QUARRY WASTE REMOVAL PROPOSED PLAN

WELDON SPRING SITE REMEDIAL ACTION PROJECT

Weldon Spring, Missouri

TRANSCRIPT OF PROCEEDINGS

March 29, 1990

Reported by Sandra McGraw

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DEPARTMENT OF ENERGY'S

PROPOSAL TO CLEAN UP THE QUARRY

AT THE WELDON SPRING SITE

TRANSCRIPT OF PROCEEDINGS

BE IT REMEMBERED, that on the 29th day of March, 1990, a public meeting was held on the above-entitled matter at the Ramada Inn, 900 Corporate Parkway, in the City of Wentzville, State of Missouri.

P R E S E N T

Panel:

Ms. Sue Schneider, Moderator

Mr. Robert Morby, EPA

Mr. Steve McCracken, Department of Energy

Mr. Rick Ferguson, Department of Energy

Mr. Dave Bedan, Department of Natural Resources

Mr. Gale Carlson, Department of Health

Dr. Margaret MacDonell, Argone National Laboratory

MS. SCHNEIDER: Good evening. My name is Sue Schneider and I am going to be the moderator for tonight's public meeting.

I'm a native of St. Charles County and I'm involved in a number of business and civic projects in the area here. There's some information on my background on the back of the agenda on your seat, just to give you an idea of who I am. And this is a public service for myself. I really -- I really have no affiliation with the principles involved here.

The public forum tonight is designed to describe and summarize the Department of Energy's proposal to clean up the quarry at the Weldon Spring site. This is also your opportunity to ask questions and to express opinions on that particular proposal.

Public informational meetings like this are part of the community relations program at the site, and in addition to that are required by the Superfund Law that the site is operating under at this point.

The public comment period on this proposal opened on March 6th and will close on April 9th. So you'll have ample opportunity to get comments in.

My role here is basically that of an objective traffic director, essentially. What I am going to be doing, it'll be my job to make sure that you get to

1 voice your concerns and to get your questions clarified
2 from the presenters here.
3 But I'm also going to be making sure that we
4 keep on track in terms of the topics and that we stay on
5 time in terms of trying to keep things moving along.
6 So, if it appears that we're kind of rehashing some
7 material, or someone seems to be taking too long or kind
8 of dominating, I would hope that you realize that I'm
9 doing that to try to keep the process moving because we
10 have a lot of material to cover. And I'm sure there are
11 a lot of questions to be answered. So we're going to be
12 doing that for the benefit of the group overall.
13 There are informational bulletins outside on
14 the table that are available to you here tonight at th
15 meeting. And there are also agendas, as I mentioned, on
16 your chairs that will give you an idea of the procedure
17 tonight.
18 As you can see from the agenda, we'll have some
19 introductions, and then a presentation on the proposal
20 will be made by representatives of the Department of
21 Energy and the Environmental Protection Agency and the
22 project management contractor, M. K. Ferguson.
23 During that time, while they're presenting
24 information, if you have some questions, there are some
25 question cards inside the agenda on your chair. And we

1 would like for you to feel free to write some questions
2 down on there.
3 And one point that I will bring up about that
4 is if, please, if you have more than one area of
5 questions or more than one question, if you could write
6 it on a separate card. Because we're going to be trying
7 to group some of them that fall into the same category.
8 So again, if you have more than one question, if you
9 could use separate cards for that.
10 We'll be asking you when you have those --
11 those questions written up to raise your hand and we
12 will have folks that will come around and pick those up.
13 And when we have the break, they're going to work to try
14 to consolidate those and divide them up in the right
15 people to answer those.
16 I guess there are a couple people assigned to
17 pick up those question cards, can you just put your hand
18 up so we know who's going to be doing that? There is
19 one -- one in the back. One over here, okay.
20 After the presentation there are going to be
21 several elected and public officials that will be
22 allowed a brief time for comment. And basically this is
23 a courtesy that will be extended to them because they
24 have spent a lot of time tracking this issue and they're
25 the ones who get the late-night phone calls from voters

1 and constituents and other people. So we are going to
2 allow a brief time for some of the officials to give
3 their comments.
4 We will have a break, as I mentioned, and
5 during that time they're going to be sorting through the
6 questions. The question/answer portion of the program,
7 and if you look at it, the way this one has been
8 designed, essentially, is to keep the presentation
9 informative and to the point, but keep it rather short
10 so we can have more time for questions and answers. And
11 they felt like that was really what people want to have
12 time spent on, be more direct about what they're looking
13 to find out.
14 That part will be done in a panel format and
15 that will be moderated by the D.O.E. project manager who
16 is Steve McCracken. At that time they're going to read
17 the questions and the appropriate person will be
18 answering that. The question-and-answer panel will then
19 be followed by an open forum.
20 And during that time we have several ground
21 rules that I felt for purposes of trying to keep things
22 moving smoothly would be best to try to lay out now.
23 We'll talk about it right before we open that part up.
24 When we do it, if you have a question or a comment, if
25 you would please go to the microphone and identify

1 yourself. And please do it in a way that will be easy
2 for our court reporter because this will all be entered
3 into public record.
4 After you have been recognized, if you would
5 proceed with brief question or comment. If you know who
6 you want to direct your question to, someone specific,
7 if you please would do that, that would make sure that
8 things are more direct.
9 And, again, if someone -- something has already
10 been covered in terms of the material, if you could try
11 to stay away from, you know, that particular area.
12 Again, we do not want to rehash a lot of information,
13 but maybe if you've got a specific point on what they
14 covered, you know, feel free to ask that.
15 And, again, please be brief because we have a
16 number of people who, I'm sure, who want to make
17 comments.
18 The other thing that I think it's important to
19 say is that you really want to keep to the topic of this
20 meeting instead of the overall project or a variety of
21 other things. We're talking about the proposal which
22 will be presented tonight which is about the cleanup of
23 the quarry. So if you seem to be going too far astray
24 we may need to get you back on track.
25 Two final notes just in terms of process. One

1 is that there is a court reporter here, and your
2 questions and responses, comments that you have will
3 become a part of the administrative record of this
4 meeting. But the staff also encourages you to send in
5 written comments prior to April 9th so that they can be
6 included in the public record. That way it's extra
7 insurance that it will be down in there in a way that
8 you're satisfied with. This is particularly important
9 if you feel like your question wasn't sufficiently
10 answered here or you would like to make a written
11 comment or response on something in particular.
12 And just one other note is that we did schedule
13 in time for a break as I said. If we start running
14 longer and longer, if people start kind of getting ante
15 then we may call for another break as we go a bit
16 further along.
17 So we'll go ahead and start. What I'd like to
18 do is introduce two people and they will begin their
19 comments and start their presentation.
20 The first person that will be up is on my right
21 and this is Robert Morby, who is Chief of the Region
22 Seven Superfund Branch of the U.S. Environmental
23 Protection Agency.
24 And then further down the line, two people down
25 is Steve McCracken who is the project manager here at

1 the Weldon Springs site for the U.S. Department of
2 Energy Remedial Action Project here.
3 And so with that, we'll start with you.
4 MR. MORBY: Thank you, Sue.
5 Let me ask, can everyone hear me? If you can I
6 won't wear the necklace. In the back? Okay.
7 On behalf of EPA I'd like to express my
8 appreciation for the opportunity to come here this
9 evening to spend a few minutes and talk with you a
10 little bit about something that we think's rather
11 important to this community. I'd also like to express
12 our appreciation to each of you for taking the time and
13 effort out of your schedules to come here and to express
14 your feelings and thoughts about what's being proposed
15 on behalf of the Department of Energy.
16 I'd like to begin by telling a little bit about
17 our role as the Environmental Protection Agency and what
18 our function is in this site and what we have been doing
19 as a part of that.
20 When Congress passed the Superfund Law it gave
21 us authority to look at Hazardous waste sites,
22 particularly as it pertains to federal facilities, to
23 have a role in the oversight at those sites and the work
24 that's being done at those sites.
25 We have exercised that responsibility here at

1 the Weldon Spring site. We've worked closely with the
2 Department of Energy officials and our contract
3 personnel as well as the State of Missouri officials.
4 Having done that, we've invested our time and
5 energies to understand the investigations that they've
6 been conducting to make sure that they've been doing
7 them in a proper format, that the work that's necessary
8 has been conducted.
9 We've also provided the comments when we've
10 found those cases that there is need for additional
11 detail and direction to be addressed. And we have found
12 that the Department of Energy has been responsive to
13 those requests that we have made.
14 In addition to that we have a responsibility
15 see that the federal facilities and Department of Energy
16 in this instance complies with the Superfund Law. And
17 that's been involved in a lot of activities as proceeded
18 up to this point and the decisions we'll be making out
19 of the meeting this evening.
20 You will have an opportunity to comment rather
21 extensively by either oral comments or written comments
22 and the concept there is if there's something there that
23 we as regulators have overlooked or have not been aware
24 of or information of that sort, it's your opportunity to
25 make us aware of that so we can take it into

consideration in the decision making that'll go forth.

Morris Kay, my Regional Administrator in Kansas City, is responsible for signing the Record of Decision which is the document which will make the decision on what happens in the way of the cleanup at the quarry.

We anticipate that that will occur on or before September 30th of this year, and our preference is that it occur soon so we can get on with the work.

You're going to hear this evening some discussion by Steve McCracken and Rick Ferguson about the proposed plan and what is being proposed to be done here.

Preparatory to that there was a -- some investigations and I would like to just call your attention to those so you'll have an awareness of them.

These are some blue bound volumes. The smallest one is a proposed plan, one is a remedial investigation and the last one over here is a feasibility study. Those have a lot of detail in them and if you have an interest in understanding the work that's been going on, those are available at four libraries.

I think they're noted on the back of one of the bulletins that has been prepared that is out on the back table as well as at the reading room at the Weldon

1 Spring facility. So I would hope that you would take
2 the opportunity to look at that and understand those
3 materials because I think they will help you make
4 comments that will be pertinent and appropriate to the
5 things that we should consider here.
6 I want to conclude these remarks and leave the
7 time for you really to speak and let us hear the things
8 that you have to say this evening. I will tell you that
9 having invested the time and energies that we have in
10 doing the work that we think was necessary, we at the
11 EPA have concluded that the proposed alternative that
12 will be discussed here this evening is appropriate and
13 we support that and we are anxious to hear your
14 comments.
15 And with that, I'm going to turn the time to
16 Steve McCracken.
17 MR. McCRACKEN: Before I start I would
18 like to just take a moment to thank Sue Schneider for
19 volunteering to be our moderator tonight. I guess in my
20 mind to volunteer to do that kind of thing is certainly
21 above and beyond the call of volunteerism, at times and
22 certainly we do -- we do appreciate that because we try
23 to find -- we do try to find somebody that will take
24 charge of a meeting and yet has an objective opinion,
25 has no -- is not biased in our favor, or would create

that kind of impression. So we certainly do appreciate that.

Speaking on behalf of the Department of Energy, I'm certainly pleased to be here. This represents a very significant point to us in our cleanup effort. I think that our people have worked extremely hard over the last two years in order to make what we consider to be a rather important cleanup decision.

We've got people -- all of our people, their primary interest is to do the job right. And as we view that, that doing the job right means to clean up the Weldon Springs site without compromising health and safety.

We have looked at a number of alternatives in proposing the cleanup decision tonight, and we've selected what we believe to be the best cleanup decision.

The proposal we are presenting is sound, it is safe and in our view it will mark, really, the real beginning of the cleanup work at Weldon Springs.

Our presentation tonight, it's -- it's designed to be very brief. There is a bulletin that's out on the table outside. I'm sure that some of you may have seen it when you came in. This bulletin basically lays out the proposal that we're presenting this evening and I

1 would encourage you to look at that.

2 In that bulletin it shows where there are other

3 documents that can be reviewed. One place that there

4 are documents that can be reviewed is at our site at

5 Weldon Spring. We do have a public reading room and

6 you're certainly welcome to come out there and look at

7 documents. We had our first visitor yesterday and I

8 think we all went out to witness that. It was sort of a

9 megavent to us. We thought that was great.

10 We also are keeping it brief. But we want to

11 go long enough to give you a chance to think about

12 questions that you might want to ask, and write down

13 those questions and pass them to one of the people that

14 will pick them up. And then we'll divide them up and

15 answer them following the break.

16 What I want to do is provide just a very

17 general overview of what it is that we're talking about

18 tonight, give you a little historical perspective of the

19 waste material that we are dealing with. I want to very

20 quickly explain why we're carrying out this action, if

21 it isn't quite obvious. And I want to talk just a

22 little bit of how this fits into the overall cleanup

23 that we're conducting at Weldon Spring.

24 If you'll give me just a moment, I need to put

25 this thing on because I like to move around when I tal

1 Following my presentation, we'll also ask that
2 Rick Ferguson, who is to my right several people down,
3 he's the manager of the quarry work -- and he'll
4 explain, just briefly too, the engineering aspect of
5 what we're proposing to do and to give you some idea of
6 that.
7 I think this thing's working.
8 First of all, if you haven't been to our site,
9 there are two areas of our site -- can everybody hear
10 me? I can't see. If you can't hear me raise your hand.
11 Can you all hear me? Can you hear me? Okay.
12 There are two areas to our site. There is the
13 Weldon Spring Chemical Plant, that's the area in yellow.
14 It's just south of Highway 40 on along Highway 94. In
15 addition to the Weldon Spring Chemical Plant, about four
16 miles south of us there's also a quarry. It's a nine-
17 acre quarry. It was used in the forties to mine
18 limestone, and it was used by the Army and the
19 Department of Energy to dispose of contaminated debris.
20 Those are the two areas of our site.
21 This shows you a picture of those two areas.
22 In the upper right-hand corner is the chemical plant.
23 That's about 220 acres, 40 buildings or structures.
24 Most of those are radiologically contaminated to some
25 extent. In and around those buildings we have soil that

is lightly contaminated with uranium.

You can see two small pits in the bottom of the picture right here. Those are what we refer to as raffinate pits. Raffinates are the waste product of the processing that went on at that plant. There's about 250,000 cubic yards of sludges in those two pits and two others that you can't see on the picture.

We are working on a decision, working on studies to determine how these areas will be finally cleaned up. And, probably most important, how that material will be disposed of.

In the bottom right-hand corner is the quarry itself. You can see the face of the waste pile in this area right here. There's about 100,000 cubic yards of material in that quarry.

In the foreground you can see that there's a small pond. That pond contains about three million gallons of contaminated water. And it's the quarry that we're focusing on this evening.

Our proposal this evening is to exhume the contaminated debris that's in that quarry, to haul it up to the plant site and to place it in temporary storage in an area right down here.

