with
12 the Environmental Monitoring Report, and which nobody
13 else in this room has seen. And I hope somebody can
14 at least try to answer some of these for me.
15 On pages 41 and 42, it talks about
16 releases of plutonium. And I have serious questions
17 about this because all along, every single year, we've
18 been told we don't deal with plutonium; we don't have
19 any plutonium, and we've never had plutonium.
20 But it clearly talks about the
21 releases of some plutonium, some in '87 and some more
22 in '88. And it was plutonium 239. And then it talks
23 about release of the thorium into the air, the 230.
24 Some of the releases were high enough

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to be measured. And the reason it gave was the fact that the reprocessing is what caused the releases to be high.

I want some clarification on this. Since we've never had plutonium on this site, I'd like to know how come in the Environmental Monitoring Report there's mention of plutonium being released into the air.

The other thing is, if indeed we're finding plutonium here, everything that I have seen here that we've been testing for is uranium. And I'm going to have a problem with this.

If you're releasing plutonium into the air, why aren't we testing for plutonium in the well water; why aren't we testing it in all these things that we're doing because all we ever see is that we're testing for uranium?

MS. MCCORD: Can I answer your second question first. Depending on the well location or where the soil samples are being taken, there's some decision on what to analyze for. But in sort of the minimum are full radiological parameters, which includes plutonium. That's part of that list. Is that -- Does anyone want to correct me?

MR. AVEL: You're right.

MR. MICHAELSON: So in fact you have been testing for it.

MS. MCCORD: So while we talk about uranium most of the time, the reason for that is we haven't seen contamination in any location unless uranium is there also.

So in some sense, it makes it easier because we've been using that as sort of a priority for analysis, or an indicator whether or not other contamination might be found.

In some cases, then the presence of a radionuclide like uranium then causes a more broader analysis which would expand it into chemical analysis to be reviewed. But we don't go out there and just look for uranium.

MS. CRAWFORD: You at least are looking?

MS. MCCORD: That's right. It's just that you're seeing results, and that's why you're not seeing the presence of the other radionuclides. They are there in some locations, particularly closer to the waste pits. But they're in much lower concentrations.

1 And we have not come up -- we haven't
2 come to a situation where we're seeing some other
3 radionuclide by itself. It's always been accompanied
4 by uranium.
5 MR. MICHAELSON: How about the answer
6 to her first question?
7 MR. AVEL: I'll just touch on it.
8 Then I'll have to ask one of the contractor folks here
9 to help me out. But there is plutonium on site. As I
10 understand it, there was some reprocessing of some
11 spent fuel that had some plutonium in.
12 MR. DAVIS: Andy I'll go ahead and
13 make a few more comments. The material you're talking
14 about, I think it's accurate to say, we've never
15 processed plutonium as a product here.
16 The fact of the matter is there was
17 some plutonium contamination associated with materials
18 returned from the Hanford Reservation, material that
19 was used in their production reactors.
20 That fuel material was processed. The
21 uranium was extracted and then brought back here for
22 further processing. In that extraction process, you
23 don't get a 100 percent separation of materials.
24 So there was some plutonium

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1 contamination associated with some of that materials.
2 And in fact my recollection, not being on site, but my
3 recollection from some historical perspective, that
4 there was some investigation by DOE in recent years
5 looking at the operations involving that material,
6 whether or not it concentrated that material, and
7 whether or not there was some activity from a worker
8 health protection standpoint plutonium should be
9 controlling.
10 There are some wastes stored on site
11 that resulted from that processing activity. They do
12 contain low concentrations of plutonium. And I'm
13 trying to think back in terms of the past
14 environmental monitoring reports. I'm not sure to
15 what extent any of those may have looked at plutonium
16 discharge, for example, in the water discharge, that
17 sort of thing.
18 MS. CRAWFORD: I think what you need
19 to do is I think you need to take the last -- and I'll
20 do it if I have to, if you guys don't want to -- but I
21 think we need to take the last few environmental
22 monitoring reports and look at the plutonium stuff
23 because plutonium is not something that you mess
24 around with.

1 It's not something that you release
2 into the air the way it has been according to the '88
3 report. And I have a lot of serious questions and
4 serious concerns about this.
5 I mean uranium is bad enough. Don't
6 get me wrong. But plutonium is much, much worse,
7 especially if you get it in your lungs. So maybe you
8 need to map that out and just see as a visual aid that
9 we can kind of look at to see, you know, the amounts
10 we're talking about.
11 MR. DAVIS: We'd be happy to do that
12 for you.
13 MS. CRAWFORD: Okay. Do you want me
14 to -- I'm almost done.
15 MR. MICHAELSON: Sure.
16 MS. CRAWFORD: Also in the EMR for '88,
17 it talks about four unusual incidents. And according
18 to my records, we were only told about two of them. I
19 have serious questions about that.
20 And the last thing, on the very back
21 of the EMR report, it lists all the various
22 concentrations that have been measured for -- it lists
23 everything; cesium, radium, technetium. It lists all
24 these different things.

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1 And then it clearly says that you are
2 not in violation of any of those. But my question is,
3 if you added all of them together, would you become in
4 violation then?
5 I don't quite understand the way this
6 table was put together. And I don't know how you can
7 consciously say you didn't violate anything because,
8 if you add everything together, there has to be a
9 violation somewhere.
10 MR. MICHAELSON: Are these questions
11 that you can address, or Bobby?
12 MR. DAVIS: I can't speak to the four
13 incidents. I'll have to look at that and talk to you
14 about that. I'm not familiar with two versus four.
15 With respect to the -- that particular type, I'm not
16 familiar with. But in terms of adding together, I can
17 talk about that.
18 If you will look at the standards for
19 release from the facilities, for air emissions, the US
20 EPA standards apply to that. And that is a dose
21 standard which takes into consideration all the
22 various isotopes that are released in calculating what
23 the potential dose to a member of the public might be
24 from at that material.

