TRANSCRIPT OF THE AUGUST 13, 2003
PUBLIC MEETING WELDON SPRING
SITE FOR THE: CHEMICAL PLANT
GROUNDWATER OPERABLE UNIT

WELDON SPRING SITE REMEDIAL ACTION PROJECT
WELDON SPRING, MISSOURI

AUGUST 13, 2003

U.S. Department of Energy
Grand Junction Office
Weldon Spring Site Remedial Action Project
CHEMICAL PLANT GROUNDWATER OPERABLE UNIT PUBLIC MEETING

7:00 P.M.

REPORTED BY: Mary T. Webb, CCR #972

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CHEMICAL PLANT GROUNDWATER OPERABLE UNIT PUBLIC MEETING

7:00 P.M.

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BE IT REMEMBERED, that on the 13th day of August, 2003, the herein-described parties met at Weldon Spring Site, Highway 94, County of St. Charles, State of Missouri, in a certain matter being presented in the manner as appears hereinafter.

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PAMELA THOMPSON: Hello. Try to get everybody -- so we have enough chairs. We have more chairs that we can bring out. If we can get everybody seated.

Are you comfortable? Are you sitting too close to your neighbor? No need to stand for this whole presentation.

Thanks, everybody for coming tonight. I am Pam Thompson. I am the Department of Energy Project Manager here for the Weldon Spring Site. I'm glad to welcome you to our public meeting on our proposed plan for the final remedial action for the groundwater operable unit at the chemical plant area of the Weldon Springs Site.

I would like to first recognize many of the participants, people who have helped put this plan together for the public tonight.

First I'd like to introduce Dave Gieser. He is from our Office of Legacy Management, our long-term maintenance and surveillance from Washington, D.C. Dave.

Many of you know Dave from our work with him on our stewardship plan. He's been out in the public. You should recognize Dave.

I'd also like to recognize Ray Plieness. He is our project from our Grand Junction office who is the oversight office for the Weldon Spring Site.
From the State of Missouri, I would like to recognize Mimi Garstang, state geologist with the Missouri Department of Natural Resources and Geological Survey Research Assessment Division; is that right?

We also have Bob Geller here from the Federal Facilities Group from the Hazardous Waste of the Missouri Department of Natural Resources.

We have Gale Carlston from the Missouri Department of Health and Senior Services.

We have Kathy Love from the Missouri Department of Conservation.

John Vogel from the Missouri Department of Conservation, Busch Wildlife Area manager. Martin Boyer, also with the Department of Conservation.

We have Gene Gunn from the United States Environmental Protection Agency, Region 7, and Dan Wall from the Environmental Protection Agency, Region 7.

We have Mike Duvall from St. Charles County Environmental Division.

We have Ben Moore from Missouri Department of Natural Resources here at the Weldon Spring Site office.

And what you see me doing is scanning around to make sure that I recognized the state and local and federal folks.

We also have from our elected organization, we
have Jim Midas representing Todd Akin. Jim has been participating with us through the stewardship program and tonight.

We have Peter Price from the Missouri Department of Natural Resources, Geological Survey Resources Assessment Division. And Mimi from that same group.

We have Rick Hampel who is the chairman of the Weldon Springs Citizens Commission.

Members of the Commission are here tonight. We have Paul Midler, also a member of the Citizens Commission; Don Price, Fritz Hoffmeister, Tom Nelson, Dee Dee Aubuchon.

You're not raising your hands now. Raise your hands. Dee Dee Aubuchon.

Anybody I've skipped? All right.

We have Larry Erickson here from the Missouri Department of Natural Resources.

And if I have missed someone, I apologize. But I did want to make sure that you knew that your local, state and federal government was represented here to talk you about this proposal.

A few things I wanted to remind you it is non-smoking. If you need to smoke, then you can go outside, and there's receptacles outside.
You see the two exits. The restrooms are here to the right. You go through there, and there's a women's restroom on the left and men's restroom on the right. There's a drinking water fountain in there.

I think that takes care of the facilities. What I'd like to do now is to get Ray Plieness, who is the office manager for our Grand Junction office.