To show you just -- we have some old pictures that were taken back in the late fifties, early sixties

that show you a fairly good -- give you pretty good idea of the kind of material in there. In fact we use these pictures quite often in doing studies, just to verify that the records that we have are, in fact, correct as far as the material that has gone in that quarry.

What you can see, this is a picture that shows when the filling operations initially began. This is Highway 94 right here. Material was brought into the quarry both by road and by rail. They began filling the quarry on this end and worked their waste pile all the way around to here. And then the sump is in this area right here.

This shows some of the -- just a closer picture to give you an idea of the filling operations. Again you can see a road coming into the quarry, an old rail car, a puller car that was used to bring cars loaded with debris into the quarry. They began filling on the upper side.

If you look at that closely, this was the initial filling operation. This is one of the kinds of materials that's in the quarry. These are drums, drums that contain thorium residues and thorium is a radioactive material.

This just shows you a better picture of how the filling operation was carried out.

1 Another picture of how the filling operation
2 was carried out. It does show you again the kind of
3 material that was in the quarry, that is in the quarry.
4 It's concrete debris, structural steel, those kind of
5 things.
6 Looking at it from this angle you can see that
7 the top of the waste pile looks very neat. That's
8 because they used a considerable amount of soil material
9 to level out and fill in voids and that kind of thing.
10 If you look at the face of the waste pile that really
11 gives you a good idea of what is beneath that surface.
12 This is how it looked at about the end of the
13 filling operation in the late sixties, and that's very
14 much what it looks like today. The only difference fr
15 then and now is that they have allowed the quarry sump
16 to fill up with water. They did keep it drained during
17 the filling operation. It has now been allowed to
18 refill to the level that you see here.
19 And that brings us to why it is that we're
20 proposing to do what we're doing -- about what we're
21 proposing. That brings us to the proposal that we're
22 here to present this evening, and that is to remove that
23 debris.
24 The reason for that, if you look in profile.
25 This is the quarry right here. To the right is the

1 St. Charles County well field. What is happening with
2 the quarry is that contaminated water is leaking from
3 the quarry. It's moving in the direction of the
4 St. Charles County well field. Fortunately it has not
5 gotten into the well field and contaminated the drinking
6 water.
7 We can confirm that with our monitoring wells.
8 We have no reason to believe that it will contaminate
9 the well water in the near future. However, we have no
10 reason to believe that it would not. And so what we're
11 proposing to do is to get on with this work we think is
12 necessary to remove the threat from the St. Charles
13 County well field.
14 Now talking about where this fits into the
15 overall cleanup strategy for the quarry. Last February
16 we met with you -- we met with the public to propose to
17 you a water treatment plant that would treat the water
18 that's in the pond that I showed you in the slide
19 earlier. That treatment plant is now being designed and
20 fabricated. But we intend to begin the construction and
21 installation of that plant this summer.
22 Once the water is treated and discharged, then
23 that puts us in a position to remove the bulk waste and
24 take it to the plant site and put it in temporary
25 storage. And Rick, in a few minutes is going to talk to

1 you about how we would propose to do that because that's
2 what we're here to discuss this evening.
3 Once the bulk waste is removed we will then --
4 we then cannot say that we're finished in the quarry.
5 What we have to do is go back into the quarry. We'll
6 look at the cracks and fissures that are the pathways
7 now that water is leaking out of the quarry. We'll look
8 at those cracks and fissures to see if any additional
9 cleanup is required there.
10 We'll look at the groundwater and we'll also
11 look at the property that's around the quarry to see if
12 any additional cleanup is required. So that's the third
13 step. And it will only be after that third step that
14 we'll be able to leave the quarry as a clean site for
15 other uses.
16 So that's what we're here to -- we're here to
17 propose that second step tonight. And what I would like
18 to do is to turn it over to Rick Ferguson and let him
19 talk to you just a few minutes about the engineering
20 aspects of this activity.
21 MR. FERGUSON: Okay. Within this second
22 phase of the project that Steve discussed, there is
23 actually three primary components. And those are the
24 operations associated with excavating the waste,
25 transporting it, and placement in secure storage at the

1 chemical plant site. I'm going to touch briefly on each
2 of those issues and give you a rundown of what our
3 proposal consists of.
4 What do we mean when we talk about bulk waste
5 excavation? Well, the scope of bulk waste excavation is
6 to remove all the material that we can with conventional
7 earth moving equipment. It's important to note that
8 we'll be taking everything out of the quarry as opposed
9 to what's maybe more traditionally proposed which would
10 be to attempt to establish some sort of cleanup criteria
11 and remove only the contaminated portions. So we'll be
12 moving everything right down to the original quarry rock
13 floor.
14 For engineering considerations we've broken the
15 quarry down into four distinct zones or regions. Zones
16 one, two, three, and four.
17 The actual removal is a fairly straight forward
18 process. However, since we are working in an old dump
19 environment we will proceed very carefully.
20 Excavation will be initiated in zone four and
21 zone three in the northeast corner where the wastes are
22 dry and relatively shallow. They are less than ten feet
23 thick in these regions. And the work will proceed into
24 the sump zone or zone two where the waste is substan-
25 tially thicker, up to 40 feet thick. Approximately half

of that thickness resides below the current water level.

Now the operation of the water treatment plant that Steve discussed will have drawn down the water in the quarry pond and therefore will have removed the poor volume, the poor water in the waste below the water table. So we can get in and work in the dry.

Lastly, the final zone to be addressed will be the haul zone. And as we back our way back out of the quarry the approximately three feet of material in this zone will be removed.

Now while the waste is being excavated, the walls will be -- will be sprayed with a high pressure wash to remove any loose material. And once all of the material has been excavated from the quarry the floor will be -- will be graded to provide drainage to the sump and we'll be ready to initiate the third phase of the project which will be to collect samples of the quarry floor and walls for the presence of any residual materials.

This work will be initiated according to our current plans and schedules in the spring of '92 and completed in the winter of '93 at a cost of approximately seven million dollars.

As the waste is excavated it will be loaded into tightly sealed trucks to prevent spilling of any

1 material. We're proposing to construct a private haul
2 road from the quarry to the plant site. The decision to
3 use this private road is basically a judgment call.
4 We looked at the physical hazards associated
5 with Highway 94 in this area, the poor line of sight and
6 the time it would take our loaded trucks to get up to
7 speed coming up these long steep grades, and concluded
8 that the last thing we want is one of our loaded trucks
9 to be involved with an accident on the highway.
10 In any case, the trucks will proceed out of the
11 quarry, up an abandoned railroad line to be converted to
12 a single-lane haul road into the plant site.
13 One additional thing that we're considering is
14 to construct an underpass in this area and eliminate
15 the road crossing. There are discussions that are
16 taking place currently with the State. If for whatever
17 reason that operation can't be implemented, we'll
18 provide flagmen or traffic controls, other suitable
19 signals to ensure a safe road crossing.
20 This haul road construction, according to
21 current schedules, will begin in the spring of '91 and
22 be completed in the fall of '91 at the cost of about a
23 million dollars.
24 This shows you the relative location of the
25 temporary storage facility with respect to the rest of

1 the chemical plant. It has a number of advantages in
2 that the haul trucks will enter in this area and they
3 won't have to crisscross the site with the traffic. As
4 it turns out that location is about a mile from the high
5 school.
6 The layout of the facility is similar to this.
7 The trucks would enter from the haul road into a sorting
8 area and they would then proceed to one of a number of
9 different sub-areas where the material would be
10 segregated in accordance with its physical properties.
11 For instance a pile for rock and concrete, a
12 pile for fine grain soils, structural debris and
13 equipment and the pile would also include retention
14 ponds -- double-lined retention ponds to collect any
15 storm water and leachate that may drain out of the pile.
16 The facilities are being designed to the
17 stringent EPA requirements for a hazardous waste pile.
18 The criteria -- the more important criteria are a low
19 permeability liner underneath the pile and covers over
20 portions of the pile that have particulates that could
21 become airborne.
22 We've made an attempt to show what the
23 completed facility would look like. Again you can see
24 the collection ponds, the covered piles, the relation to
25 the raffinate pits that Steve showed.

1 The temporary storage facility construction
2 would, pending the approval of these plans, would be
3 initiated in the fall of '91; completed in the spring of
4 '91 at the cost of about two million dollars.
5 And briefly that's a quick summary of the
6 operations of excavating the waste, transporting and
7 placing in secure storage.
8 And at this point I'll turn it back over to
9 Steve. He may want the lights down.
10 MR. McCRACKEN: The reason I asked her to
11 leave -- I have one more picture that I want to show,
12 and it's one that I showed just a moment ago.
13 This is the way that the waste pile looks
14 today. Basically what we can do in the quarry is we can
15 very closely monitor that waste, which is what we are
16 doing to be sure that there is no danger or no
17 contamination that's getting in the drinking water
18 supply in St. Charles County.
19 We do that extensively. We work constantly
20 with the State and the County on that to be sure that
21 isn't happening. But all we can do is monitor it. All
22 we can do is assure people that water is safe by our
23 monitoring.
24 And really what we're proposing to do is in
25 this condition we can monitor it to assure that it's

1 being stored -- that it's -- there is no danger. But
2 what we're proposing is to put it into a condition that
3 we cannot only monitor it but control it and to
4 eliminate off-site emissions. And that's what,
5 basically what we're proposing to do. We want to be
6 able to monitor it and control it as opposed to only
7 monitor it.
8 You can turn the lights on now.
9 I have just a few more notes. And the studies
10 that we've presented, or the studies that we have done
11 indicate or demonstrate that the work can be done
12 safely. But in our minds that's only the first step as
13 far as health and safety goes, because that is certainly
14 the first priority in everything that we do.
15 Now that if we -- when we go beyond the studies
16 then we'll create or we'll prepare design work packages
17 and that's, safety and health will be a first priority
18 in those design work packages, also, and we'll design in
19 safety and health to prevent problems. We won't rely on
20 that only though. We'll also have a very extensive
21 monitoring system that will allow us to be able to
22 assure that air and water is safe.
23 And finally, we will also have a very
24 comprehensive emergency preparedness plan that will
25 place us in a position to react very quickly to problems

1 if they occur.

2 The sole reason that we're doing this activity,

3 or not the sole reason, but the primary reason that

4 we're doing this activity is because of the future risk.

5 And that future risk is that it could contaminate the

6 St. Charles County well field. And that's the reason we

7 are proposing to get on with the activity.

8 Bob Morby asked me to mention one other point,

9 and that is tonight's -- the comments that we make and

10 the questions you ask and then the answers that we

11 make -- that we give to your questions will become a

12 part of what we call the Responsiveness Summary.

13 In addition to that, if you feel that we

14 haven't answered your question adequately or if you

15 think of additional questions that you have that you

16 don't think about tonight or don't get an opportunity to

17 ask, then we strongly encourage you to submit your

18 questions to us in writing.

19 The closing date for receiving questions is

20 April 9th or postmarked April 9th. And I'm encouraging

21 you to do that, too. And those questions and the

22 answers that we will give to those questions will also

23 become a part of the Responsiveness Summary. And that's

24 a very important part of compliance with the rules and

25 regulations that are set out by EPA for this kind of

1 work.

2 With that I'll turn it back over to Sue

3 Schneider.

4 MS. SCHNEIDER: Okay. Again if you have

5 some questions, if you can be jotting them down and

6 folks will be able to collect them. So if you have any

7 written down if you want to put your hand up we'll have

8 some people come by and pick those up.

9 We do have a couple of elected or public

10 officials who have submitted some information, and

11 several that are here that we wanted to go ahead and go

12 through that process.

13 First of all we wanted to mention that

14 Congressman Jack Buechner has submitted comments which

15 will be entered into the public record.

16 State Senator Fred Dyer who attended an earlier

17 presentation for the elected officials a week or so ago

18 has sent his regrets that he is unable to make it

19 tonight because he is out of town, but he is aware of

20 the situation at this point in the proposal.

21 We have Representative Ted House, who is from

22 the 20th District, he has sent some written information.

23 I want to read at least an excerpt from that to give you

24 a sense of what he had passed along.

25 "Please announce at the meeting and note for

1 the record my continued strong concern that the
2 treatment and discharge of the water and the removal and
3 storage of the bulk waste be conducted in a manner which
4 will pose no danger to the area residents, the students,
5 and staff of Francis Howell High School, or any
6 passersby, or any other person.
7 "It is essential to the health and safety of
8 the people of St. Charles County that the St. Charles
9 County well field be closely monitored for migrating
10 contaminants and that the items removed from the quarry
11 be stored in a manner which poses no health risk."
12 And again those are comments from
13 Representative Ted House from the 20th District of the
14 State Legislature.
15 Is Representative Ortwerth here yet? I'm not
16 sure he -- I didn't see him in here. Okay. Why don't
17 you come on up?
18 MR. ORTWERTH: The people of St. Charles
19 County have lived with the environmental problems that
20 were created by the federal government at the Weldon
21 Spring site for nearly half a century now. The wastes
22 from the production of TNT and the processing of uranium
23 have left my constituents and others in St. Charles
24 County with a legacy, continued legacy of fear and
25 uncertainty.