So each one of those different isotopes that might be released into air are considered as part of that dose calculation, and then that dose is compared against the standard.

I think the calculations, the slide demonstrations that we have to do for US EPA for the air emissions concern, certainly indicate we're within those dose standards.

From the standpoint of releases to other media, for example releases to the river, or external radiation, for example from the K-65 silos, the DOE has regulations which govern public exposure there.

And in the same fashion, we look at a total dose from the release from all pathways. So all the various isotopes of consequence get looked at in that determination.

MS. CRAWFORD: So what you're saying to me is that if you add them all together, you're not going to get any higher dose.

MR. DAVIS: I'm not saying the dose won't be any higher. I'm saying the dose that we calculate takes into consideration and looks at the contributions from uranium, or cesium, or any of the

1 other isotopes that are present there that are of any
2 significance when we go through the dose calculation;
3 that the models that are used, the ones that we are
4 required to use by EPA, the ones we're required to use
5 by DOE policy, take those, all those various isotopes,
6 into consideration.
7 Now, there are some, if they're there
8 in very minute quantities, they may not necessarily be
9 added in specifically, the ones that are there. And
10 there are certain criteria we use for cutoff, and when
11 they're included and when they're not as far as the
12 specific calculation.
13 But the uranium and the other isotopes,
14 the radionuclides, are reported in that dose
15 calculation that shows up in the EMR. And for air
16 emissions, it shows up there as well, as required the
17 EPA as part of what we're required to do under air
18 emission regulations.
19 MS. CRAWFORD: If you go to page 34,
20 it specifically talks about the plutonium being
21 somewhat higher, and the thorium 230 being somewhat
22 higher.
23 These are two pretty deadly substances
24 that I think we need -- this needs to be clarified, at

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1 least for me. Will this companion guide that we're
2 waiting on to go with this EMR, is that going to be
3 something that helps explains what this means to us?
4 Maybe somebody needs to explain to me
5 what is the companion guide, and why it's so daggone
6 important that we wait for it.
7 MR. DAVIS: The companion guide was
8 intended to be a document which provided some
9 additional information to help you walk through the
10 EMR in terms of the information that is there. It was
11 particularly directed at air emissions. Westinghouse
12 had taken the initiative to have that developed in
13 hopes it would help people understand the document.
14 As we've gone through the process with
15 headquarters, the correction and the questions we got
16 back on the companion guide is they felt it was
17 actually too restrictive in that it only talked about
18 air emissions and was not broad enough a document.
19 And the direction we've gotten is that the companion
20 guide will not be issued as part of this -- along with
21 this EMR.
22 What we were intending to do, mainly
23 to provide some more information, what we were
24 intending to do is include additional information that

1 will help people understand the information in the EMR
2 in this upcoming document, which will cover '89, which
3 obviously will be out later in the year.
4 MS. CRAWFORD: The companion guide is
5 just another document that is going to be added on
6 with the EMR, right? I'm real confused.
7 MR. DAVIS: We had intended to issue
8 it along with the EMR and provide whoever we gave the
9 EMR a copy of the companion guide. What it did, it
10 went into the regulations dealing with radioactive
11 emissions, particularly air emissions, and probably
12 got more detail and probably a little bit more
13 explanation than is in the EMR in terms of background
14 and trying to get understanding of -- clear
15 understanding -- of what the information in the EMR
16 means; comparisons to background and other types of
17 things, a lot more discussion on radon than
18 traditionally has been in the EMR.
19 MS. CRAWFORD: Is that the risk
20 assessment; is that going to come along with it, too?
21 MR. DAVIS: The risk assessment is
22 another document. For those who may not know what
23 we're talking about, that was a document prepared by
24 IT Corporation for the DOE.

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1 It was delivered to the DOE last
2 Summer, late last Summer, has been undergoing the DOE
3 review and approval system. We're waiting for
4 headquarters' approval to release that.
5 But that will not -- if we could
6 release them both at the same time, fine. We're not
7 holding up the EMR to release the risk assessment
8 report.
9 The risk assessment report looks at
10 the historical releases from the site and makes
11 projections about both doses that could have been seen
12 and also makes predictions of health effects. That
13 document will be forthcoming, but we're not holding up
14 the EMR waiting on that.
15 MS. CRAWFORD: The last thing I have
16 is, Andy, I had asked you for a copy of John Frazier's
17 cancer risk report. Is that something you haven't
18 gotten to yet?
19 MR. AVEL: I received a copy of it.
20 It's in my office, and I just haven't got it to you.
21 I'm sorry.
22 MS. CRAWFORD: Okay. Thanks.
23 MR. MICHAELSON: I'm going to sneak in
24 a written question here because we said we'd

intersperse these. The renovation referred to, is that for future production? Yes.

MR. AVEL: I'm sorry.

MR. MICHAELSON: The renovation that was referred to, is that for future production?

MR. AVEL: Yes, the purpose of the renovation is to modernize the plant.

MR. MICHAELSON: You win the award for the shortest answer so far.

UNIDENTIFIED SPEAKER: The most alarming answer however --

MR. MICHAELSON: Your turn.

MR. AVEL: Wait a minute. I guess I need to add to it just a little bit.

MR. MICHAELSON: He has to clarify.