Ray.

RAY PLIENESS: Thank you, Pam.

My job this evening I will try to establish the process to get through this agenda as quickly as possible with the full intent of getting conversation back and forth and getting public input on our proposed plan.

So we're going to try to get this over and be done. Tom Pauling will give you a quick overview of the plan of the proposed plan fairly quickly. We'll have a few agency comments. Not listed, we'll allow the Missouri Department of Conservation to have a quick comment also.

But what we really want to get to is the public question and comment period. So --

AUDIENCE: Can you speak up a little?

RAY PLIENESS: Can I speak up a little?

Yes, I can speak up.

Now, if we go to the next slide, we're going to
this overview of how we’re going to facilitate public influence. Again, after a quick break, which actually will be between the agency comments and the public’s opportunity to speak. This is a requirement of CERCLA to provide the public an opportunity to comment on anything that we do on a decision-making process.

Right now, that’s a 30-day public comment period. That starts on August 4th with the publication, notification in the newspaper that we outlined our proposed plan, made to the public for review, and this particular meeting is strategically placed about halfway between when we sent it out, the proposed plan, and then you have to have your final comments completed by September 3rd.

This is an introduction from us and an opportunity for you to comment. You still have until September 3rd to comment in the final phase. We will have a stenographer here. It will be a meeting that is developed as a transcript and a public administrative record ultimately at the end of this.

We will have a facilitator. And our facilitator, which I’ll introduce, will be Wendee Ryan. At the end of the period with the agencies, we’ll have a facilitator with the full expectation to keep people on target and within some timeframes, because our goal is to
allow everybody a chance to speak this evening that has
an interest to speak. And everybody can hear the
responses to those comments that they may want to
present.

So one of the key elements is that we want to
keep the remarks relative to the proposed plan. This
meeting has been established to be done about nine
o’clock. If you want to talk about something on the site
other than the proposed plan, the staff is committed to
stay and talk about that. But as you comment this
evening, please try to focus your comments on the
proposed plan and only the proposed plan. We want to
give everybody a chance to comment on that.

Actually, as it works out, if we get through
all the comments and you have another comment and we’re
allowed time, we’ll try to recycle and get everybody
through again if there’s an interest to do so.

There are comment cards, a blue card in your
folder. It’s intended that you can use that to write
your comment down and help to make it a little easier to
read from. It will also allow if you don’t want to get
up and make a comment or provide one to us this evening,
there’s a box in the back, you can just stick that
comment card right there, and it will become part of the
public record as part of the Response Summary at DOE that
will ultimately come out of this process here.

With that, I'd like to go to the next slide, and remind everybody this is not your last time to comment. So, if you're not sure what you want to say yet, you're still in the education process, the next phase of this is to give you a quick overview. Tom Pauling will do that. And you have until September 3rd via mail or fax to submit your comments.

So, if there are no questions on that process, I'd like to get right into the agenda. But I'd like to give a chance -- does everybody kind of understand how we're going to follow through?

If there's no questions, I'll ask Tom to try to go right through the proposed plan. We have the proposed plans on the table over here. So, if you didn't get one, then you can -- did everybody get one? If not, we can get you one, because his presentation basically follows you right through that proposed plan based on the sections. So you can follow along, and he's going to try to explain DOE's ideas on that particular section and why we believe this is the best proposed plan.

If there are no questions, I'll just ask Tom to proceed. Tom.

TOM PAULING: Thank you.

Now this slide shows the key points of the main
topic of the proposed plan. I’ll just point out in
advance there are some drawings we attempted to reproduce
in the handout. They’re not as clear as they could be,
and there are some color versions of those slides that
you may want to pick up later if you want any more
detailed drawings.

So these are the main topics, and we’ll just
proceed with those.

One of the main concerns, of course, in
understanding groundwater is, well, how did it
contaminated? A lot of you are familiar with the
operations at the site, but I just wanted to briefly
cover the main activities here.

Of course, during World War II, this area, as
well as the area west of us was a large ammunition
production area where the Army made TNT and DNT. Some of
that activity was here, at these sites. The TNT lines
were the lines that were on this site.