1 As you know, much of this concern has been
2 focused on the wastes in the quarry near the St. Charles
3 County well field. While I and I think most of the
4 residents of this County are aware, that monitoring has
5 shown that the production wells of the County's drinking
6 water have not been contaminated, we remain gravely
7 concerned about the potential for migration of
8 contaminants which have already leeched into the
9 groundwater beneath the quarry into the well field
10 servicing our County. Simply put, there is no margin
11 for error when it comes to the water supply serving our
12 rapidly-developing County.
13 I am pleased, as I think most of the elected
14 officials are, with the proposal that the U.S.
15 Department of Energy has submitted to remove the
16 chemical and radioactive wastes from the quarry site. I
17 urge DOE to proceed with a sense of urgency in
18 reclaiming the debris deposited in the quarry before
19 additional radioactive and chemical elements escape into
20 the groundwater beneath the quarry.
21 I feel that it's critical that the monitoring
22 program that's being jointly conducted by federal,
23 state, and local authorities continue without
24 interruption with sufficient frequency. Adequate
25 samples must continue to be tested from the monitoring

1 wells long after the cleanup of the quarry is completed.
2 Four decades of groundwater infiltration have
3 already occurred. It is vital as well, in my mind, and
4 I think you intend to address this, that the pumping
5 that is required for removal of the quarry wastes does
6 not result in the release of additional contaminants
7 below ground.
8 I commend the Department for its decision to
9 transport the bulk wastes via a specially constructed
10 haul road to the temporary storage area. The health and
11 safety of the motoring public, nearby students and
12 nearby public employees demand that loaded trucks stay
13 off Highway 94.
14 Due to the large number of truck trips that are
15 necessary to remove all the quarry wastes, I would urge
16 DOE to consider the possibility of the construction of
17 some kind of separated grade crossing so that loaded
18 trucks will not pose a hazard to the movement of traffic
19 on this narrow, winding stretch of highway.
20 As you know, gentlemen and ladies, a concern
21 that is often expressed by the residents of this County
22 and shared by its public officials is that the temporary
23 storage area could become the permanent storage area for
24 the quarry wastes. I understand that it is not DOE's
25 intention to leave the quarry wastes in the temporary

1 area or to convert this temporary storage facility to a
2 permanent disposal site.
3 What I guess I want to say this evening is th
4 I, and I think most of the other elected officials of
5 this County, intend to hold you to that commitment to
6 close out the temporary storage area when the final
7 disposal facility is available and decided upon.
8 I am uncomfortable with the apparent delays in
9 arriving at a decision on a permanent disposal option.
10 Last fall DOE officials stated that such a record of
11 decision would be made by the spring of 1991. The
12 latest informational bulletin says that this decision
13 will not be made for a few years, and I'm not sure
14 exactly what that means, but it doesn't sound like it
15 means next spring.
16 Another obvious concern will be for the
17 students and staff at Francis Howell High School. I
18 believe it's crucial that DOE continues to provide funds
19 to the school district in order that it may engage its
20 own environmental and safety consultant. I am also
21 counting on the Missouri Department of Natural
22 Resources, the Missouri Department of Health to continue
23 to assist in strict oversight of this project along with
24 the U.S. Environmental Protection Agency. The
25 continuing cooperation of all these agencies is

1 important to the successful completion of this project.
2 Let me say in closing that the Department of
3 Energy's communications with concerned citizens and
4 elected officials in this County concerning the Weldon
5 Spring Site Remedial Action Project has greatly improved
6 over the years. I urge you to continue this meaningful
7 dialogue, so that measurable progress can be made based
8 on decisions that reflect a true public consensus as to
9 responsible environmental stewardship.
10 I urge you to do all you can to expedite this
11 project. St. Charles County has endured this
12 unfortunate episode of governmental mismanagement and
13 damage to our community's environmental resources for
14 far too long.
15 I thank you for this opportunity to comment.
16 Thank you, Sue.
17 MS. SCHNEIDER: Are there any other State
18 Legislators out there that came in that I missed? Did
19 you want to --
20 MR. McCRACKEN: Joe, you said so many
21 things that I just wrote like crazy trying to get it all
22 down. And in general there isn't anything that you've
23 said that I don't agree with, for the most part.
24 I appreciate your comments on improvement
25 of communications. I couldn't tell people how important

we believe that to be.

Continue to provide funds to the school, that's our intent to do that.

When will a final decision be made? It is being delayed some but we are going to have the draft documents done this October. And what we need to do then is get the review process done as quickly as we can. In fact I've been talking about that to the EPA today.

Let's see. You want a separated grade crossing 94. Certainly we would like to do that and the only thing that we're looking at now is cost and whether or not it can be done at a reasonable cost. But it is certainly our desire to do that.

Pumping should not result in a release, we agree with that. Our studies say that it won't, but we're going to expand our monitoring system to be sure that it does not.

Maintain monitoring until we're sure that things are safe. We'll certainly do that.

I think that that's most of what I caught. Thanks, Sue.

MS. SCHNEIDER: Okay. We have two folks here from the state level in terms of state agencies that are involved with this, and we wanted to give them

1 a couple minutes to make some comments on this.

2 The first one is Dave Bedan, who is listed in

3 your agenda. He is Radioactive Waste Coordinator of the

4 Division of Environmental Quality, Missouri Department

5 of Natural Resources. Dr. Dave Bedan.

6 DR. BEDAN: Thank you, Sue. My name is

7 David Bedan, representing the Missouri Department of

8 Natural Resources. I am the State's Coordinator for not

9 only DNR but the other state agencies that are

10 interested in and working on this project.

11 As many of you in this room know, the Missouri

12 DNR has been urging the cleanup of the Weldon Spring

13 Quarry for well over ten years. Therefore, we are very

14 pleased to see the U.S. Department of Energy is

15 proposing to remove the waste from the quarry.

16 We support the general concept of this plan,

17 but we will continue to review the details of the plan

18 as they become available.

19 We are all concerned, of course, about the

20 potential threat of the quarry waste to the St. Charles

21 County well field. The well field has been extensively

22 monitored by local, state and federal agencies for the

23 past five years. And this monitoring has shown that the

24 drinking water wells have not been contaminated by the

25 wastes in the quarry. However, the quarry does present

1 a potential threat to the well field and we want to see
2 the wastes removed as soon as possible.
3 Removing and temporarily storing this waste
4 would not only eliminate this threat to the well field,
5 but it would also expedite the total cleanup of the
6 Weldon Spring site. And we think this could be done in
7 a manner that will not prejudge the decision about the
8 final disposal of all the site waste which is an
9 entirely separate decision.
10 As Representative Ortwerth said, we also intend
11 to hold DOE to the commitment that the temporary storage
12 facility will not become a permanent storage facility.
13 We're not sure how long it will be but it's definitely
14 not going to be the temporary -- the permanent storage
15 facility.
16 The DNR will be overseeing the detailed
17 implementation of this quarry cleanup plan. And it will
18 be important to carry out fully the radon and dust
19 control plans which are outlined in the feasibility
20 study.
21 As they're outlined in there, they will do the
22 job safely and protect the environment and human health.
23 And because of the possibility that there is mixed
24 radioactive and hazardous wastes in the quarry, we think
25 the temporary storage area should meet all the

1 substantive requirements of the state and federal
2 hazardous waste law and regulations.
3 We also believe that the loaded trucks should
4 be kept separate from the local traffic and Highway 94
5 in order to reduce the possibility of accidents. The
6 railroad easement which DOE proposes to use for the
7 loaded truck traffic now crosses Highway 94 at three
8 separate locations. And we think the haul road should
9 be designed to eliminate all of these three crossings.
10 I was pleased to hear tonight Mr. Ferguson say
11 that the DOE was considering a totally separate
12 right-of-way with a separate grade crossing down by the
13 quarry. We would really like to see you do that. Also,
14 we have been in contact with the State Highway
15 Department and they're very interested in that separate
16 right-of-way and very interested in cooperating with DOE
17 so it can happen.
18 Finally, I think it will be important to keep
19 the public and the administration of the Francis Howell
20 High School informed of the progress of the cleanup
21 project. It's going to be very important, because a
22 well-informed public is going to be essential to the
23 successful and safe cleanup of this quarry.
24 In conclusion, the DNR supports the general
25 concept being proposed by the EPA and we look forward to

1 an early start of the cleanup.

2 I will be happy to try to answer any questions

3 later. There are also several other staff members of

4 the DNR here in the audience, as well as the State

5 Department of Health and the State Department of

6 Conservation. So I think between us we covered about

7 all the areas that you might be interested in. Thank

8 you.

9 MS. SCHNEIDER: Okay. The other person --

10 state official who's here is Gale Carlson who's the

11 Environmental Specialist with the Department of Health,

12 Division of Environmental Health and Epidemiology

13 Services.

14 MR. CARLSON: Thank you, Sue.

15 As Dr. Bedan mentioned earlier, the Department

16 of Health acts as an oversight agency reviewing health-

17 based or health-related plans in these cleanups.

18 We have been involved in the Weldon Spring area

19 for approximately nine years. We started doing water

20 sampling in the early eighties all around the area.

21 Right now we have about one hundred wells, private wells

22 that we sample on a quarterly basis.

23 We basically work as a risk assessment agency.

24 That means when some proposal comes forward, we

25 determine if that is a risky or a non-risky proposal.

1 We then provide that information to the Department of
2 Natural Resources. Dr. Bedan mentioned that his agency
3 is basically that they're the final State oversight
4 agency in these kind of cleanups.
5 We've reviewed all the documents that have been
6 provided to the State which I am really sure are all the
7 documents that exist in relationship to this cleanup.
8 Now we basically believe that the proposed remedial
9 activities, that means draining the water out of the
10 quarry first, and then cleaning up the bulk waste,
11 storing it up on a temporary basis at the chemical
12 plant, is the safest way and the most expeditious way to
13 clean this thing up.
14 I basically have nothing more to say. If
15 there's any questions, health related, feel free to ask
16 them tonight. Thank you.
17 MS. SCHNEIDER: I want to make a quick
18 check if there's someone, as we move through the
19 different levels of government, is there anybody here
20 from the County Commission that wanted to speak? I
21 didn't see. Okay.
22 We have two representatives here from the
23 Francis Howell School District which is very nearby
24 there. So we wanted to start out -- I believe
25 Superintendent Dr. Wanda McDaniel wanted to speak first.

1 DR. McDANIEL: Thank you. I am Wanda
2 McDaniel, Superintendent of Schools of the Francis
3 Howell School District.
4 As you well know the Francis Howell School
5 District surrounds the Weldon Spring site. Our largest
6 facility, the Francis Howell School, is located within
7 one mile of the chemical plant and the raffinate pits.
8 The high school houses approximately two
9 thousand students, faculty and staff members each
10 workday. Needless to say, as a superintendent of
11 schools, my concern is for the health and safety of our
12 students and faculty.
13 In my statement at the hearing in December,
14 1988, concerning the August '88 work plan for the
15 remedial investigation feasibility study, environmental
16 impact statement for the Weldon Spring site, I requested
17 at that time that an independent consulting firm to
18 monitor the air at the campus to verify DOE's current
19 and future results be hired.
20 Through a joint agreement a consultant,
21 Mr. Bill Mathis -- excuse me, Mr. Bill Thomas of Mathis
22 Associates was selected and hired by the Francis Howell
23 School District on May 3rd, 1989. This is at the
24 cost -- is being paid by M. K. Ferguson, the general
25 contractor for the Weldon Spring Site Remedial Action

1 Project. I believe Mr. Thomas is here tonight. Would
2 you please stand? Thank you.
3 Mr. Thomas has been involved in the meeting --
4 planning meetings update. He has been provided with
5 numerous written documents regarding the Weldon Spring
6 site test results and plans for the removal of the bulk
7 waste from the quarry.
8 We're pleased with the working relationship
9 that's been established with onsite personnel at the
10 plant. There's been good communication throughout this
11 planning process between the Department of Energy, M. K.
12 Ferguson, Mr. Thomas, and the Francis Howell School
13 District.
14 Francis Howell High School has been established
15 as one of the public reading sites with information
16 regarding the Weldon Spring Project. That's stored and
17 made available to the public.
18 There have been numerous meetings held which
19 provide updates to the Francis Howell School regarding
20 activities at the site. Francis Howell administrators,
21 teachers, and students have been provided information
22 and tours of the site.
23 While good communication has occurred, it's
24 essential that the Francis Howell School District and
25 its consultant receive published documents in a timely

1 manner. For example, it took approximately one and a
2 half years to get the latest environmental monitoring
3 report for 1988. This report was finally issued in Jul
4 of 1990. The results for 1989 should be available as
5 quickly as possible.
6 In addition to receiving above documents in a
7 timely fashion, we also recommend that a quarterly
8 summary be provided to the District for the purpose of
9 monitoring information. In addition, background, fence
10 line and on-campus monitoring should continue. Soil,
11 air, and groundwater monitoring should be kept up to
12 date and information reported to the District in a
13 timely fashion.
14 The monitoring around the quarry provides a
15 first line of defense for students, staff, and patrons.
16 Monitoring around the plant itself and background
17 systems in outlying areas are essential throughout this
18 process.
19 There are continuing concerns of the Francis
20 Howell Board of Education Administration around the
21 safety of our students and our employees, particularly
22 the students and employees of Francis Howell High School
23 and Weldon Spring Elementary School as in my statement
24 in December of 1988.
25 The interim respond action of gravest concern

1 is the removal of the bulk waste from the quarry. These
2 concerns deal with the removal of the waste from the
3 quarry, transporting the waste to the chemical plant
4 itself for temporary storage, storage of the waste,
5 monitoring systems, and an emergency plan disaster
6 alert.
7 In each of these areas of concern our focus is
8 on the safety and the welfare of the students and the
9 faculty in the schools nearest the site.
10 The responsibility of the monitoring of the
11 removal of the water and bulk waste of the quarry has
12 been placed directly into the office of the Deputy
13 Superintendent for the Francis Howell School District,
14 Dr. John Oldani. He works with Mr. Thomas to evaluate
15 the entire removal procedures. I would now like to ask
16 Dr. Oldani to respond specifically to our concerns of
17 the removal process.
18 DR. OLDANI: The Administration and Board
19 of Education of the Francis Howell School District have
20 reviewed the work plans prepared by DOE concerning the
21 removal of the bulk waste from the quarry. In the
22 opinion of our consultant, Mr. Thomas, this work has
23 been designed to meet current industry standards to
24 minimize the emission of radioactive uranium and thorium
25 and provide an adequate margin of safety to the

1 residents and the students of the Francis Howell School
2 District.
3 The Weldon Spring quarry is located four miles
4 south of the chemical plant and contains approximately
5 95,000 cubic yards of waste materials and construction
6 rubble that are contaminated with the uranium and
7 thorium.
8 Our consultant agrees that it is not possible
9 to adequately sample and test the spread of
10 contamination in the groundwater because of the nature
11 of the materials in the quarry. The concrete and steel,
12 for example, buried there prohibit equipment from
13 drilling to the groundwater level.
14 Groundwater samples collected outside the
15 quarry have detected low concentrations of radioactive
16 materials. Radioactivity has not been detected in
17 samples collected further away from the quarry toward
18 the Missouri River.
19 The removal of the waste from the quarry. This
20 serves two purposes. One, the rock formation
21 surrounding the quarry can be correctly characterized
22 only after the wastes are removed; and two, removing the
23 main source of the contamination reduces, of course, the
24 likelihood that the contamination will continue to
25 spread.