MR. AVEL: No, I guess I don't want to add to it.

(Laughter.)

MR. MICHAELSON: Go ahead.

UNIDENTIFIED SPEAKER: Before I get a chance to ask my other questions, I do have one more about these mysterious drums. The program, the repackaging program and the inspection program, or work plan, this is for the EPA. Does this work plan

1 comply with RCRA? No?

2 MS. MCCORD: Well, the inspection plan

3 and the repackaging plan for that pad has not been

4 submitted to the regulatory agencies.

5 UNIDENTIFIED SPEAKER: So you're not

6 familiar with the plan?

7 MS. MCCORD: No.

8 UNIDENTIFIED SPEAKER: Well, that's

9 why I'm not probably not familiar with the plan.

10 MS. MCCORD: That's right.

11 UNIDENTIFIED SPEAKER: So to your

12 knowledge, it doesn't comply with -- because you

13 haven't seen it -- doesn't comply with RCRA nor any

14 state or federal environmental laws?

15 MR. MITCHELL: Part of reason we're

16 not aware of that yet was because traditionally that

17 pad was thought to contain just radiological waste.

18 UNIDENTIFIED SPEAKER: We're talking

19 about RCRA waste, not nonRCRA waste.

20 MR. MITCHELL: That's right. It's not

21 just, in the last six months, that it's been known

22 that there was potentially suspect RCRA waste on that

23 pad, and then just recently, in the last week, that we

24 found that some of those drums had in fact leaked. So

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1 the fact that some of the RCRA components of the plant
2 1 pad are fairly recent.
3 MS. MCCORD: And it's, I guess lack of
4 action, or the status of that pad being addressed in
5 that enforcement action under RCRA from US EPA against
6 Westinghouse in that the -- because of those, these
7 actions had not been taken, the plant 1 pad is
8 incorporated, has been incorporated into that
9 enforcement action.
10 So, and typically, there's not
11 repackaging plans even for a plant like -- I mean even
12 a pad that would could have taken hazardous waste.
13 The facility has the obligation to minimize the
14 release -- the potential releases -- of hazardous
15 waste and hazardous constituents into the environment.
16 So they have to do that automatically.
17 That kind of thing should have been triggered under
18 the facility's contingency plan. But it's been the
19 sort of violations that --
20 UNIDENTIFIED SPEAKER: It's a
21 violation?
22 MS. MCCORD: That's right.
23 UNIDENTIFIED SPEAKER: Is it fair to
24 say it's a violation that it's been characterized as

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1 RCRA waste -- that's a mouthful -- it was
2 characterized as such, and the program developed was
3 not submitted to EPA, or it does not, to your
4 knowledge, comply with the RCRA requirements.
5 UNIDENTIFIED SPEAKER: If I could
6 clarify that, the drums that we moved to storage, the
7 740 drums, they were known RCRA waste. And we are
8 moving them into storage. We have six drums left, and
9 the inspection program for those drums, along with the
10 other RCRA waste we have on site, do comply with the
11 EPA programs.
12 The other drums that are on the plant
13 1 pad, we have about 16,000 that you referred to in
14 our article. They're under evaluation. We do not
15 know whether or not they're RCRA. That's why we're
16 doing an evaluation.
17 And what we've done is we've developed
18 an accelerated over-packing project this year. We're
19 going to over-pack about 10,000 of those drums. We're
20 doing weekly inspections, and we greatly are trying to
21 enhance the storage out there.
22 All the drums that are known RCRA, we
23 moved to storage and moved to proper storage, and do
24 the inspections that are required under the

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1 regulations. So I just wanted to clarify that.

2 MS. MCCORD: And I guess I'm sort of

3 talking about things that are being dealt with, legal

4 briefs between attorneys on both sides. But the plant

5 1 pad is not a facility, a unit, that we felt was ever

6 authorized for the materials.

7 Some of the locations where the drums

8 are being removed are, again, subject to the

9 enforcement action, and weren't, in US EPA's opinion,

10 authorized to receive those materials.

11 So while environmentally that might

12 seem better to repackage it, and I agree with that,

13 and move it to a better location, there are many

14 regulatory deficiencies that are being addressed with

15 this enforcement action. And what is being done today

16 for inspections weren't necessarily what has happened

17 in the past. And we have not settled those violations.

18 UNIDENTIFIED SPEAKER: That's why I

19 put the question to EPA because I'm sure that

20 Westinghouse and DOE believe they're in compliance

21 with RCRA and State and federal environmental laws.

22 But you're telling me that you haven't seen the plan.

23 And again, it's our self-regulating agency over here,

24 and we don't have access to a work plan before it's

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1 done.

2 MS. MCCORD: I think you --

3 UNIDENTIFIED SPEAKER: I saw you

4 wondering about an assessment, an assessment that was

5 made by DOE and Westinghouse. I don't want to cause a

6 fight here.

7 MS. MCCORD: I think maybe a short

8 answer is that US EPA's position on the regulatory

9 status of the facility for compliance with hazardous

10 waste is that they're not in compliance.

11 And that's why we have an enforcement

12 action and are spending our enforcement resources to

13 try and achieve compliance.

14 UNIDENTIFIED SPEAKER: okay. He has a

15 repackaging question.

16 MR. MICHAELSON: Go ahead.

17 UNIDENTIFIED SPEAKER: You guys are

18 going to have to help me on this. I'm still having

19 trouble understanding this repackaging business.

20 These 212 thorium drums, now, the old drums, could

21 somebody tell me what were those made out of; were

22 those stainless steel drums like the pad 1 drums?