From the mid ’50s to the mid ’60s, the Atomic
Energy Commission processed uranium for this site. Part
of the process involved storage and disposal of materials
on the ground in large pits. Some of the sediments,
contaminated sediments, were deposited in ponds near the
perimeter of the site. There were dump areas with a
sewer line. These areas contributed significantly to the
groundwater contamination.

In the mid '60s to mid '80s, there was a period of almost no activity. The Army did come in and dumped some of the buildings and some of the material from those buildings into the pits. But also just a series of deterioration occurred that contributed to groundwater contamination, and additional waste and materials that were inside the building became exposed and rainwater was able to contact that waste and percolate into the groundwater.

Also the activities that we have conducted primarily in the mid '90s to just recently excavating the soil and excavating and pumping the sludges and treating them, placing them into a disposal cell. Going after thousands of drums that were deteriorated in the pits. Most likely mobilized some additional contaminants to the groundwater.

But that cleanup is now complete. The waste has either been shipped off site. There's very little that went off site, but some of the organics went off site. And the area was treated, sludges disposal or were treated, and the rest placed in disposal cells. So the source removal is complete and the waste that's on site is isolated primarily in the disposal cell.

Current groundwater, spring water conditions,
we have four categories of contaminants. The
\textit{trichloroethylene solvents}. Again, that waste primarily
entered the groundwater from disposal of drums containing
that material in the pits. It has not currently reached
any of the springs in the area.

Nitrate, again, primarily from the pit area,
the use of nitric acid. It is more widespread, it’s more
soluble, it has traveled further and it has reached
springs north of the site.

Uranium is in two wells near the area of the
pits. And that has also reached springs both north and
south of the site.

Nitroaromatics are in several locations on
site, and then drainage south of the site.

These drawings that you have depict that in
picture format. These contours are color-coded regarding
the contaminants.

This drawing shows the nitrate, the TC and the
uranium. These contours show the outermost extent of the
contamination based on the standards that are applied,
the groundwater standards for those contaminants.

This other drawing shows nitroaromatics. Both
of these drawings have sketched in the areas that we’re
talking about that are the principal areas that
contribute to the contamination. Here we’ve sketched in
some of the old process lines that the Army had. And you
can see this contamination, in some respects, falls where
the activity occurred.

Groundwater flow studies, I take this
opportunity to introduce Ms. Cato, who is here, is our
site geologist, and she'll be available to help answer
questions on this subject.

Contamination is primarily confined to the
uppermost bedrock unit. It's fractured limestone with
horizontal fractures and flows to the northwest. Now
I'll use this drawing over here that helps illustrate
that. This is -- I know many of you are not familiar
with this type of drawing. It shows a number of things.

The red-dashed line shows the groundwater
divide so that rain water that's percolated into the
ground north of this line flows to the north and, of
course, south flows to the south.

These blue lines are developed by measuring
water levels in the wells and establishing through these
elevations that groundwater gradually flows in this
direction as these elevations decrease.

And you can perhaps see where these two areas,
where slight troughs exist, where water flows into those
areas and then flows to the north/northwest. And this,
this area here, is Burgermeister Spring, which is where
most of the shallow ground water expresses itself in this area.

Current groundwater use, there really is no groundwater use in the impacted area. There are no drinking water wells or agricultural wells, and over the years, the Department of Health, Health and Senior Services has developed a program of sampling wells in the surrounding area, and has not attributed any contamination, any source contamination to this site in the wells.

A summary of risks is another negative component of this plan. Mary Picel of Argonne National Laboratories is here, and has been our principal source of these risk assessments.

Again, the purpose of these is to evaluate the protection of human health and the environment. We’ve used EPA-standardized risk methodologies. We had one of our workshop during the stewardship phase of the discussions.

The current recreational and military training uses continue to remain very safe. There are very conservative assumptions that go into these calculations. The only exposure to the groundwater from these activities would be encountering water at the springs, and we’ve run calculations that would assume that a
visitor could come as many times as twenty times a year
and drink the water for thirty years and still have very
little risk of an increase of cancer.