1 DOE has implemented an extensive monitoring
2 program that is sufficient in the opinion of
3 our consultant to detect the release of contamination by
4 several different pathways including air, water, and
5 groundwater.
6 Air sampling equipment has been operating for
7 more than three years collecting air samples at many
8 locations around the quarry and the chemical plant.
9 Similar equipment is located at several locations
10 including Francis Howell High School itself.
11 These monitors serve to advance -- provide
12 advance warning not only to site laborers but also to
13 staff and students at Francis Howell High School should
14 a problem occur.
15 Water samples are collected each quarter both
16 at the surface water as well as groundwater monitoring
17 wells. All of these samples are necessary to document
18 that exposures are acceptable and below current
19 levels -- or current standards rather.
20 As Dr. McDaniel has noted, the concerns of the
21 Francis Howell Board of Education and Administration
22 center around the safety of our students and employees,
23 particularly the students and employees of Francis
24 Howell High School and Weldon Spring Elementary School.
25 I would like to individually briefly discuss

1 each of the areas of concern that we have regarding the
2 removal process which Dr. McDaniel has noted.
3 First of all, the removal of waste from the
4 quarry. Our consultant has reviewed the plans for
5 removal of the waste from the quarry and has reported
6 that it appears as though all possible precautions are
7 being taken to assure that the removal of the waste will
8 not present a hazard to our students or to our
9 employees.
10 We have been provided information as to the
11 reason and the necessity for the removal of the waste.
12 Our concern, therefore, lies only in the safety of the
13 process.
14 Transportation of the waste to the temporary
15 storage site. In order to transport the waste to the
16 temporary storage site it will be necessary either to
17 cross Highway 94 or to transport the waste via an
18 overpass or underpass to avoid Highway 94 traffic.
19 It is our understanding that DOE is continuing
20 to study these options and has yet to make a final
21 decision at this stage as to which option will be
22 chosen. Should the trucks carrying the waste actually
23 cross Highway 94, it is likely that flagmen will be used
24 to control traffic. It is the position of the school
25 district that this process not take place during school

1 hours or at least at times when school buses
2 transporting children would be using that highway.
3 The plant that's presently -- this plan is
4 presently in place regarding removal of material by
5 Francis Howell High School. At present, materials are
6 not transported during the hours in which the high
7 school is in session. We would recommend, should
8 flagmen be used therefore, that at given times during
9 the day when school is in session or at least when
10 school buses are using this area, that the flag crossing
11 be shut down.
12 On the issue of the return of the empty trucks
13 to the quarry site, present plans call for these trucks
14 to return to the quarry site south along Highway 94.
15 The Francis Howell School District is concerned about
16 the safety of bus and student traffic with the increased
17 use of large trucks at times when students would be
18 using this highway.
19 We asked DOE and M. K. Ferguson to cooperate
20 with us then in setting plans to reduce truck traffic at
21 times when there is bus or student traffic along this
22 roadway.
23 Regarding the storage of waste. Due to the
24 proximity of the temporary storage site to Francis
25 Howell High School and the District Administration

1 Annex, all precautions must be taken to assure that
2 there not be a migration of hazardous materials that
3 would put the health and safety of students or employees
4 at risk.
5 Our consultant has reviewed the plans for the
6 temporary storage and has concluded that precautions are
7 being taken regarding that insurance -- assurance,
8 rather.
9 Our concern regarding the temporary storage
10 site which has already been noted this evening is that
11 the storage indeed be temporary and that this site does
12 not become a permanent storage site.
13 Regarding the monitoring program, it is
14 essential that air, water and soil monitoring continue
15 which will ensure the health and safety of the students
16 and employees. Sufficient monitoring sites should be
17 set up both at the storage site itself at and near the
18 perimeter, as well as onsite at district facilities.
19 Results of the monitoring must be made available to the
20 District and its consultant in a timely manner.
21 Finally, relating to the emergency plan. At
22 present an emergency plan which deals with actions to be
23 taken if there are spills or natural disasters has not
24 been developed, or at least been made public.
25 It is absolutely essential that detailed

1 emergency plans be developed which will address the
2 health and safety of the students and employees of the
3 District. Until such plans are developed, it is the
4 position of the school district that waste removal from
5 the quarry not begin.
6 These emergency plans should deal with all
7 natural disasters including earthquakes, high winds, and
8 tornadoes, as well as spills or any other disasters
9 which could affect the health and safety of students and
10 employees on the campuses.
11 It is our understanding that emergency plans
12 are being studied at this time. The District requests
13 that its employees and its consultant be brought in on
14 the planning process, and that detailed plans be
15 developed and approved by all parties.
16 In conclusion, the Administration and Board of
17 Education of the Francis Howell School District do
18 appreciate the excellent communication and cooperation
19 which we have received from DOE and M. K. Ferguson
20 regarding the operation of the Weldon Spring site and
21 the plans for future work at the site. We ask that this
22 communication continue.
23 Our concerns relate to the health and safety of
24 our students and employees during the quarry cleanup and
25 temporary storage. It is essential that DOE and M. K.

on continue to work closely with the school

ct officials as these plans are further developed

he activities at the site actually begin.

The health and safety concerns I've listed are

ical. All possible precautions must be taken to

ure health and safety of these students and

ployees. The emergency plan which is yet to be

8 published is critical, and the District's position that

9 the work proposed cannot -- it is the District's

10 position that the work proposed cannot begin until an

11 acceptable emergency plan has been developed which will

12 indeed protect the students and the employees of the

13 school district. Thank you.

14 MS. SCHNEIDER: Did you want to respond to

15 that?

16 MR. McCRACKEN: Yeah, just a few comments.

17 The detailed emergency plan that you're talking

18 about, Dr. Oldani, is being prepared. And we will not

19 begin work at that site until we've had, all of us

20 jointly, have had time to review that plan and agree

21 that it's adequate and will certainly involve a number

22 of people, County emergency people, those kinds of

23 things.

24 Providing information in a timely manner.

25 You're right. Our 1988 environmental monitoring report

1 was quite late. Actually, the report was ready. It was
2 held up because of reasons that were outside of our
3 control. But I don't think that's the real issue. The
4 issue is you don't want to receive information on a
5 yearly basis, you want to receive it more frequently
6 than that, and I think that is a good idea and that we
7 need to accommodate you on that.
8 As far as our monitoring systems, in fact, I
9 think you mentioned they should continue and in fact be
10 improved, and we plan to do that. We'll absolutely
11 continue to do the monitoring that we're doing now and
12 more monitoring in the -- in fact as a for instance, the
13 radon monitors that are currently at the high school and
14 around our site are being replaced with, I guess they're
15 state of the art, they're real-time, I don't know if
16 they're state of the -- they're real-time monitors. In
17 other words they give us a continuous readout on radon
18 so that we'll know moment by moment if there are any
19 radon changes that are of any significance.
20 As far as crossing Highway 94 during school
21 hours and returning to the quarry during school hours, I
22 think that's something that we can work on, and we will
23 do that. I don't see any -- I don't see that as a
24 significant problem to us from what I understand school
25 hours are.

1 Should indeed be temporary. I think that's
2 something that Joe Ortwerth mentioned that I forgot to
3 come back to it. I didn't do it intentionally. I agre
4 with you that this should indeed be temporary. It's not
5 designed to be permanent, there is no intent that it
6 would be permanent, and I don't think you could even
7 upgrade it to be permanent the way it's designed. But
8 it is quite adequate as a temporary storage facility. I
9 think that pretty well covers it.
10 MS. SCHNEIDER: Okay. We're going to take
11 a fifteen-minute break. And what I would like to do, if
12 we could have two staff people positioned at the aisles,
13 and maybe you can just collect the cards as people are
14 filing out to take the break. What time is it now?
15 Okay. So we'll come back at 8:30 and go through the
16 questions and then the open forum.
17 [A break was taken.]
18 MS. SCHNEIDER: I'd like to go ahead and
19 get rolling. The question-and-answer section will be
20 moderated by Steve McCracken with the Department of
21 Energy who's going to be -- I believe at this point
22 they've kind of divided up the questions as to who is
23 going to be answering what. So, with that, Steve, you
24 want to just go ahead and take over and start rolling
25 with it?

1 MR. McCRACKEN: Sure. First of all my
2 panelists, my colleagues have been kind enough to give
3 me the majority of the questions. Fortunately, I guess
4 the opportunity to go last. So, but there is one
5 question that I want to answer that hasn't been asked.
6 It was asked just the other day and I thought it was a
7 very good question. It certainly caught us by surprise
8 and caused us to look into something and realize
9 something that we had done that was unintentional and
10 that we're going to correct.
11 If you look under the cover of the documents
12 that we have prepared, you'll find a disclaimer. And
13 that disclaimer simply says that this information, we
14 don't stand behind this accuracy or completeness or
15 usefulness of this information. And I want to assure
16 you that that's not the case.
17 The disclaimer that was put in there is
18 something that's been put in documents for years. We
19 were putting it in there without really reading what it
20 was saying. But the bottom line is that we are
21 responsible for the accuracy, the completeness, and the
22 usefulness of the information that we present to you.
23 We stand behind what we do and it's my intent
24 to write letters to everybody that have received
25 documents and tell them that that disclaimer is

1 incorrect. And it's going to be removed in the future
2 reports or in any reprints of the one that we have.
3 It was certainly something that was
4 unintentional or something that we overlooked. And I
5 kind of smile when I say that but it's really not very
6 funny. When you think about it, it's something we
7 absolutely do not believe is appropriate in these
8 documents and it's going to be removed in future
9 documents.
10 With that, I thought that we would start with
11 Ken Meyer. He is the manager of our Environmental
12 Monitoring Program, and he will answer a few questions.
13 We'll let Kenny go to the lectern because he doesn't
14 have a mike. But the rest of us will probably sit her
15 and answer questions.
16 MR. MEYER: Okay. Can everyone hear me?
17 I had three questions and they're all totally
18 unrelated, so I'll address each one.
19 The first question is, "Since the quarry looks
20 pretty full of water, where is the runoff from the rain
21 water going?" It's basically going into the
22 groundwater. All the water that falls into the quarry
23 as rain goes into the sump and into the groundwater and
24 that's what causes the problem and poses the potential
25 threat to the well field. So that -- I think that

1 answers that's why the groundwater outside of the quarry
2 is contaminated.
3 Next question. "Has a full investigation been
4 conducted as to other dump sites, other than the quarry,
5 in the surrounding area been concluded?" It's kind of a
6 two-part -- I have kind of a two-part answer.
7 Oakridge Associated Universities did a very
8 extensive survey for radiological contamination. They
9 looked all over the Weldon Spring Wildlife Area, along
10 all the highways, along the railroad tracks, any place
11 they thought there could be contamination. There were
12 also several flyover surveys done. And we, the PMC, now
13 continue to look for areas of contamination outside the
14 site. And we believe we have found all the major areas.
15 And we continue to look for other smaller areas.
16 The Department of Army, I believe, is currently
17 initiating an investigation to evaluate any dump areas
18 outside of the Weldon Spring Training Area as a result
19 of the ordinance works. And that work is just kind of
20 in the planning stages right now I believe. The
21 Department of Army would have more information on that.
22 Third question is, "What impact will the
23 cleanup have on wildlife, deer, turkeys, squirrels,
24 etc., in the immediate area?"
25 One of the first things we'll do in the quarry

area is set up a staging area. It will be where the water treatment plant is. Will be set up and constructed in affluent ponds. And anything even remotely resembling wildlife habitat will be removed. So there will potentially be some minor displacement. Just some areas of habitat that won't be available, that will be destroyed. And the wildlife will just move into adjacent areas and move back.

We don't really anticipate any problems or significant impacts to the wildlife. And we have just conducted a biouptakes study where we looked at rabbits and squirrels onsite that live in contaminated areas and didn't detect a significant uptake. And we're currently working with the Department of Conservation to measure any impact on fish in the Busch Wildlife Area. And those are the only three I had.

MR. MORBY: If anybody has knowledge of any other dumping, I'm sure you would have an interest in having that come to your attention, right?

MR. MEYER: Yes. If anyone has any knowledge of other dump sites, if they involve radioactive material we would investigate them. If they involve ordinance works materials, we would pass that information along to the Department of the Army.

MR. McCRACKEN: Okay. I was going to echo

that. Because, you know, the information that we receive from citizens and people that have, either they're familiar with the area that we work in or actually have worked at our plant site, has been very valuable to us in the past, as far as useful information and understanding more about our site and areas that need to be cleaned up. So we encourage that any time.

And you can give me a call or Jim McKey a call or anybody at the site, and we'll certainly follow up on it. And then we'll get back with you and let you know what we found.

Next, Dave Flemming, who is one of our health-physics people onsite is going to take a question.

MR. FLEMMING: Okay. I have just one question. "According to DOE's own admission, radon levels are higher than background at the quarry. Then why move it closer to the school and motor traffic while moving the bulk waste and increase the degree -- the dangers of exposure to radiation?"

Well, the reason why radon levels are higher than background at the quarry at present is because the bulk waste is unconsolidated, it's not firmly packed. Once the bulk waste is brought up to the temporary storage area it will be firmly packed, it will be consolidated, and it will be covered. And these covers

1 will control radon emissions.

2 We also are, as Steve mentioned earlier in the

3 program, increasing our radon monitoring program. We

4 will have continuous radon monitors at the temporary

5 storage area, at the quarry and at the high school. And

6 these monitors will ensure the effectiveness of our

7 engineering controls.

8 MR. McCRACKEN: Next we have Dr. Margaret

9 MacDonell. She's with Argone National Laboratory. She

10 is the manager of the feasibility study process that is

11 very much a -- a very substantive part of the decision-

12 making process. And she'll answer a few questions.

13 DR. MacDONELL: I have just a couple, and

14 they're on the evaluation criteria. First of all, on

15 Page 13 is referenced of the evaluation criteria,

16 Section 6.1, Paragraph 2. The first question, "Cutting

17 down on the volume by treatment, as well as cutting down

18 on toxicity, how is this going to be done?"

19 The way we're reducing toxicity of the wastes

20 at the quarry is by removing them from the quarry and

21 placing them in controlled storage at the temporary

22 storage area. In this manner we reduce the temporary

23 exposures and that cuts down on the potential risks to

24 the public.

25 As far as reducing the volume, in fact, the

volume will probably increase somewhat because we're excavating more than just the contaminated materials since we're taking everything out of the quarry down to bedrock. But there will be some volume reduction of the waste itself by the dewatering that will be done at the quarry.

The second question, "How large is the drum storage area?" At the temporary storage facility the conceptual design, right now we expect it to be about 50 feet by 50 feet. And, again, those conceptual designs will be finalized into detailed design when we know further what the specific engineering factors will be for this temporary storage area. Fifty by 50 is about 2500 square feet.

The last question I have is by Linda Hoenig, and you can ask me further if I don't respond as I think you're asking. The question is, "Question about evaluation criteria or final alternatives."