23 MR. AVEL: No.

24 MS. MCCORD: There are no stainless

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1 steel drums out there anywhere.

2 UNIDENTIFIED SPEAKER: The thorium

3 drums were made out of --

4 MR. MICHAELSON: What are they made

5 out of?

6 MS. MCCORD: Steel.

7 UNIDENTIFIED SPEAKER: Steel, steel.

8 MR. AVEL: Carbon steel.

9 UNIDENTIFIED SPEAKER: I'm sorry.

10 MR. AVEL: Carbon steel.

11 UNIDENTIFIED SPEAKER: Carbon Steel.

12 And the new ones are made out of --

13 MR. AVEL: The same material.

14 UNIDENTIFIED SPEAKER: Steel. And the

15 thorium has been there for about ten years.

16 MS. MCCORD: Seventeen. But we don't

17 know how long it's been in those drums. It's been in

18 that one location for seventeen years?

19 MR. GRUMSKI: Right.

20 MS. MCCORD: So it could have been in

21 those drums even longer than that. It's just that it

22 was in that one location for 17 years.

23 MR. MICHAELSON: It has been in those

24 drums for at least 17 years.

1 MS. MCCORD: At least.

2 UNIDENTIFIED SPEAKER: You know,
3 55-gallon steel, we all know what happens if you leave
4 a steel drum out in your alley for 17 years. I don't
5 get it.

6 You guys are in the heavy metals
7 business; you couldn't find anything more durable than
8 steel to put thorium in. Thorium is the only
9 substance I've ever heard a doctor say, if it gets in
10 your system, it will cause cancer; not might, will.

11 You couldn't find anything? You still
12 can't find anything besides steel to package this in?
13 Are we going have to, in 17 years, repackage it again?

14 MR. AVEL: The repackaging operation
15 that's ongoing is combined with moving the material
16 indoors so it will not be exposed to the weather.

17 UNIDENTIFIED SPEAKER: I see. It's
18 going to be indoors. So that's going to help.

19 MS. MCCORD: Even if you had an empty
20 drum out there in the environment at the Fernald plant,
21 because of the rainfall, that the life of a drum is
22 anywhere from maybe six months to five years. It just
23 sat there.

24 And that doesn't mean that the

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1 material inside of it is contributing to its corrosion.
2 But a drum, obviously, containing material that it
3 will not react with, is safe to hold, if moved indoors,
4 is not going to degrade at that same kind of rate.
5 UNIDENTIFIED SPEAKER: Yeah, but they
6 have stuff there like titanium, for which the only use
7 that they can come up with is they can use it on tank
8 armor; they can use it on shells because it's real,
9 real hard. It's not soft like steel. Okay. I'm not
10 in the heavy metal business. I don't get it.
11 MS. MCCORD: I'm not sure if they make
12 55 gallon drums out of that material.
13 UNIDENTIFIED SPEAKER: You know, Bobby
14 here, or, JT or somebody ought to be able to answer
15 this, for Christ's sake.
16 MS. MCCORD: The problem with this
17 material is that there's no answer today where it's
18 going to go. There may be some point, some
19 arrangements, it could be moved somewhere else, a
20 better climate --
21 UNIDENTIFIED SPEAKER: I don't want to
22 cut you off, but these people have been here a long
23 time. I didn't get -- how did you characterize the
24 condition that these thorium drums are in? I was

1 confused. Did you say they were in good condition?
2 Are they in better condition than the pad 1 drums,
3 worse condition, about the same?
4 MR. AVEL: Worse.
5 UNIDENTIFIED SPEAKER: They're in
6 worse condition than the pad 1 --
7 MS. MCCORD: It depends on the drum.
8 You can see material; you can see waste material
9 looking at drums on pad 1. You can see waste looking
10 at drums that were in the plexus pad.
11 UNIDENTIFIED SPEAKER: I don't want to
12 confuse apples and oranges here. I'm talking about
13 the thorium, the 212. You can see thorium leaking out
14 of them.
15 MS. MCCORD: You can see waste. The
16 drums are that corroded.
17 UNIDENTIFIED SPEAKER: So we could ask
18 Bruce Boswell this stuff. He didn't even know where
19 the damn thorium was on site. You say you only find
20 it in conjunction with uranium; you never just find
21 thorium on site?
22 MS. MCCORD: Are you talking about
23 contamination, environmental contamination, or the
24 material that's stored?

UNKNOWN SPEAKER: Well, make the distinction for me.

MR. MITCHELL: There's all kind of thorium on site that's stored in drums. And some of them are in better conditions than others. What Catherine was saying earlier was that, whenever we see contamination in the ground, uranium is the main contaminant, like in water or soil. But there is plenty of thorium.

UNIDENTIFIED SPEAKER: Main contaminant in the sense that there's a largest amount of that?

MR. MITCHELL: Exactly, exactly. But there's plenty of thorium.

UNIDENTIFIED SPEAKER: Not that that's the most dangerous; it's just that that's the largest single one?

MS. MCCORD: We're making a distinction between material that's supposed to be stored in some form, bulk form, versus material that's already released to the environment contaminating water, soil.