We also calculated that in the future certainly
the land could change in use, and residences could pop
up. The assumption would also be that they're going to
access the shallow groundwater for drinking purposes,
which, although not likely, could happen. And there are
situations, there are places within some of the most
contaminated areas where the calculated risk would not be
acceptable from the EPA's standpoint.

That is some of the background that has led us
up to this final phase. In looking at remedial action
objectives of the groundwater, first and foremost is the
effect of the human health and the environment,
compliance with, again, what EPA calls applicable or
relevant or appropriate requirements. It's kind of the
regulatory term for the standards that would apply. And
in this case, it would be primarily drinking water
standards for the dump.

The other objective is to ensure that the land
use during the remediation timeframe remains consistent
with the restriction that we would expect to meet in
order to keep people from being exposed to contaminated
water.
So these are the -- what criteria did we evaluate? Well, back in 1999, we issued a proposed plan to the public. We had gone through a series of evaluations, and the outcome of that was that principally that the State of Missouri believed that we should further investigate and do additional work to evaluate some of the alternatives more.

And what resulted was an interim record decision for the treatment TCE in place and additional study that we closely coordinated with Missouri DNR to enhance the conventional program to pump and treat. At their direction and with their assistance, we drilled angle wells for extraction to explore the possibility of encountering larger amounts of water through that method. We injected clean water into the aquifer upstream in order to try to flush the contaminants out.

Although there was some success on a local scale, we encountered difficulties and determined that these didn't provide any enhancement over what we had already tested.

There is a lot more detail about those studies in the supporting evaluation, which is a separate document from the proposed plan, which we mailed out and is also available.

So what we took forward then for evaluation was
these three alternatives and no further action, which EPA always requires people to keep in as sort of a point of reference. And then long-term monitoring with institutional controls and monitored natural attenuation with institutional controls, contingency activities.

These are the criteria that EPA laid for how to evaluate these alternatives. There, again, we give them categories. The threshold criteria are you must meet those in order to get further evaluation. The other -- the five in the middle there are balancing criteria, whereby you assess one alternative's relative benefit over the others. And then finally the modifying criteria is to get the state and community to accept these alternatives.

The next slide is an attempt to briefly summarize the evaluation. There is certainly more detail in the supporting evaluation. Just going all the way over here, what I really want to emphasize on this line is, in our opinion, monitored natural attenuation with the institution controls, the contingencies, offer a greater level of protectiveness, which is really what we were after here.

Go to the next slide just to cite some of those points. Under our proposal, MNA, monitored natural attenuation, would establish performance monitoring that
would require additional well construction, more frequent sampling, more analysis. We would have -- would supply a rigorous data trending, determine whether the processes are working as predicted, and the parameters are decreasing over time.

There would be target concentrations that would trigger contingency activities. Some of those activities would include increased monitoring frequency, more monitoring of locations, in the case of TCE, trichloroethylene.

Since that has not mobilized very far, we are committed to taking action should our prediction not turn out to be correct, and come back and do an active chemical oxidation treatment for a second time once those trigger levels are established.

So it's really been a very aggressive active monitoring approach. It entails a commitment to meet the standards through the years, the objectives within a reasonable timeframe. And the EPA has the job of assessing what's reasonable.

Our predictions are that these contaminants will reach those acceptable standards in about a hundred years. Some less than that, but that's the long end. And that's reasonable by their definition, but also reasonable in comparison to what else we could do.
Remembering that the pump-and-treat activity and chemical oxidation that we attempted we would not expect to be successful. And so you would end up waiting these hundred years for these standards to be met anyway.

Key component of this remedy is institutional controls to maintain and protect this. We have a high expectation of success since we’re dealing primarily with state and federal governments, landowners that surround this property. We’re not going to restrict any of the current uses. In fact, even future uses could change, but we do need some restrictions so it’s not an unrestricted use in the future.

And the long-term surveillance and maintenance plan is really the document that will assure that all this is implemented over this long period of timeframe.