I guess you wondered what we looked at when we determined which of the final alternatives would be our preferred alternative. And there are three major categories of criteria and that's effectiveness as far as protecting human health and the environment, implementability, and that looks at ** feasibility of these things whether we have equipment available and the

1 appropriate resources to carry out what we're proposing.
2 And the third is the cost.
3 And those are really -- they constitute the
4 screening criteria, but those are the basic issues for
5 the final criteria as well as, if you want me to go into
6 the detailed evaluation criteria, I'd be glad to. But I
7 don't know if it was a generic question or detailed
8 question.
9 So, Linda, if you're out there and you want
10 further description than what's in the document I'd be
11 happy to give it to you. That's it.
12 MR. McCRACKEN: Are there any other --
13 anybody else have any questions?
14 Okay. Rick Ferguson, whom you've already --
15 who's already been introduced, has some questions and
16 he'll answer them.
17 MR. FERGUSON: The questions I'll address
18 regard the sorting and the hauling operations.
19 And the first question on sorting says, "Why
20 does the waste material from the quarry need to be moved
21 four miles to the Weldon Spring Chemical Plant before
22 sorting? This is an unnecessary risk of spreading the
23 waste along hauling road. It also is an unnecessary
24 risk to people at Francis Howell High School during the
25 sorting process."

1 The sorting is an issue we're going to attack
2 in several ways. We're going to excavate in a way that
3 we can remove materials selectively and that will aid in
4 sorting.
5 First of all, we're going to preliminary
6 sorting at the quarry. And we'll excavate in a way that
7 we can perform selective excavation. The material will
8 be cast directly behind an excavator into a pile where
9 front end loaders will work the material and do sorting
10 in the quarry area.
11 The reason we have a sorting pad at the
12 temporary storage site is to provide flexibility to the
13 sorting process due to logistical reasons and its
14 limited space in the quarry area. All of the sorting
15 may not be able to be performed at the quarry but it's
16 certainly our preference. Also, to perform sorting
17 during excavation, it's easier and it's more efficient
18 in that area.
19 The second part of this question says,
20 "Containerized waste at the quarry before hauling will
21 minimize the risk further."
22 And one of the other things we'll be looking at
23 during design as an operational consideration is to keep
24 the dump trucks out of the quarry area.
25 Provide containerized boxes or roll-off boxes

1 that will provide additional flexibility during the
2 excavation, during the quarry area, and this way you can
3 keep trucks out of the quarry area and minimize efforts
4 to decontaminate the trucks before they get on the haul
5 road.
6 It's something we're going to be looking at
7 from an operational or efficiency standpoint here at
8 conceptional design.
9 Another area of questioning is, "What is the
10 design of the hauling trucks?"
11 Again, at this point in the circle of process,
12 the detailed design hasn't been performed. What's being
13 performed at this time is the development of criteria of
14 what to design to. And the criteria for the hauling
15 trucks is to meet the Department of Transportation
16 requirements for low specific activity.
17 And those requirements call for strong, tight
18 containers. They'll be covered. They'll be leakproof.
19 They'll be standard ten-ton, twelve-cubic yard trailer
20 trucks. And we're looking at a bathtub-type design. It
21 actually doesn't have a tailgate. It provides dumping
22 like a bathtub that will be leakproof.
23 The second portion of this question, "Is the
24 Katy Trail, the railroad easement being planned?" The
25 answer to that is no.

The easement that I mentioned that the haul road will follow from the quarry to the chem plant site is an abandoned DOE railroad spur easement. The railroad is no longer in use. The Katy Trail area is where the discharge pipeline for the water treatment plant will proceed to the river as discussed in the presentations last spring.

The last question is, "What is the expected truck frequency?"

And the anticipated logistics would be to have ten trucks make four trips a day. So there would be 40 trips per day from the quarry to the chem plant area. And that would be five days a week, eight hours a day.

I hope that adequately addresses those questions.

MR. McCRACKEN: And that eight hours is dependent upon what we work out with the school on what we discussed earlier as far as during school hours.

I think it's my turn now. I want to read one here that I understand was answered during the break. It's directed toward the Department of Health.

And that is, "Would somebody from the Department of Health come to the Francis Howell High School to talk to the kids about safety of the water? My daughter will not drink it and says most kids don't."

1 It's my understanding that this was discussed
2 with Gale Carlson of the Department of Health, and he
3 has certainly agreed to come to the high school.
4 I realize that the Department of Health is
5 probably your best source for discussion of these type
6 of things, but if you would like, we would certainly --
7 the DOE and our contractors, would certainly be willing
8 to come and talk to the kids. Similarly, it's
9 unfortunate that people might think that the water is
10 not safe, because it certainly is.
11 "How many years do you anticipate temporary
12 storage occurring?"
13 Three to six years.
14 "At this time are there any proposed sites for
15 the temporary (sic) storage area?"
16 There are no proposed sites yet. But there are
17 three alternatives for disposal sites. We are looking
18 at onsite as a potential disposal site. We are looking
19 at a facility in Clyde, Utah, that accepts waste similar
20 to the kind that we are dealing with. And we're also
21 looking at a -- the assumption is that within a hundred
22 miles of our site there is probably a similar or better
23 site and we're looking at that as an alternative.
24 We are not yet in a position to propose a site.
25 That will be with our documents that we would issue in

1 the October time frame of this year.

2 Did I say temporary?

3 Are there any proposed sites for the permanent

4 storage?

5 Everything I just said is for permanent

6 storage.

7 Do I need to go over that again? I don't think

8 I can say that again.

9 "Is there an emergency plan and public alert in

10 the event that something unexpected occurs that would be

11 hazardous to the public, i.e., residents nearby,

12 students and faculty at the high school, and traffic on

13 Highway 94. Explain your emergency plan and alert

14 system if one exists."

15 And that plan will cover the type of things

16 that are questioned here, and other things. Natural

17 disasters, anything that could result in an off-site

18 transportation of contaminated material.

19 The staff from Francis Howell High School

20 expressed a concern that that be finalized and agreed

21 upon by all parties prior to beginning the work. And we

22 certainly intend to do that.

23 We have, really, a very good start on the

24 emergency plan already. But you have to fold that into

25 the design that you're doing because the design will

1 certainly guide us in other parts of the emergency plan.
2 So really, the emergency plan should not come out as a
3 final document until after it's done, but will be befor
4 any physical work is done.
5 "Why are you moving the contamination to a
6 temporary site at a cost of seven million dollars? This
7 seems like a huge waste of tax dollars when it's only
8 being moved one mile and the problem will still exist
9 and cost more millions to move again. When will it be
10 permanently contained?"
11 Let me take this one piece at a time. Try to.
12 "When will it be permanently contained?"
13 The documents that we are going to have out in
14 draft toward the end of this year will contain a
15 discussion of the alternatives for permanent storage, or
16 for permanent containment. It will be only those
17 documents -- it will be only at that time that a
18 permanent disposal decision, or containment decision, or
19 whatever you like to call it, will be made.
20 That decision will be made jointly by the DOE
21 and the EPA. But if the EPA and the DOE cannot agree,
22 then the EPA has the final say. But we're going to
23 agree.
24 "Why are we moving to a temporary site at the
25 cost of a million dollars?"

1 You know, our attitude is that if there is
2 obvious things that you can do to stabilize the site and
3 that they are not going to bias the final decision-
4 making process, that it is a good thing to go ahead and
5 carry out those activities. And that's what we're
6 proposing to do.
7 In addition to that, there was some mention
8 earlier that you can't even get a drill bit down through
9 this material. And that's true. You can't. You cannot
10 really adequately characterize the material without
11 removing it.
12 So we must remove it first, characterize the
13 material to know exactly what we're dealing with. And
14 then once we have that, then you can determine what
15 treatment technology is appropriate for the material and
16 how it will be disposed. That's one reason that we're
17 removing it now, or we're proposing to.
18 The other is the potential -- certainly the
19 potential impact to the St. Charles County well field.
20 We just believe that it's a good thing to get on with.
21 You say that this is a huge waste of tax dollars when
22 it's only being moved one mile. Actually it's four
23 miles but I think it's the same difference.
24 There may be some additional cost in putting it
25 in temporary storage, but ~~qualitatively speaking~~ I don't

1 really think that there is. Because you have -- we're
2 going to have to handle this material twice no matter
3 what we do. We cannot -- we've got to pick it up, sit
4 it down, characterize it, determine what to do with it,
5 and then move it again according to whatever that
6 decision is. And so my feeling is that we're really not
7 wasting tax dollars. That's my feeling. And that's one
8 of the bases for our proposal.
9 This one's to St. Charles County. I'll pass
10 this on to them.
11 It says, "Why not put a permanent intake at the
12 river and abandon the well field?"
13 I think there's a similar question in here
14 somewhere to us, why not move the well field. So I'll
15 take a shot at it.
16 I think the next question -- I don't know where
17 it is. Let me see if I can find it real quick.
18 Well, anyway, there is another question in
19 here, "Why not move the well field, that's only a
20 million bucks, where moving the waste is seven million?"
21 That's fine. The comparison is not quite
22 correct. If you move the well field, you've still got
23 to move the waste. So, that comparison, to me, is not
24 really a good comparison.
25 As far as why not move the well field, we see

1 no reason to move the well field because there is no
2 contamination in the drinking water that requires moving
3 the well field.
4 We really don't have any reason to believe that
5 that condition currently exists, that does assure the
6 good water in the well field, we have no reason to
7 believe that it wouldn't change.
8 So what we're doing is preparing to get on with
9 the work. We do have a monitoring system in place that
10 if something would begin to happen that looked like a
11 threat to the well field, we feel confident that there
12 is adequate time to react and to do something that would
13 assure an adequate water supply in St. Charles County.
14 MR. MORBY: I guess I would add to that,
15 Steve, is that we believe that that's a natural resource
16 that deserves protection and should be protected. And
17 by doing this cleanup it gives you that assurance you
18 would have, rather than just moving the well field.
19 MR. McCRACKEN: "Why are the bulk
20 contaminates being moved closer to the school?"
21 There a couple of reasons. We did try to
22 address this question in the question-and-answer section
23 of the bulletin that we put out front for people to pick
24 up. And I think that that's really a pretty good
25 answer. And that is that the fact is that in order to

take -- carry out this action right now, there simply is no other place that is available.

In addition to that, even if there were, I'm not convinced that we wouldn't still propose the same thing. Because by putting it in close proximity to our site, or within the boundary of our site, we are certainly better able to manage that material safely.

And so my feeling is that those are two very good reasons for putting the material where we're proposing to put it.

There is, moving closer to the school, I will point out that we have picked a place on our site that is the greatest distance from the school. That wasn't the sole reason. Another thing that we tried to do is pick what we think is a good geological setting and that's a good place for that material.

"What is meant by temporary storage? That is, how long will the bulk waste be stored? Is the removal of the bulk waste from the TSA in the Superfund? Why doesn't EPA fund removal of the bulk waste entirely from the site?"

And I'll go for the last one. I think that's great.

MR. MORBY: Do you want me to explain why? Because you're responsible.

1 MR. McCRACKEN: The whole idea of
2 Superfund is not to use Superfund money to clean sites
3 up unless you cannot find a principal responsible party.
4 And EPA found us principally responsible.
5 Let's see. Is the temporary storage -- is the
6 removal of the bulk waste from the temporary storage
7 area in the Superfund? ** to that.
8 The removal of the -- the final removal from
9 the temporary storage area to treatment and permanent
10 waste disposal is very much a part of the Superfund
11 process and the decisionmaking process.
12 Temporary storage is simply that. And that is
13 that we propose to put it into temporary storage for
14 three to six years, but it would be moved from that
15 area. It would -- the different forms of waste would
16 undoubtedly be treated in some way, and then finally
17 disposed of.
18 "If the cleanup costs 30 to 40 million dollars
19 and a new set of wells costs less than" -- Oh, here's
20 the question -- "less than one million dollars, why not
21 move the well field?"
22 I tried to answer that question and that is
23 whether you move the well field or not you must still
24 remove the waste. And Bob talked about that some
25 further.

1 "Why not defer the removal of the quarry
2 waste -- why not defer the removal of the quarry waste
3 until the decision to remove all the waste elsewhere is
4 made?"
5 That is one of the alternatives that we
6 considered. The fact of the matter is, that the way I
7 view it, you can either move the waste now or you can
8 move it later. And what we're suggesting is that it's a
9 good idea to get on with the work. It is in our opinion
10 obvious that it's needed and we think that we're in a
11 position to do it safely.
12 "Isn't there an inherent drawback in proposing
13 several remedial actions rather than the main cleanup,
14 especially if funding does not come through at all, or
15 comes far less than the expected values?"
16 You can make two assumptions, I think, in
17 cleaning up a site that is as large as ours and as
18 complicated as ours. You can do two things.
19 You can either try to make all the decisions
20 before you do anything, or you can try to do those
21 things that stabilize materials and reduce outside
22 emissions while you're still going through the process
23 of making the bigger, more complicated decisions.
24 At our site, and I think it's very consistent
25 with the way all large sites should be done, you should

1 do those things that you can do that you don't bias the
2 decisionmaking process, that are an obvious improvement.
3 I don't believe that you should wait until all decisions
4 are made and all things are known before you begin to do
5 the work. And that's the approach that we've been
6 taking at the site for the last two years.
7 We've conducted a number of small -- smaller
8 cleanup activities, asbestos abatement, PC abatement, a
9 few buildings demolition, putting in structures to
10 reduce off-site surface water releases. We've done a
11 number of things.
12 And the quarry activity that we're proposing
13 tonight is certainly the largest of those. But that we
14 think that it's good to be doing these things in
15 parallel with these long, difficult decisionmaking
16 processes.
17 You talk about especially if funding does not
18 come through at all or comes through at less than
19 expected values. We believe that still we must assume
20 that the work will be done. If you take an attitude
21 that you're not going to do -- if you take -- there's a
22 number of reasons why you can convince yourself to do
23 nothing. And I think that that's the wrong attitude to
24 take. And I believe that that's reflected in the
25 proposal we're making.

1 "We have known of this site now for quite a few
2 years. Why does it seem at budget time the money budget
3 is always less than our environment precedent?"
4 The way the budget process works, the beginning
5 of the budget process is called the President's Passback
6 Budget. That's what he passes back to Congress as a
7 proposed budget.
8 A year ago the President did propose a budget
9 that would have significantly skipped this project and
10 stretched it out. He essentially levelized funding. It
11 would have increased the project costs substantially,
12 and the duration. However, there have been a lot of
13 things that have happened in the last year in the
14 President's Passback. Same president.
15 But in his second passback budget this year, he
16 has gone back to the original concept of the project.
17 He has significantly increased the budget for the next
18 year. And, in fact, he has fully funded us at the level
19 that we think we can productively spend. I think that
20 there has been quite a change over the last year.
21 Certainly I hope that it continues. Get on with it? I
22 agree. That's good.
23 Several -- Meredith Bollmeier with St. Charles
24 County -- several pertinent remarks and questions in
25 regard to St. Charles Countians technical assistants

1 grant will --

2 MS. SCHNEIDER: I'll handle that one.

3 MR. McCRACKEN: Okay. Considering the

4 close proximity to the high school, will the movement of

5 this radioactive material pose a real threat to the

6 students, possibly from dust?