UNIDENTIFIED SPEAKER: Andy, what did you mean when you said that thorium is not waste; it's

1 a product? What do you mean product? Are you going
2 to turn around and sell it to somebody?
3 MR. AVEL: The thorium we have --
4 UNIDENTIFIED SPEAKER: That's what a
5 product is; is it not? What is a product as opposed
6 to waste; what's the difference, please?
7 MR. AVEL: Be patient, and I'll answer
8 your question.
9 UNIDENTIFIED SPEAKER: I'll try to be
10 patient.
11 MR. AVEL: The thorium that's being
12 over-packed is considered a product because there may
13 still be an economic use for that material.
14 UNIDENTIFIED SPEAKER: You might still
15 be able to sell it?
16 MR. AVEL: Correct, or use it
17 somewhere within the Department.
18 MR. MICHAELSON: Do you have another
19 question?
20 UNIDENTIFIED SPEAKER: Oh, yeah. But
21 I'm not going to keep people up any longer. That's
22 what I wanted to know. Thank you very much.
23 MR. MICHAELSON: Okay. Try to insert
24 another written question. Will the waste pits and the

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K-65 silos finally be removed from over the buried auquifer?

MR. AVEL: Both of those areas, the waste pits and the K-65 silos -- Let me address the K-65 silos first. We are doing a removal action to determine what the best treatment, or the best --

UNIDENTIFIED SPEAKER: Near term.

MR. AVEL: -- near term treatment -- thank you -- will be for those K-65's in the silos, and the answer to that question is going to be the result of that engineering evaluation and cost analysis. So to say -- to answer the question definitely at this time is kind of precluding the process.

The waste pits, it's the same answer. We're involved in the Remedial Investigation/Feasibility Study, and the goal of that study is to determine what the final treatment will be for that area. So I can't answer that question until the studies are completed.

MR. MICHAELSON: Okay. I'm just going to ask, because of the late hour, that we do try and make our answers as short as possible here. Go ahead.

UNIDENTIFIED SPEAKER: I have a question for the EPA. Now that you've been elevated

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1 to cabinet status, do you have any hopes of actually
2 having more cleanup sites? I mean you have cleanup
3 sites, but the great majority of them are not cleaned
4 up.
5 MS. MCCORD: The requirements for
6 cleanup of sites is being driven by the laws that are
7 passed by Congress. And no matter if EPA is at
8 cabinet status or not at cabinet status, as it's been
9 since 1970, doesn't change the mandates that Congress
10 imposes on the agency. And the process for these
11 cleanups or identification of sites does not change
12 because the executive branch has restructured EPA's
13 role.
14 My personal opinion is that it can't
15 hurt in that EPA has a higher profile in the executive
16 branch. But it doesn't change our mandate for
17 protection of the public health and the environment.
18 UNIDENTIFIED SPEAKER: In some cases,
19 you've done a very good job. I just would like to see
20 actual more cleanups of a site around the United
21 States.
22 MS. MCCORD: Yeah, and I think
23 everybody recognize that there's fault in the
24 Superfund process, definitely. And it's a subject in

1 many congressional hearings, and obviously there's a
2 lot of problems with the process. We're getting tied
3 down in courts for a lot -- instead of getting out
4 there and doing the work.
5 UNIDENTIFIED SPEAKER: I had another
6 question, I guess for the DOE. Over the years, we've
7 had documentation and releases to the media of the
8 uranium dust that's gone up through the stacks and out
9 into the air. But we still have scientists getting on
10 public radio and talking, both media, and saying that
11 the uranium is too heavy to go off site. Is there
12 anybody willing here tonight to say that that uranium
13 dust can fly whichever way the wind goes, or blows?
14 MR. MICHAELSON: I'll let you take it
15 on that, the short version.
16 MR. DAVIS: Okay. I'll try the short
17 version. I think, from the standpoint of dispersion,
18 the uranium that would have been emitted from the site,
19 I think what you heard said, at least from my
20 knowledge from a technical standpoint of what's gone
21 on in terms air emissions, they're no different with
22 this than they are any air emissions.
23 There's some of the material, if it's
24 a large size particle, it will tend to fall out of the

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air stream closer in to the release point. The smaller the particles, and given wind conditions and a lot of other things, the further it can go.

I certainly think you'll find -- in fact you'll find even in all the dose calculations -- that we do we insert particle size considerations and solubility calculations.

And I think you'll find that those calculations, the fact that they show dose to off site population, and we do a dose calculation within an I guess a 50-mile radius for the population dose, does take into account that some of the material does in fact go off site. If it didn't, it would not be a contribution to dose off site.

MR. MICHAELSON: Does that answer your question?

UNIDENTIFIED SPEAKER: Yes, thank you. I just wanted to make it very clearly to any scientist that that stuff can fly beyond the border or the fence line.

MR. MICHAELSON: Thank you.

UNIDENTIFIED SPEAKER: Thank you.

MR. MICHAELSON: Maybe we can get through all these written questions real quickly and

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1 other people who want to approach can in the meantime.
2 What is going to happen in the removal action for the
3 south plume?
4 MR. AVEL: The removal action for the
5 south plume has currently progressed to an engineering
6 evaluation and cost analysis document. There is a
7 draft document that is being reviewed by DOE. We've
8 gotten comments back from our contractors, and we're
9 finalizing that document. It will be in the public
10 reading rooms August -- April 15th.
11 MR. MICHAELSON: I think the question
12 is what is actually going to happen.
13 MR. AVEL: Well again, that document
14 is the decision document. There are several different
15 alternatives that have been evaluated and are still in
16 the process of being finalized. And until that
17 document is finalized, we don't know for sure. But
18 come April 15th, you'll be able to get the document in
19 the reading room and find out what the solution will
20 be.
21 MR. MICHAELSON: Go Ahead.
22 UNIDENTIFIED SPEAKER: Will we find
23 out on that date what you did or what you're going to
24 do?

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MR. AVEL: What we're doing to do.