Let’s go over to this drawing. This is a drawing of the site, and I don’t know if this turned out very well on your copies. The groundwater that’s contaminated into one shaded area. The institutional controls boundary proposed that we’re proposing would include a 1000-foot buffer zone around that. It’s primarily protection from the well that could draw contamination towards it instead of the direction it’s going now. And it includes the springs to the north that are contaminated with some of the contaminants.
It also includes institutional controls on the southeast drainage to the Missouri River, which has a couple of contaminated springs in it.

This just shows the supporting documents that we have developed over the years. We have those out. Looks like they’ve all been scarfed up. Anyone who didn’t get one and wants one, they’re certainly available and we can get you a copy.

This demonstrates that we’ve been studying groundwater for a long time and a lot of information about it, and is available for this proposed remedy.

The last slide is one you’ve seen. It’s just a reminder of how to get your comments to us. Take that home.

RAY PLIENESS: Thank you, Tom.

I recognize that was very quick. The intent was to give a quick overview for those that haven’t a chance to read the proposed plan and save most of our time for the public comment.

But before we do that, we’d like to spend a little time and provide an opportunity for the regulatory community and state agencies to provide input on their thoughts on the proposed plan.

At this time, I’d like to introduce Mimi Garstang with the Missouri Department of Natural
Resources for a comment from her organization.

Mimi.

MIMI GARSTANG: Thanks, Ray.

First of all, I want to thank so many of you who have taken the time to be here tonight. I think one of the most important things for staff that are here from the Missouri Department of Natural Resources is to listen to you tonight and hear what your concerns and what your comments are.

We, too, have prepared comments to present tonight. I wanted to admit that it’s actual been difficult for me to put together comments tonight.

One reason is because, on one hand, I think we’re really close to a good remedy to the contaminated groundwater at this site. However, on the other hand, I feel like that there are still too many unknowns, things that haven’t been decided about the remedy that creates concerns for the Missouri Department of Natural Resources. And I’m going to talk about that a little bit more.

You realize that we’re quickly approaching the last record of decision at the Weldon Spring Site, and I doubt if anyone is more anxious than the Missouri Department of Natural Resources is to finish up the good work that’s been started here at the site.
Some of you are also aware that we have put off the decision on the groundwater here. One reason is because it is a complicated issue, and we want to try to come up with the best remedy that’s protective.

We wanted to make sure that a conservative remedy is in place and a sound remedy to address the groundwater contamination. First and foremost, we want the plan to be protective of the people that live and work and play near this site, as well as we expect the plan to be protective of the St. Charles County and how fast it is growing and will continue to grow in the future.

And as a neighbor, we believe that the Missouri Department of Conservation needs to feel comfortable that there aren’t unacceptable risks at their property, and that people that use their property are not being faced with any unacceptable risks.

After listening to Tom’s presentation, I know you’re aware now that the proposed plan leaves contaminated groundwater at this site. Now our staff, our technical staff at DNR, highly respect the abilities and the knowledge of the technical staff that work here at the Weldon Spring site, and we want to work together with them to come up with the a good solution. We, too, have very good technical in the Missouri Department of
Natural Resources.

Now both sets of technical staff agree that a traditional groundwater remediation technology here at this site is going to be very difficult because of the complex geology and hydrology. We also agree that the likelihood of it being totally successful, even if we try it, is probably slim. And it's because of those reasons that we have been willing to consider a passive remediation of the groundwater or this concept of monitored natural attenuation.

However, DNR can only consider supporting this type of remedy under certain conditions. One condition is that DNR become a full partner to a long-term agreement for future decisions and management of this site in the future. And we will continue to work towards that major goal with the Department of Energy and EPA.

And we want to do this so that we can properly represent the public's concerns well into the future.

The other condition is agreeing to the details of the sound monitoring plan with defined contingencies to activate if the conditions worsen at the site instead of improving.

The Department of Natural Resources noted very early to the Department of Energy that monitored natural attenuation for leaving the contaminant groundwater in
place to dilute and disperse on its own would be an
acceptable remedy only if we could agree on the specifics
of how to monitor this contaminated groundwater to prove
to ourselves, as well as prove to you, that the
groundwater conditions are clearly improving and not
getting worse.