7 Our studies have indicated that we can control

8 this activity to where there will be an extremely low --

9 you can calculate risks for anything. If you want -- if

10 you make a certain set of assumptions you can calculate

11 a risk.

12 Using very, very conservative assumptions, and

13 they're reflected in the documents that we've prepared,

14 even using those very conservative assumptions we show

15 in there, in those documents that any risk to the

16 students will be extremely low and would actually be

17 even lower than what the EPA suggests would be your

18 targeted risk for a cleanup activity.

19 So we don't believe there will be any risk to

20 the students. Certainly that is a calculated

21 theoretical risk. It is our attitude at that site there

22 will be no contamination reaching the high school. And

23 we will have the monitoring systems and we'll be doing

24 the engineering, and we'll have the monitoring systems

25 to assure that that's what's happening.

1 "After all the material is moved, isn't it
2 possible that the danger will still exist to the well
3 field from the material that has settled into the rock?"
4 There is some possibility of that. We can only
5 know that once the -- once the material is removed.
6 What we have to do is remove that material, we will
7 investigate those cracks and fissures, and then just
8 outside the quarry we'll determine if there is any
9 additional threat to the well field and we'll take
10 whatever action is required to remove that threat if
11 there is one.
12 "Wouldn't it be advisable to move the well
13 field to some other location?"
14 I've already addressed that. It says at
15 government expense.
16 This question has come up a number of times.
17 If anything threatens that well field the government
18 will do what is required to assure water to the
19 St. Charles community. I can't tell you what that is
20 because we would have to decide that at the time.
21 Whether it meant moving the well field or treating the
22 water, that kind of decision would be made when you
23 understand what the problem is.
24 Believe me, I've talked to people within the
25 DOE, and the consensus and what everyone is saying is

1 that we'll do what is required to assure quality water
2 for St. Charles residents if that well field is
3 threatened. And I bet the EPA would make us do it. T
4 residents of St. Charles County have your assurance that
5 no other dumping of hazardous waste will be allowed on
6 the site from outside of St. Charles County.
7 We have said a number of times in the past that
8 we have no plans to bring any waste from outside, any
9 waste other than the quarry waste and the site waste to
10 St. Charles County.
11 Every time that I have a public meeting I call
12 Washington and say -- and ask them again if I can still
13 provide that assurance. And I did it before this
14 meeting. And they said that they had no plans -- they
15 too are saying that there are no plans to bring any
16 waste from outside St. Charles County.
17 The last time they suggested that, I'm sure
18 that there were some people that were around there. I
19 wasn't, but I heard about it. And as I say, there was
20 rather a strong reaction and I think that that had a lot
21 to do with the DOE decision.
22 "If the haul road is -- if the haul road is a
23 one-lane road, then it appears that empty trucks that
24 have just unloaded their waste at the temporary site
25 will be using Highway 94 to return to the quarry."

1 That is correct.

2 "What steps are you taking to ensure that the

3 empty trucks do not have any residual waste left in them

4 in the event an accident would occur involving one of

5 the trucks. Are they going to be cleaned thoroughly

6 prior to utilizing the public thoroughfare, i.e., would

7 they be flushed out and sprayed with the same" -- I

8 can't quite read that.

9 I think the idea is are they going to be

10 cleaned out inside and out. When the trucks leave the

11 quarry to get on the haul road, they will be screened

12 externally to be sure that there is no contamination on

13 the external surfaces of the trucks before they travel

14 on the haul road to the plant site.

15 When they reach the plant site and deposit

16 their load, they will then be screened externally to

17 assure that there were no contaminations on the external

18 surfaces of the trucks before they would get on Highway

19 94 again.

20 There is -- there is no plan to clean the

21 internal surfaces of the truck so that there would be

22 absolutely no residue.

23 The one thing that Rick mentioned in his

24 presentation is that there is no radiological reason

25 that you could not have a haul truck on Highway 94

1 hauling material. That's done -- this is called LSA
2 waste.
3 The Department of Transportation has guidelines
4 that we'll meet even though we're not hauling that
5 material on the roads. The reason that we're bringing
6 the material up on the haul road is a judgment call on
7 our part. A lot uphill grade on a curvy road coming
8 from the quarry area and we believe -- I believe that
9 there is a better possibility that people being slowed
10 down by this traffic will do something dumb, and they'll
11 end up being in an accident.
12 From a radiological standpoint, it is unlikely
13 that that would create great risk to their health.
14 Certainly from the traffic accident itself it would, or
15 from the public perception, we would get where there was
16 a traffic accident involving one of our trucks, it would
17 be rather extensive I'm sure. And that's the reason we
18 do not want to bring loaded trucks up that road.
19 When the trucks return on Highway 94 they can
20 return at speeds -- at a speed that should not impede
21 traffic. And, therefore, we think that there is an
22 unlikely possibility that they will be -- there is a low
23 possibility that they will cause a wreck. But if that
24 was a wreck, and all there was was the small amount of
25 residue that would be on ~~the internal surfaces~~ of the

1 truck, it wouldn't be a radiological risk as much as it
2 would be from the accident itself.
3 What we'll have in our emergency preparedness
4 plan, is a plan to deal with this event if it occurs,
5 both coming up on the haul road if there is a truck that
6 turns over and returning on Highway 94. And we'll be
7 prepared to deal with that along with any emergency
8 teams from the County or the County Ambulance Service.
9 And that would be all well-coordinated and will not be a
10 problem. It will not be a problem.
That's all the questions I have, Sue. You
12 might ask if we missed any -- if anybody didn't hear
13 their question read.
14 MS. SCHNEIDER: Are there any stray
15 questions out there, lost a card or whatever?
16 Basically at this point it's your turn. You
17 all have listened patiently for two hours. What I'd
18 like to do is, again, is just recap our ground rules
19 then for my part, just so I can gauge some time.
20 Can I get a sense from you all, this won't
21 limit you if a question pops into your head. Can I get
22 a sense just by a show of hands at this point who would
23 be interested in asking a question or making a comment
24 so I can kind of gauge time. Would you put your hand up
25 if you're interested in speaking?

1 Okay. Again that's not to limit you, if you
2 didn't put your hand up you can still get it up. Now,
3 again, if you could, if you are interested in coming up
4 if you'd just raise your hand and we can just kind of
5 pick.
6 When you come up to the microphone, if you
7 would identify yourself for the record. If you have an
8 unusual name you might spell it out for the court
9 reporter's purpose to make it easier on her. And,
10 again, if you could keep your comments or questions
11 brief that would be helpful. And, again, the other
12 thing is if you can keep it to this proposal.
13 So, given that, somebody want to go ahead and
14 start? You had your hand up?
15 MR. HALLIDAY: My name is Norman Halliday
16 and I'm a long-term resident of St. Charles County and
17 my question is, When you take the waste out of the
18 quarry, what are you going to do with the quarry when
19 it's all gone? Are you going to allow it to fill back
20 up with water?
21 MR. McCRACKEN: No. Our plan is that
22 there would be no impoundment once we are finished.
23 MR. HALLIDAY: In other words, you're
24 going to open it up so water can just go right on out?
25 MR. McCRACKEN: Yeah. There's two things

that have been suggested. Whether they're the only two things I don't know.

One is to open it up like you've said and the other one that somebody suggested would actually be to knock the bluff down that's right there and then it would be open too. You'd have to do some backfilling with clean material but that's -- you know.

Those are two things that have been suggested. But our plan is that there would be no impoundment there when we're finished. Certainly we'll want to work with the -- you ask what would be done with it.

Within the federal government there is a process for excessing land but my guess would be that it would end up with the Department of Conservation if they wanted it. So we would be talking to them and how they would want the land at that property.

MR. HALLIDAY: I would hope that you would keep any additional water from coming back in there. Because, as a father who has had kids swimming in that quarry, I would like to see no more water in that quarry.

MR. McCRACKEN: I agree.

MR. BOLLMEIER: My name is Meredith Bollmeier and I'm with St. Charles Countians Against Hazardous Waste. And I would like to say that Dr. John

1 Soucy, who is our current president, is not here
2 tonight. He wanted to be. They have a big meeting at
3 St. Joseph's Hospital on Medicare and he had to be
4 there.
5 He had a question and he wanted to voice this
6 concern. He said he hoped that we were aware that
7 safety standards in relation to radiation are
8 continually declining. And because of this if the
9 present risk evaluation is suspect, and should
10 conservative ones be applied -- should more conservative
11 ones be applied. Okay. That is the question he would
12 like to have on record for consideration.
13 My comments are, I'm the Technical Assistants
14 Grant Project Manager for the Superfund Grant that the
15 Citizens Organization was awarded last year by EPA
16 Region Seven. And I have some comments and questions in
17 that.
18 And one of the things is that because Weldon
19 Springs is a federal facility site, it's very difficult
20 to follow the format of the Superfund Tag Grant.
21 They're called tag grants, and the schedules that are
22 set up for remedial investigation meetings, because
23 you've gotten Weldon Spring so complex.
24 It's broken down into like fourteen operable
25 units where there is going to be a meeting for these a

1 we go down the road. This makes it difficult especially
2 when we get -- I want to know, when you get the
3 documents printed, is there a time limit on when you
4 have to have the public hearing?
5 When we got the documents, it's been less than
6 a month. And that makes it difficult to go through the
7 process of getting a technical advisor. And could there
8 be 45 days, 60 days, time to go through that process
9 that we are required to do. And then also allows people
10 who want documents to have time to really read them.
11 Everybody's just had time to barely get into them, and
12 this is a real important thing to us when we live in
13 this County and we do take it seriously.
14 And at the 1987 draft environmental impact
15 statement here, over 118 people gave either oral or
16 written testimony. So I think that you will find an
17 interest if there is enough time allowed, and I think
18 there is a lot of people here tonight that have stayed
19 here because they're interested.
20 MS. SCHNEIDER: Can I stop you just for a
21 second, Meredith? I think just in terms of process, if
22 we can go through those one by one that may be simpler.
23 MR. BOLLMEIER: Well, really, they don't
24 have to answer each one. I think if they are just aware
25 that these are problems, if they can allow more time,

more time and then more adequate advertising. Because I know you did a big ad in the Journal but I can't remember when it was that I saw it. And a lot of peop. didn't know.

And the other thing is, seven o'clock is too early. A lot of people who work in St. Louis and St. Louis County just barely get home by seven o'clock. It doesn't give them time to have dinner. And so seven thirty would be a more reasonable time.

And for a lot of people, if we could have something more central like in the Fort Zumwalt School District which would be -- they've got some nice, large school buildings that would be more central to the subdivisions. It would be more easily accessible. So those are things that people have brought to my attention.

The others are that one copy at each library is insufficient, of the documents. Because people go and they're reading them, somebody comes and they want to read them, and you wait in line to read documents. It's silly. You don't have that much time. I myself get most of my reading done either early in the morning or late at night.

Okay. Steve, is the water treatment plant design report done? Is it available now?

MR. McCRACKEN: Not yet. We're looking at a month or two.

MR. BOLLMEIER: Okay. The other thing is, are the transcripts being taken up here tonight and any comments that people turn in, are they going to be in any kind of publication and when will that be available?

MR. McCRACKEN: The comments and responses will be a part of the -- there will be a transcript of that. That will become a part of the Responsiveness Summary, and that Responsiveness Summary will be made available to the public.

MR. BOLLMEIER: When, about when? Do you mean this year?

MR. McCRACKEN: In July.

MR. BOLLMEIER: In July. Okay. I mean like if we have hired --

MR. McCRACKEN: That has to also come along with the Record of Decision so that's the reason it's in the July-August time frame.

MR. BOLLMEIER: Do you see a time frame for your Record of Decision?

MR. McCRACKEN: Yeah, I sure do. Mr. Morby here is telling me that he's pushing for August. And I think that's a great idea.

MS. THERESA TIGHE: This is the Record of

1 Decision on this project, not on the permanent storage
2 of the waste?
3 MR. McCRACKEN: Right. Right.
4 MR. MORBY: I think I said in my comments
5 that it would be on or about before September 30th and
6 having met with Steve today I'm encouraging him to make
7 it happen in August of this year.
8 MR. BOLLMEIER: Okay. One last comment
9 and this I heard during the break.
10 People would rather ask their own questions
11 than turn them in, and even if they had to be brief,
12 because when they hear some of the questions asked
13 repeated back, it isn't the question they had in mind.
14 So they're not feeling like they had that input into i
15 And where it might take a little more time, I know you
16 all get so tired of it, having to answer all this
17 anyway, it would give you a break. That's all I have to
18 say.
19 MR. McCRACKEN: You know we've talked
20 about that quite often, Meredith, and it seems like
21 we -- one reason we try to go both ways, there's some
22 people that don't like to stand up at the mike, too, and
23 we try to accommodate them. That's one of the reasons.
24 And the other one is we try to sometimes, and I
25 didn't do a very good job of it, is take similar

1 comments and consolidate them and answer them at once.
2 But, yeah, it's something that we will think about.
3 How's that?
4 MS. SCHNEIDER: Steve, I just had a
5 question in terms of Dr. Soucy's question. Is that a
6 response that you want to give now or did you want to
7 just enter that into the --
8 MR. McCRACKEN: I will answer it in
9 general terms. And then I may need to get some help
10 from our radiation experts.
11 MS. SCHNEIDER: Can you repeat that
12 question again?
13 MR. McCRACKEN: The question was, do
14 recent studies indicate a greater risk to exposure to
15 radiation than was previously thought? Is that about
16 right? And I think that the answer to that is yes.
17 Recent studies seem to -- they do indicate that
18 there is a higher risk. And when you look at higher
19 levels of exposure, worker protection standards, that
20 may become a factor because our -- we had a fellow who
21 read that whole study in the last week and it's his
22 interpretation that what the report is saying is that
23 the risk from exposure to radiation could be as much as
24 four and a half times as high as was originally -- was
25 previously expected. And I think that it's from a

1 fairly respected panel that's come in with these
2 conclusions.
3 The thing that we want to make is a point in
4 that is a -- that's true. They could be four and a half
5 times higher. And if you take the risk that we had
6 calculated, that is so extremely low, one in -- how much
7 is it for students? It's -- what is that, one in two
8 million?
9 If you had a risk that you calculated as one in
10 ten million, for instance, just based on very
11 conservative assumptions, to the students at Francis
12 Howell High School, and if you multiply that times four,
13 it's four in ten million.
14 And the point of that is that at the exposure
15 we're talking about, a rather high increase in which is
16 expected in risk is still a very low number. Because
17 the number is so low, that by multiplying that times
18 four it's still extremely low. And that's the point.
19 MR. BOLLMEIER: Can I say something in
20 relation to that?
21 It's hard for people to relate this one in ten
22 million or one in what, because in this County we have
23 had a mortality study rate for leukemia and an
24 incidence -- both of them had indicated higher
25 incidents, and cluster of things.