MR. MICHAELSON: Why is it taking so long to define the south ground water contamination plume? We're looking for the short version on this one, too, I think.

MR. AVEL: As we install wells, and we come closer to nailing down the boundaries, based on the information that we get from those wells, that will tell us whether or not we need additional wells and where to put them.

It's kind of an interim process. Right now, we think that by the end of this fiscal year, we'll be complete with installing wells in the south plume. Basically that's why it's taking so long. It's just a repetitive process of coming closer and closer to a boundary of contamination.

MS. MCCORD: We've also had some institutional problems in that these wells are all going on private properties, and there's been a great amount of cooperation from private property owners for allowing the site to install wells on their property.

There's been a lot of problems with properties owned by companies not allowing or causing -- or delaying the installation of wells on their

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1 properties even though they're in critical locations.
2 Right now, that forced an elevation
3 and legal actions be taken, which wastes valuable time.
4 We've got companies out there today who are denying
5 access to the government to install these wells to
6 finish this project. And they aren't being good
7 neighbors.
8 MR. MICHAELSON: How does Mr. Knollman
9 water his milk cows?
10 MR. AVEL: Mr. Knollman has a well on
11 his property that extends below the depth of
12 contamination in the auquifer. And his well is tested
13 regularly and monitored by our program.
14 MR. MICHAELSON: Okay. Explain
15 today's letter regarding round table. Why did Boswell
16 send letter?
17 MR. AVEL: A letter came out -- I
18 guess some people received it today -- that contained
19 a survey form concerning the round table discussions
20 that I mentioned a little bit earlier.
21 The reason it was sent from
22 Westinghouse is because it was a Westinghouse
23 suggestion. And Westinghouse is managing this effort
24 for us. And -- Well, that's basically the reason.

And all we're looking for in those surveys is some input, some feedback from the community, to let us know what kind of topics and what topics you would like to have round table discussions on, and where to locate them, when to locate them, and who you would suggest attending these round tables.

MR. MICHAELSON: Is it true that it's not limited to and not certainly even focused on RI/FS; it's on basically any issue that people --

MR. AVEL: Whatever issues that you'd like to discuss. That's the purpose of the survey. If you put them in the survey, then we'll plan on having a round table discussion on those topics.

UNIDENTIFIED SPEAKER: I have a quick question on that. I appreciate the round tables and all, but the survey came out, and there's no place on the form to say who you are. And how are you going to contact us after we fill out these surveys if you don't know who filled out the surveys?

MR. AVEL: I guess we were a little shortsighted there. We wanted to make sure that anybody that did fill out a survey form and did not want to put their name on it could fill one out in that form or fashion. But we probably should have had

a little explanation and a line for a name and address if you'd like to.

MR. MICHAELSON: So it's not too late. You can put them on before they turn them in.

UNIDENTIFIED SPEAKER: It just distresses me that we're supposed to trust you all with cleaning up the site, and you can't produce a survey form that covers the basics. That really bothers me.

MR. AVEL: I understand. I've seen cases where we would put request for name and address, and even caveat it and say if you want to, and we get the same kind of input, feedback back; that we can't even decide how to send out a survey form, if we did it the other way. I understand, and I can appreciate it.

UNIDENTIFIED SPEAKER: Okay.

MR. MICHAELSON: This is the last written question. And I'm having a little trouble reading it. So if that person is here, they may need to clarify it. In the report of radionuclides in liquid effluent to the Great Miami River and Paddy's Run Creek, Mr. MW Boback reported both strontium 90 and technetium 99 as being present. Since both

radionuclides are fission products, when was reprocessing done on site?

MR. AVEL: How about John Fazier?

MR. MICHAELSON: John, can I trouble you to come up here because of the transcript.

MR. FRAZIER: I'm not sure I want to answer that question, but I do know that since 1962, there were reactor returns of uranium. And reactor returns are those uranium metals that have been irradiated in a reactor, very low power, very low enriched uranium.

And as a consequence of all those reactor returns, you do have fission products. Cesium 137 is included, along with the strontium 90 and the technetium 99.

Both the technetium 99 and the strontium 90 are pure beta emmiters. And I'm not familiar with the specifics of Mr. Boback's report for the liquid effluents.

MR. MICHAELSON: So they are the products of reprocessing, but the reprocessing took place someplace else?

MR. FRAZIER: It's my understanding.

MR. MITCHELL: Isn't the same setup as

1 the plutonium coming back?

2 MR. FRAZIER: It's a consequence of --

3 not only are your fission products, but you have some

4 transmutation products, those that are beyond uranium.

5 You have some of those presents in reactor return.

6 It's my understanding that that practice started in

7 1962.

8 MR. AVEL: If whoever asked the

9 question would like us to answer that in more detail,

10 just get back to us, and we'll track that down and get

11 an answer back to you.

12 UNIDENTIFIED SPEAKER: This report

13 came out in 1977. So I'm surprised at the time block.

14 MR. FRAZIER: Why would you surprised

15 at the time block? 1962 preceded 1977.

16 MR. MITCHELL: It's a long time.

17 UNIDENTIFIED SPEAKER: It's quite a

18 few years difference between the time of the report.

19 MR. FRAZIER: I think you asked the

20 question, or someone asked the question, regarding the

21 liquid effluents as reported in 1977, and he included

22 that in 1977. So it seems to me in terms of the logic,

23 he's referring back to releases that would be present

24 as a consequence of reactor returns which were brought

on site from 1962 on. I didn't say prior to '62; I said '62 on is what I say meant to say.

MR. MICHAELSON: Okay.

UNIDENTIFIED SPEAKER: (Inaudible.) -- 15 years before they discovered it.

MR. MICHAELSON: Someone asked the question did it take 15 years to discover it.

MR. FRAZIER: I'm not familiar with the report except what you've said here today. You're referring to the liquid effluents?

UNIDENTIFIED SPEAKER: Yes.

MR. DAVIS: I think from the standpoint of did they know that there were fission products and other things, and plutonium 239, whatever, in the reactor returns, I think that -- I don't have the details of all the history, but certainly from just basic understanding of reprocessing function, you know those are going to be present to some extent.

So in terms of him knowing about the materials being there, I feel quite confident the people did. In terms of when those materials started to be monitored for as far as liquid discharges and/or air discharges, I'd have to do some research and go back to previous monitoring reports there and see what

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1 showed up, as well as in other records that they may
2 have at the site.
3 And at this point I have not done that.
4 If you'd like us to research that a little more in
5 terms of looking when we started monitoring for that
6 and those kinds of things, we'd be happy to do that.
7 MR. MICHAELSON: If you're going to
8 ask questions, it would really help if you would come
9 up to the microphone. I'm even having trouble hearing
10 you. Some other people may as well. I'll repeat your
11 question if you really prefer. Did you have another
12 question.
13 UNIDENTIFIED SPEAKER: No. If it was
14 reported in -- if it was known in 1966, I'm surprised
15 that there aren't reports between then and 1977. And
16 I'm also surprised that it was these fission products
17 were released at all to the liquid effluent.
18 MR. DAVIS: As I said, I'll have to
19 look and see in terms of what information was in
20 earlier reports prior to 1977 in terms of specific
21 environmental monitoring reports or other reports that
22 might have been released to the public.
23 MR. MICHAELSON: We're going to record
24 that one. It sounds like something that you may want

to get back to people on.

MR. DAVIS: I think we'll also have to get back in terms of why did that those particular materials go into that liquid stream. I'm not familiar enough with that process technology to be able to tell you that.

MR. MICHAELSON: Are there any other questions that people would like to approach the microphone and ask? Sure. Go ahead.

UNIDENTIFIED SPEAKER: In December when you sent some of the employees out to sample the K-65 silos, they had a little incident where they got contaminated. And according to your report from WMCO to the DOE, it said that the employees involved did not consider this incident to fall within the DOE reportable event criteria. So they didn't tell the senior management until the next day.

And I know you've had an investigation since, and you slowed down the thorium over-packing because of that. What is the criteria for reportable events, and how will the public be informed of things that are going on as you do the cleanup? It's a real concern for us that, in the process of doing the cleanup, further contamination and dangerous

1 situations may arise, and we won't know about it.

2 MR. AVEL: An incident or the

3 requirement to report an incident, of course, depends

4 on what kind of incident it is. And they vary from,

5 in this case, I believe it was eight hours that they

6 should have reported the incident.

7 And again, I think the fact that the

8 report was generated, and investigation was generated

9 by DOE to look into why that could happen is a

10 positive sign, and is a sign of DOE's concern that

11 these types of situations don't exist.

12 And again, I think our short-term

13 performance, past performance on getting information

14 out to the public, should be, hopefully would be an

15 indication that we are trying to do our best. We are

16 doing our best to get information out to you as soon

17 as we can.

18 MR. MICHAELSON: Did that answer your

19 question?

20 UNIDENTIFIED SPEAKER: In a way, but

21 we have a siren system so, if something really goes

22 wrong at the system, we can be forewarned. But if the

23 basic employee right there at the site decides well,

24 this isn't going to be a problem, or there won't be a

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1 chain reaction of events that's going to escalate into
2 something, if they don't report immediately, the
3 decision making proccess can be slowed to the point
4 where, if something does occur, it will be too late to
5 do anything about it.
6 MR. MICHAELSON: Were there any
7 conclusions to that investigation?
8 MR. DAVIS: There was an investigation
9 report issued. The man at Westinghouse is either
10 being asked or has responded to it in the broad
11 spectrum.
12 I know as far as the thorium project,
13 as far as the management review we conducted was to
14 review how Westinghouse was responding to those
15 recommendations regarding notification reporting,
16 assuring we've got management accountability, and
17 accountability for reporting information all the way
18 from the supervisor at the work site all the way up
19 the chain.
20 In terms of what specific procedure or
21 changes we'll make on site in response to that, I
22 think what I'd like to do is just note that as
23 something for me to get back on.
24 I'm not familiar enough with the

1 details to be able to discuss everything that
2 Westinghouse has done. But I do know that management
3 accountability has been stressed, as well as I think
4 the basic philosophy that, if there's any question of
5 whether something should be reported, it best be
6 reported because that's our expectation.
7 UNIDENTIFIED SPEAKER: Okay. This
8 just seems to me similar to the operation that had to
9 be delayed because the structure of what you do if
10 this happens and that happens. They had to go back
11 over all that. And you had a -- when I say elbower
12 situation, the people that were there to set up the
13 safety standards were not comfortable with it. And I
14 thought we had gone through that problem back then.
15 And it seems like it keeps resurfacing with each
16 project that you get involved with. It's disturbing.
17 MR. MICHAELSON: Any other questions?
18 UNIDENTIFIED SPEAKER: I have a
19 proposal to make. I have five questions. I'd like to
20 read four, hand them to you in writing so I can get a
21 response; I'd like them in the public record. And
22 then the fifth one, I'd like you to try and answer.
23 MR. MICHAELSON: And then I'd like to
24 suggest that we call an official end to this since