1 And like when people have children that go to
2 Francis Howell, they've had their children's classmates,
3 somebody in that class has been sick. So these are the
4 things that, while they may be anomalies to you, they
5 are worrisome to the people here. And, you know, in
6 that respect, I was wondering, Doctor, were you going to
7 say something tonight, or are you going to turn in your
8 testimony in writing? Okay. We'll do that.
9 MR. McCRACKEN: The students at Francis
10 Howell High School are certainly our biggest concern,
11 too. And it's our expectation and it's our plan, and
12 everything we're doing is to assure that there will be
13 no contamination to reach that school. We don't want
14 that to happen and we're not going to let it happen.
15 MS. SCHNEIDER: I was just curious, Gale
16 Carlson, did you want to respond to that at all or --
17 MR. CARLSON: I can try and respond to
18 those questions, Meredith.
19 First of all, we had Dr. John Krellon, who ran
20 that St. Charles childhood leukemia study here. He was
21 here last year in October. And we, I think we tried to
22 answer those questions before.
23 It's difficult for the public to understand,
24 but believe it or not, cancer clusters, that means
25 unexpected or unexplained groupings of cancer do occur

1 all over the place all the time and there is no reason
2 for it. I guess you could say the reason sometimes is
3 chance. In other words, the reason somebody wins
4 something in a lottery is a chance. There is no other
5 reason for that.
6 It doesn't sound nice to talk about cancers of
7 children that way but that kind of thing can happen.
8 Our studies of the St. Charles leukemias, childhood
9 leukemias did not prove any environmental cause of those
10 cancers.
11 We could not find a specific cause. We did
12 clearly rule out any exposure by any of those children
13 to any radiological sites in this County. We
14 specifically asked all the relatives we could find abo
15 that, and we also asked other persons many other
16 questions to try to make a case control study in this
17 County.
18 You're right. People are concerned about it.
19 And unfortunately when you try to explain something like
20 that to people, even if you say, statistically there was
21 no association once they hear the term cancer cluster
22 they always think, well, it must be caused by something.
23 We can't prove, but we have pretty -- we are very clear
24 that in this case those kids were not exposed to any
25 radiation sources from this site.

1 Now they could have gotten leukemia from
2 radiation but, and I hope you don't think I'm trying to
3 talk down to you, radiation's all around us, it could
4 have been caused by some other form of radiation, or it
5 could have occurred in a way that had nothing to do with
6 radiation. We do know that leukemia is the most common
7 childhood cancer. So, if a child is going to get cancer
8 it's probably going to be cancer. So it's difficult to
9 answer that.
10 I think there was some other statements you had
11 too that I don't know if I adequately answered those.
12 And we agree that there's a concern and that's why we're
13 so careful and want to get this thing cleared up, want
14 to get his place cleaned up.
15 And something that Steve mentioned, I guess
16 there was something real interesting to say. The idea
17 that people don't understand these numbers. I agree.
18 But when you hear a number like one in ten million or
19 four in ten million, a generally easy way to understand
20 it is to think about this, if there were ten million
21 students who went to St. Charles -- or to Francis
22 Howell, we would expect four of them to get cancer above
23 and beyond the normal cancers they're going to get.
24 Anyway, we would expect four more of them if the most
25 recent risk estimates are more accurate than the older

one which is like one in ten million.

Now, it's not nice to think about it but if there were ten million kids going to Francis Howell, between two and a half million and three million are going to get cancer anyway from other sources. Maybe they're environmental sources, maybe they're not.

So now what the increased risk basically is, is instead of having a risk of we'll say three million in ten million we'll just use that number, now we have three million and four in ten million. That's the possible excess risk from having these chemicals at the temporary storage site.

So it's such a low risk that that's why we believe that it's not going to be a concern to the students at the school.

MR. McCRACKEN: And those risks are calculated on a very conservative set of assumptions. And I can tell you that the environmental monitoring systems that we have in place have to date shown nothing above background in the air beyond our fence line. And it is the air that could potentially impact the students at Francis Howell High School.

MS. SCHNEIDER: Okay. We had a couple other folks had some questions or comments? Sure. Gentleman back there. And then if you would want to

1 come up after him.

2 MR. KENNETH GRONEWALD: I am a long-time

3 resident of St. Charles County, too, as well as a former

4 hauler of wastes to the quarry.

5 I had a question earlier on the size of the

6 barrel storage area. In my mind I don't know that

7 that's big enough. It should be possible that the drums

8 we put in there come out intact. They're in layers.

9 And fifty-by-fifty foot storage will by no means take

10 care of that amount of drums that we put in there and

11 that's the only thing I was going to comment on was

12 that. Thank you.

13 MS. SCHNEIDER: That sounds like the kind

14 of information that would be helpful to you all.

15 MR. McCRACKEN: It is helpful to us, and,

16 Ken, what we plan to do for intact barrels is actually

17 store them inside the buildings that we have on site,

18 and the ones that are not will go into that area.

19 That's our current plan and we are remaining

20 flexible with these size of areas within that storage

21 area. You've got to design it with flexibility in mind.

22 Because you're right, we cannot get an exact -- we don't

23 have an exact understanding of what each one of the pile

24 sizes would be. So we'll want to be flexible as we --

25 as we bring the waste up to this area.

1 MS. SCHNEIDER: If you would go back there
2 to that one, please.
3 MR. REMINGTON: My name is Stan Remington
4 and I'm the St. Charles County Hydrology Consultant to
5 the well field that we've been talking about tonight.
6 And maybe I can just make some comments here
7 about some of the questions that have been asked
8 tonight.
9 Mainly why don't we remove the well field.
10 I don't know how many of you realize just how
11 slowly groundwater moves. This contamination has been
12 going on for more than forty years and it has yet to
13 reach any of the water in any of the production wells
14 that we're pumping from from the well field.
15 In addition to that we have, the County itself,
16 has four monitoring wells. And I don't know how many
17 the DOE has but they have many that we periodically
18 test.
19 We had been doing it once a month. And we, the
20 County that is, have four of these and there has been no
21 indication -- these are located between the quarry and
22 the well field. And so far there is no indication that
23 any of this contaminated water has reached any of these
24 four wells, except one that has a slightly elevated
25 total _____ content but it still isn't anythi

1 to get excited about.

2 Well, if it's taken forty years for it to go

3 from that quarry to, let's just assume that it has

4 reached that one monitoring well, it's going to take at

5 least another forty or even probably longer to reach the

6 first well in the well field.

7 And our analyses show that the water quality of

8 the water from these wells is probably better than the

9 water quality in the Missouri River. And if we were to

10 use the Missouri River water it would be terribly

11 expensive to get the quality up to the standards that's

12 required.

13 And if the well field did become contaminated

14 it wouldn't happen to all the wells at once. It would

15 probably happen to one, and it would be a very slight

16 rise and it would be a continuous rise. And if it

17 happened, of course, we would immediately shut that

18 particular well down and replace it with another one

19 outside, probably outside that well field.

20 But we would have plenty of time to take care

21 of any potential contamination problems. And that's the

22 basic reason that we would not want to move the well

23 field at all, and also the expense is so high. Thanks.

24 MS. SCHNEIDER: Thanks.

25 Steve, do you want to respond to that at all or

1 does that speak for itself?

2 MR. McCRACKEN: No. We have, I think Rick

3 was telling you, twenty-six monitoring wells that we

4 look at routinely. And we will not let the water

5 quality of St. Charles County be affected without doing

6 something.

7 MS. SCHNEIDER: Any other questions?

8 There's one other there and then if you would like to do

9 yours after her then.

10 MS. HOENIG: My name is Linda Hoenig. I

11 have a question for the gentleman from the Department of

12 Health.

13 Now that you have reduced our children to mere

14 numbers, I want to know if the Department of Health

15 plans to do an epidemiology study or keep some kind of

16 tests on the health of the school kids and the staff and

17 the residents during and after the cleanup for, say,

18 fifteen, twenty years afterwards or are you going to

19 wait until another cluster happens and then try to

20 figure out where it came from?

21 MR. CARLSON: We would be glad to do that

22 kind of study, it's depended on funding. That wouldn't

23 be a problem. It would again, take fifteen or twenty

24 years before we get any results. In other words, if you

25 do an epidemiologic study, a prospective study of what

1 the health status of the children is now and then follow
2 them for twenty years, we would then know.
3 MS. HOENIG: What do we have to do to
4 initiate the Department of Health into starting that
5 type of study now and following up during the process of
6 the cleanup?
7 MR. CARLSON: That's a possibility, but
8 again it really depends on funding. It is the most
9 expensive type of health study that can be done, a
10 prospective epidemiological study which is basically --
11 MS. HOENIG: I think our kids are worth
12 that.
13 MR. CARLSON: That's great. I'm not
14 against it at all. I can't tell you tonight that we
15 will, because I don't have that authority.
16 MS. HOENIG: What do we have to do to get
17 that done?
18 MR. CARLSON: How about if I bring that
19 back to my department director, mention it, and then
20 we'll get back to the school administration?
21 MS. HOENIG: Okay. Can I ask another
22 question?
23 Will the study be less flawed than the prior
24 study? People were left out of that study, the cutoff
25 line was not accurate. The questions that were asked

1 were not pertinent to Weldon Springs or anything around
2 there from what I understood from the people who got the
3 questions. And the question that happened before the
4 question that they included was totally wiped out
5 because they died before this study started.
6 MR. CARLSON: Well, that's why the study
7 was done, because there were children that had died of
8 leukemia.
9 First of all, whenever you do a prospective
10 study, that is you follow people into the future, it is
11 much more accurate than following people into the past.
12 You miss people, you miss data, people forget things,
13 but again, the problem is it takes much more time to get
14 any results.
15 Now, and what you would then find, and I don't
16 want to say this isn't a good idea -- let's say that --
17 let's say that this is a real speculation, and I don't
18 want to make it sound silly. Let's say that there is,
19 or there will be a risk that we don't know about now.
20 If we follow the kids for fifteen or twenty
21 years and we find that risk occurred and there is an
22 excess, unfortunately it doesn't stop the illness from
23 occurring. All we would know then, is we can point a
24 finger and say yes, the waste site caused it. We still
25 need to clean the waste site up.

1 MS. HOENIG: Well, the next time they have
2 a cleanup somewhere like this, they can take more
3 precautions yet, so that this doesn't happen again.
4 MR. CARLSON: Yes, that's good.
5 MS. HOENIG: Even one child is one child
6 too many.
7 MR. CARLSON: That's good. That's good.
8 I'd be glad to approach that with you with my director
9 that the problem with that is, and maybe I should -- I
10 don't do it too well.
11 The problem is that maybe I need to do then
12 also is to say we need funds, and then those funds come
13 from DNR and those funds from DNR come from EPA and
14 maybe they'll do it. And I don't want to say this
15 funding is going to cut it off. That would be terrible
16 to say we don't have the money so therefore we can't do
17 the study.
18 But it's the kind of study that is difficult to
19 do, is very involved, and might not prove anything.
20 Because for instance, some children that now go to
21 Francis Howell High School are going to get cancer. I
22 know you say I reduced it to numbers. I know that
23 sounds terrible, but you need to know that now.
24 MS. HOENIG: I know that.
25 MR. CARLSON: And it's not necessarily

1 from this waste site. It is not -- for instance, I
2 mean, and this is the old passing-the-buck story, how
3 many high school kids are smoking and how many are going
4 to be adult smokers.
5 MS. HOENIG: Smoking doesn't cause
6 leukemia.
7 MR. CARLSON: No, it doesn't cause
8 leukemia but it causes cancer.
9 MS. HOENIG: Right.
10 MR. CARLSON: So we're going to find
11 cancers in this study. And I wouldn't want to say that
12 by having the study we're going to solve the problem.
13 Again, we really need to clean this up. And if
14 you believe that having a study is going to prevent so
15 illness, it won't necessarily prevent it. And it might
16 not even, if you want a guilty party, it might -- most
17 likely won't prove that the site is the guilty party.
18 But that doesn't mean we can't do that study.
19 MS. HOENIG: That's not the point. The
20 point is if it is causing and if you can prove that the
21 next time take more steps to prevent it.
22 MR. CARLSON: That's fine, but it's
23 important to know in the beginning what if we don't
24 prove it.
25 MS. SCHNEIDER: Wait a minute, I was

1 letting this lady go first.

2 MS. ZAHN: My name is Jean Zahn and I have

3 a couple comments about Mr. Remington's comments that

4 were just made.

5 It upsets me that the comments were that you

6 people don't know how long bedrock travels. It takes

7 forty years. Well, in forty years I might be dead but

8 my children will be here, or their children will be

9 here, or relatives I have will be here. So, you know,

10 that type of comment is not appreciated by me.

11 Also the comment about, if it gets into the

12 well field it's only going to be one well field anyway.

13 Well, one well field, as we all know, is too much. And

14 if you do your testing quarterly of these fields or

15 however long you do your testing, how many people have

16 already drank that water before you found that.

17 So I just don't understand why those comments

18 were really made. They didn't -- they didn't help

19 anything here. They just upset me.

20 MR. McCRACKEN: Can I answer that

21 question? Nobody will drink that water. What we have

22 got are four rows of monitoring wells in between the

23 pumping wells in the quarry. We monitor those wells to

24 see if contaminants are moving toward the well field,

25 and we would respond before the contamination ever got

1 into the pumping wells.

2 So nobody will drink that water before we know

3 it. If there is contamination moving, we'll pick it up

4 at that monitoring well and do something before it ever

5 gets to the drinking water.

6 MS. ZAHN: I do appreciate that

7 clarification. It just seems like the comment was made

8 it's like you people don't really know what you're

9 getting all upset about.

10 MR. McCRACKEN: And we certainly don't --

11 what we're trying to say is that we had the time to do

12 the work safely, we think. There is no -- we don't --

13 we've studied this problem, we've spent two years doing

14 it, that's a good thing to do. Because we think we've

15 got a very good handle on what is going to happen as we

16 exhume the waste.

17 For instance, as we -- when we draw the water

18 down in that quarry sump, the actual -- the grading will

19 reverse to some extent and contaminated water will start

20 to flow back into the quarry instead of out of the

21 quarry. So there's a very good chance that if it

22 were moving in the direction of the next row of

23 monitoring wells, for instance, it would stop that.

24 But the point is that we're not going to wait

25 for it to get to the monitoring water before we do

1 something. We would do something long before that.

2 MS. SCHNEIDER: Okay. Let me check first

3 if there is anyone else that has a question or a

4 comment. If you would want to come up next after

5 Meredith.

6 MR. BOLLMEIER: I just want to comment on

7 one thing.