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1 it's getting close to 11, 10:40, because we did say
2 there was going to be an availability session,
3 although everyone may be too worn out for that now.
4 But let's, if do you have more
5 questions, that you still have opportunity to keep
6 asking them, but give people the chance to maybe
7 gracefully exit at this point considering the late
8 hour. Go ahead.
9 UNIDENTIFIED SPEAKER: There have been
10 a lot of graceful exits while we speak.
11 My first question is what is the
12 current schedule and budget for off site shipment of
13 backlogged low level radioactive waste? I'm not
14 referring to newly generated waste or construction
15 related waste.
16 And for the Ohio and US EPA, do you
17 think off site shipment of waste, including schedules
18 and standards, should be made part of future federal
19 facilities compliance agreements? As I understand it,
20 it currently is not. That was number 1.
21 Number 2, what are your current
22 priorities, schedules, budgets regarding the
23 environmental remediation? I'm looking for some solid
24 numbers. A lot of people are, too. It's the hardest

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1 information to come by from the DOE.

2 Regarding the cleanup projects, it's

3 very important that the public have information

4 specifically on off site shipments of nonRCRA waste,

5 and information specifically on your characterization

6 of RCRA and nonRCRA waste.

7 Number 3 -- this is for both the DOE

8 and the EPA -- do the storage buildings for the RCRA

9 drums comply with environmental requirements; and how

10 long do you plan on keeping these drums in these

11 buildings?

12 MR. MICHAELSON: I'm sorry, when you

13 say "storage drums," you mean --

14 UNIDENTIFIED SPEAKER: The storage

15 buildings for the RCRA -- the drums that are covered

16 by RCRA.

17 MR. MICHAELSON: So you're asking

18 about both the drums and the building?

19 UNIDENTIFIED SPEAKER: Now I'm talking

20 about the buildings, the storage building themselves.

21 Okay.

22 Four, when did you plan to release the

23 '88 Environmental Monitoring Report? I understand

24 that Lisa Crawford has a copy of it. My congress

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1 person, from whom I couldn't get it anyway; that's Buz
2 Lukens, but another Congress person has said that he
3 has requested it, and he cannot get it either.
4 I know it was completed last June;
5 that's June of '89. And you've responded to that
6 question because it's out of your hands for the
7 release of that. I want to know who do we write to,
8 who do we complain to other than Admiral Watkins,
9 himself? What does the public have to do to get
10 their hands on something that a few people have their
11 hands on?
12 And the fifth question, and if you
13 will indulge me, I really would like an answer to this
14 one. When will the Tiger Team action plan be finished
15 or made public? According to Secretary Watkins' cover
16 letter on that Tiger Team report, it was to have been
17 due by October 20th.
18 And according to the DOE's preliminary
19 report on the Tiger Team findings, I understand the
20 DOE Assistant Secretary for Environment Safety and
21 Health has already reviewed it.
22 Leo Duffy, I learned who's the
23 Director for Environmental Restoration and Waste
24 Management, is supposed to draft the action plans.

1 I'm assuming all of that's been done. And I'm
2 wondering when it will be made public? Where will the
3 funding for the action plan come?
4 MR. MICHAELSON: It's actually a
5 two-parter.
6 UNIDENTIFIED SPEAKER: Yes. And has
7 it been appropriated? Has the money for the action
8 plan implementation been appropriated?
9 MR. MICHAELSON: Mr. Davis, were you
10 going to answer that?
11 MR. DAVIS: As you know, the action
12 plan, itself, is a headquarters document. The
13 headquarters assistant secretary is responsible for
14 providing that document to the Secretary.
15 We have submitted a couple of -- well,
16 a first draft, and then we were asked to submit some
17 additional information. We recently, I guess within
18 the last week, I believe, transmitted some final
19 information from our perspective on the implementation
20 plan to headquarters for their use in preparing their
21 overall plan to go to the Secretary.
22 I'm under the assumption -- and Steve
23 might help me here. I'm under the assumption that
24 that report will be made available once the Secretary

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has agreed to the action plan. No decision has been at this point?

UNIDENTIFIED SPEAKER: That's right.

MR. DAVIS: Okay. And funding issues, there are some of the items in there for which actions have already been taken. There's some ongoing actions that are in the Tiger Team, like the RI/FS, for example, which are part of continuing project.

The RI/FS activities are identified as items under the Tiger Team. And there's other funding that will have to be appropriated in later years to address the issues, part of which are the things that already have plans, some new things as well.

In terms of details of that, again, the answer of that will have to come from the headquarters organization responsible for the overall planning for the implementation of those findings.

MR. MICHAELSON: It is now 10:45. I don't know whether that's a success or not, getting out of here before 11:00. We spent at least as much time, I think, in the question and answers as we did in the presentation. So perhaps that's a change in emphasis. Actually, we spent more.

We do have the poster session still

available. I still see an awful lot of people wearing these things here. So I guess they're here to continue to answer questions. Thank you, everyone, for participating, and all those of you who stuck it out to the end, and we'll see you next time.

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PROCEEDINGS CONCLUDED

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C E R T I F I C A T E

I, Katherine L. Warren, the undersigned, a notary public-court reporter, do hereby certify that at the time and place stated herein, I recorded in stenotypy and thereafter had transcribed with computer-aided transcription the within one hundred sixty-nine (169) pages, and that the foregoing transcript of proceedings is a complete and accurate report of my said stenotypy notes.

Katherine Warren

MY COMMISSION EXPIRES: KATHERINE L. WARREN

AUGUST 28, 1991. NOTARY PUBLIC-STATE OF OHIO

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