8 On what Stan Remington said is that what is

9 changed in the County with this well field, you know,

10 it's been forty years but in the last ten years they

11 have drawn more water from that well field than in the

12 forty years before it because of the growth in the

13 County. So that's the well field that all the western,

14 southwestern developments are counting on getting their

15 water from which is a real important thing to keep

16 implanting.

17 What I wanted to say to Gale was when we did

18 the cancer study of children, the leukemias were the

19 smallest amount of the groups, there were thirty-five

20 children with cancer, only thirteen of those were

21 leukemias.

22 Other parents were very hurt that their

23 children with cancer didn't count. And I understand why

24 the Department of Health had to use leukemia, because

25 that is where they've got the statistics because it is

1 so rare.

2 But that is one of the things that, you know,

3 Dr. John Goffman testified in '87 that bone cancer

4 should be looked at in relationship to children and with

5 water because children's immunity systems aren't as

6 fully developed as adults. So that's an area we still

7 need to explore and to get more definition on. Because,

8 and I realize it's difficult, but I want to give the

9 floor to Sue.

10 MS. SCHNEIDER: Go ahead.

11 MS. DREY: My name is Kay Drey, I live in

12 University City.

13 And I've been writing as fast as I could all

14 evening, dropping papers and stuff. I wasn't sure what

15 the format was going to be tonight. I have six pages of

16 questions, fourteen questions, each one of which has

17 subquestions. I'd be happy just to start reading and

18 you can have me sit down when you want to. I don't know

19 how you want to do this.

20 MS. SCHNEIDER: And none of those have

21 been covered?

22 MS. DREY: That's right.

23 MS. SCHNEIDER: Good question.

24 MS. DREY: I also have a page of

25 introduction. Just a brief page, actually. So do you

want to give me a five minutes or something and blow a whistle or what do you want to do?

MS. SCHNEIDER: I think that's a good idea.

MR. McCRACKEN: Why don't we take a break and come back.

MS. SCHNEIDER: Do we have any other questions or comments? Does it look like we're winding down here?

MS. DREY: I can go pretty fast in five minutes.

MS. SCHNEIDER: Could you be my timekeeper since I don't own a watch?

MR. MORBY: You got it.

MS. DREY: I don't think anyone else has been given a time limit.

MS. SCHNEIDER: You're the only one who has told me you have fourteen questions and three pages of comments.

MS. DREY: I will mail these in.

I am here to make it clear, first for the record, that the citizens who participated in the appeal of the National Pollutants Discharge Elimination System permanent for the quarry water agreed not to continue our protest of the proposed release of the treated water

1 into the Missouri River.

2 Only with respect to the amount and type of

3 informational monitoring that the Department of Energy

4 would be required to perform for the Missouri Department

5 of Natural Resources had determined that we are not

6 allowed to pursue any of our other concerns such as to

7 whether this water should be released into the St. Louis

8 County drinking water supply, that is into the Missouri

9 River about ten miles upstream from the St. Louis County

10 Water Company's main intake structures.

11 We also never discussed the question of whether

12 perhaps the bulk waste should be extracted and removed

13 from the quarry before the quarry pond water begins to

14 be pumped out.

15 We remain concerned about the continuing supply

16 of water that needs to be treated and could then end up

17 in our water supply such as the contaminated groundwater

18 from the adjacent and underlying vicinity areas that

19 will flow into the quarry as the pond water is removed.

20 And we're concerned about the rain water and

21 the snow that will perforate through the waste, and the

22 processing water such as from the high pressure hosing

23 of the quarry walls, from radon and dust control, and

24 from the dewatering of the bulk waste.

25 Obviously the quarry must be cleaned up.

However, many questions remain unanswered.

Number one. How can responsible decisions be made about water treatment technologies and bulk waste excavation and storage with only the minimal monitoring data you know have available?

We have no indication and no one really knows the quantity of radioactive isotopes in the quarry pond water or in the bulk wastes. Until extensive, and in fact expensive, isotopic analyses are performed on the pond water and groundwater, it seems premature and unscientific for the waste treatment, the waste water treatment plant to be designed.

How can anyone know which water treatment technologies, if any, will be affective in removing all the radioactive or hazardous pollutants if a full characterization of those pollutants is not available?

As a St. Louisian living downstream I remain extremely concerned.

Two. How can anyone plan adequately for the removal and transport, and interim storage of the bulk waste when inadequate data are available on these wastes as well, as you say on Page six ten of the Feasibility Study. It quotes, "Drilling would be extremely difficult. Representative sampling is unfeasible." That's an abbreviated statement.

1 Three. Has there been an explosive expert who
2 has had input into this whole plan of excavation because
3 of the natural aromatics such as TNT and DNT? Has he o
4 she determined if the TNT in the quarry soil is in high
5 enough concentration there to be a detonation? Has a
6 contingency plan been drawn? Could the 2,4-DNT, which
7 is a potent carcinogen, volatilize when exposed to the
8 water that is to be sprayed in the quarry for dust
9 control during excavation and during the high pressure
10 hosing of the walls?
11 Four. Where do you expect to dispose of the
12 radioactive residues that will accumulate during the
13 operation of the quarry water treatment plant? Are
14 these concentrated radioactive wastes to be stored on
15 the asphalt pad in the temporary storage area?
16 Five. Have you evidenced as yet whether any of
17 the contaminated groundwater has migrated south of the
18 slough, that is slough of the quarry? How far is the
19 plane moving each year? At what depth below the surface
20 are you extracting water for monitoring?
21 What precautions are you taking to make sure
22 that water is being extracted from a range of depths,
23 such as from the top of the aquifer where the
24 concentration level is likely to be highest, and to make
25 sure the amount of water extracted does not extend so

1 deep that less contaminated water could dilute a more
2 highly contaminated slate of water, thereby destroying
3 the concentration level in the sample.
4 Six. Have you estimated the probability of a
5 tornado having a direct hit at the chemical plant site?
6 That is at the site of the proposed temporary storage
7 pad over the next five to ten years when you're expected
8 to use that storage facility. The probability of a
9 tornado.
10 What is the probability of the tornado? If a
11 tornado hit the storage pile, over how large an area
12 have you estimated that the thorium and other
13 radioactive materials would be dispersed? Do you think
14 the public should be given the opportunity to decide
15 whether that's an acceptable level of risk?
16 Seven. Is there to be a dike built around the
17 temporary storage asphalt pad to contain any runoff?
18 Eight. According to Page ten two of the
19 Feasibility Study, you say the bulk wastes may be stored
20 on the asphalt pad up to ten years. What are your plans
21 for the final disposition of these materials?
22 According to the final environmental impact
23 statement that was published in February of 1987, you
24 were expected to establish a permanent disposal cell at
25 the chemical plant site.

How confident are you that you can build a permanent cell on this site that would meet state regulations, such as for hazardous waste landfills and would meet regulations and would meet federal regulations such as Superfund TRCRA or Research Conservation and Recovery Act for Hazardous Materials and the Department of Energy regulations for radioactive materials?

MS. SCHNEIDER: Okay, Kay. I have to stop you there. It's been five minutes. And I want to say that in terms of a time limit, that was your suggestion. So if you want to know why nobody else got one --

MS. DREY: Can I just finish it? It's four pages and one question.

MS. SCHNEIDER: I really don't think so. It's five minutes to 10:00 and I want to give Steve a chance to respond to the ones that you have already asked.

MR. McCRACKEN: We'll absolutely take your questions and we'll answer each and every one of them in the Responsiveness Summary that will be made available to the public.

For the most part, everything that I heard you say we have considered. There was within the context of this meeting for permanent disposal, that's not in the

1 context of this meeting tonight, but within the context
2 of this meeting the things that you brought up we have
3 considered.
4 You started out talking about water treatment
5 and the fact that you did not have a chance to really
6 get your views aired. Well, for the benefit of the
7 people here we had three rather endless negotiating
8 meetings with the coalition and with Kay and her group
9 to address the eleven issues that they raised as an
10 appeal to the water treatment plant MPDES permit. And I
11 received a letter from them two days ago that said that
12 they were satisfied that the appeal had been adequately
13 resolved.
14 And I really don't understand why it keeps
15 coming up, because we took those eleven issues, we did
16 everything we could to comply with them. And I have a
17 letter from you, from Arlene Sandwande that indicates
18 that you are satisfied that the appeal has been
19 resolved.
20 And so I don't understand why that one is still
21 coming up because frankly we basically tried to meet
22 every one of the issues that you raised. Beyond that,
23 I'm not going to try to go into detail, but we'll answer
24 them, I think that we have considered the questions that
25 you have.

1 I don't know what we're going to do as a group
2 tonight but we're willing to sit down with you face to
3 face and answer these questions one by one if that's
4 what you want to do because we have got answers.
5 MS. SCHNEIDER: Okay. What I would like
6 to do -- I don't know if Bob or you, Steve, have any --
7 excuse me.
8 MS. TIGHE: My name is Theresa Tighe from
9 the Post-Dispatch. I think one of Kay's questions was
10 very interesting and I would just like to have the
11 answer if you all have it.
12 It was the question about, have you had a --
13 something nobody asked tonight and one of us probably
14 should have. Have you had an explosive expert study t'
15 DNT and the TNT and what kind of safety precautions are
16 going to be made for that and do you know how large are
17 the quantities? Can any of it still be volatile?
18 MR. FERGUSON: There are experts in the
19 U.S. Army Contents and Hazardous Materials Agency that
20 you subpoenaed that have decontaminated many explosive
21 sites across the country. And the center of expertise
22 in these areas, the gentleman who has been contacted out
23 there, his name is Ollie Obolah, I'll spell that for you
24 later, and the range of concentrations that they begin
25 to become concerned about in explosive hazards is in the

range of twelve to fifteen percent. The highest concentrations that we have measured with TNT in the contaminants in the quarry is on the order of two percent.

MS. TIGHE: What about the DNT?

MR. FERGUSON: DNT is not an explosive hazard in those concentrations, it's the TNT that's of the concern. And the engineering controls that will be applied as an extra measure of safety would be to provide wetting agents, and wetting agents will be applied as a manner of dust control in those areas regardless of the explosive hazards.

MS. TIGHE: Also earlier tonight, Joe Ortwerth asked a very interesting question. And that is, when do you think there will be a Record of Decision for the final resting place for the waste at this point in time. You said in October of 1991 there would be a document.

MR. McCRACKEN: In October of 1990, this is 1990, we will have the draft document prepared and then it's still -- we're still trying to, we're working on what the review process will be knowing that it will be, that's why I don't have an exact date when the documents will be ready. It's a matter of getting them reviewed and having a public meeting such as this to

1 discuss this.

2 And I want to add one thing to what Rick has

3 said. We're not assuming we know everything about that

4 waste that's in that quarry. The approach that we're

5 going to take is that we don't know everything about

6 that waste material that's in that quarry and we're

7 going to think ahead, we're going to plan for unknowns,

8 and we're going to put ourselves in a position of being

9 able to deal with things as they come up.

10 I think with people like Ken we can certainly

11 have a good understanding in the records we have, we can

12 have a good understanding of what is in there. But we

13 are not going to assume that we know everything. That

14 would be rather foolish, we think for us to do that.

15 MS. TIGHE: The school district brought

16 this up to me and then I'll sit down. This is my last

17 question.

18 What are the precautions you would take in case

19 a tornado would hit either the plant or the storage

20 area? What could you do?

21 MR. GREEN: My name is Steve Green, the

22 Site Radiation Safety Officer.

23 We currently do have a draft of a plan to deal

24 with all kinds of emergencies, and a tornado is one.

25 The threat of a tornado is really with the tornado

1 itself, first. What damage it could do as it came
2 through an area.
3 Our plan is to first, people would first
4 protect themselves from the tornado. We would then
5 dispatch a crew of people to monitor and find out what
6 the results of any contaminants that might have been
7 spread were.
8 And then, after we looked at where the
9 contaminants might have been spread it, we would then
10 make recommendations to further deal with it. If the
11 contaminants posed a health threat, then we would
12 implement plans to evacuate people for things like that.
13 MS. SCHNEIDER: Okay. Basically we do
14 need to wind up.
15 Steve and Bob, I wanted to give you, if you had
16 any closing comments before we close the meeting.
17 MR. MORBY: Just on behalf of EPA I would
18 like to express our appreciation for the time and effort
19 that you have spent in preparing for this. I think by
20 the quality of the questions that have been given here,
21 it shows that there has been time and real interest.
22 We would encourage you to take advantage of the
23 time that is yet remaining to make your input so that
24 can be a part of this decisionmaking.
25 MR. McCRACKEN: I think what I would like

1 to do is just that if you would like to know more about
2 what we're doing, give us a call or come see us. We
3 will sit down with anybody individually or as a group
4 and we will go through with you everything we're doing
5 and try to show you what we are doing particularly to
6 assure the health and safety is adequately provided for.
7 We need to have that type of communication and
8 the understanding that can be generated from that if
9 we're going to really succeed with this project.
10 I think there are two things we need. To clean
11 the site up, but in my mind it's very important that
12 people understand what we're doing and can feel like
13 it's not going to endanger their health.
14 So if you want to come see this, see us, give
15 me a call and we'll set up a time and we can go through
16 this stuff just as long as you can stand it. And we'll
17 show you what we're doing, and I think that when we do
18 that we can increase your confidence that we can do it
19 adequately.
20 MS. SCHNEIDER: Okay. I would like to
21 thank you all for presenting. I can tell you from just
22 being involved with this process, these folks take it
23 very seriously and put a lot of work into doing this,
24 and really see the need for it.
25 Just to close, I want to remind you that there

are those information bulletins out there. If you don't already have one just pick one up. And again to get written comments in. I guess Steve corrected as long as they are postmarked by April 9th they would be included in the record.

Again these folks will be around here for a little bit longer. If you want to buttonhole one of them that you think has the answers to the questions that you have please go ahead and catch them for a few minutes afterwards.

And just on behalf of the federal agencies involved and the contractor for the project, we want to thank you and we really appreciate your attention and your concern and your cooperation with this. So good night.

[Meeting adjourned.]

* * * * *

STATE OF MISSOURI)
) SS
COUNTY OF ST. CHARLES)

I, SANDRA McGRAW, a machine shorthand reporter and notary public within and for the State of Missouri, do hereby certify that on March 29, 1990, I was present at the public meeting held at the Ramada Inn, 900 Corporate Parkway, in the City of Wentzville, State of Missouri, and reported all the proceedings of said public meeting; and I further certify that the foregoing pages contain an accurate reproduction of my shorthand notes of said proceedings.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal on _____, 1990.

My Commission expires: July 19, 1993.

_____
Sandra McGraw
Notary Public within and
for the State of Missouri.