All the technical staff do tend to agree that
we expect the groundwater to attenuate. But due to the
geologic and hydrologic complexities at this site, we
cannot make any assumptions. Instead we must collect the
proper data over time to prove that this remedy is
protective and not creating unacceptable risks.

Nothing would please DNR anymore than if we
were standing in front of the public together with EPA
and DOE saying we are all agreeing and support
wholeheartedly a recommendation. And we are confident
that we can get to that point.

But I have to tell you tonight that we are not
there yet. We have previously prepared detailed
technical comments on the draft proposed plan addressing
our concerns. And so far most of them have not been
addressed in the final proposal.

Now I will not go through any of those detailed
comments tonight. I just want to give you an example of
one important issue. That issue is the vertical depth of
the TCE contamination has not yet been identified. That has been in our comments, and we believe that both the vertical and horizontal extent of all contaminants must be identified before we are comfortable that we're putting the proper institution controls in place and that the groundwater is attenuating properly. This is part of the data that we must have to prove to you and to ourselves that this remedy is truly protective.

We want you to know that the State is committed to finalizing a sound remedy and record of decision for the groundwater at this site. We will do whatever it takes to resolve the outstanding issues.

However, as I said before, we will insist that this remedy is conservative and protective of the people that live, work and play near this site. We will continue to insist through our formal parlance on this proposed plan that a sound monitoring plan is in place to either prove or disprove that the remedy is performing as expected and a contingency plan is identified to activate if the remedy appears to fail or if the unexpected occurs.

DNR will also continue to actively pursue an official seat at the table for future site actions, decisions and oversight in the public's behalf.

All of you here tonight are well aware that
it's going to take all of us working together as partners, not working against each other, to successfully institute the proper institutional controls and long-term surveillance need to keep this site safe well into the future.

I do want to thank the Department of Energy for allowing us to comment tonight. And I also want to encourage all of you to take advantage of this opportunity to let us know what your concerns and your comments are.

Thanks.

RAY PLIENESS: Thank you, Mimi.

Another perspective from the State will come from our neighbors, the Missouri Department of Conservation, whose land is adjacent to ours.

Ms. Kathy Love will give their perspective.

KATHY LOVE: Thank you, Ray, and thank you, Pam, also, for making time on the agenda for us.

I'm just going to read a brief statement that addresses our comments on the proposed plan.

The public can trust to the Missouri Department of Conservation the care and management of the land and its resources surrounding the Weldon Spring Site Remedial Action Project. These public areas, known as the August A. Busch Memorial Conservation Area and the Weldon
Spring Conservation Area, are enjoyed by half a million visitors per year.

As population and development continue to grow in St. Charles and surrounding counties, this expected public use of these conservation areas will also grow. We take our responsibility to ensure the safety and enjoyment of these visitors very seriously.

Groundwater underlying these two areas is an essential component of their resource health. Contamination that lasts for one hundred, five hundred or one thousand or more years compromises our ability to use the natural resources in a way that ensures our visitors' safety and health.

We are well aware of calculations that show little risk at anticipated exposure levels. However, we're also aware that such calculations may change with regard to specific contaminants, and the conditions over time may increase the exposure levels. All these factors require that groundwater contaminants be monitored and treated to the extent technology makes possible.

We will consider monitored natural attenuation an acceptable alternative under the following circumstances. If the state and federal agencies agree the groundwater remediation is not technically feasible at this time. If the state and federal agencies agree to
revisit the issue as new technologies become available regardless of changes in exposure risks. If the state and federal agencies collect data that demonstrate to our agency and the public that the contamination is, in fact, not spreading or affecting ecosystems on the Department of Conservation property.

Additionally we question the efficacy of several trigger points in the contingency action in the proposed supporting evaluation, and request the following monitoring practices be adopted.

When TCE levels exceed drinking water standards, five micrograms per liter, in any unweathered zone well, alternative remedial action should be initiated regardless of the TCE concentration in the plume.

The trigger point of twenty micrograms per liter as indicated in the document is unacceptable, and remedial action should not be dependent on contaminant levels in the plume.

Similarly, at Burgermeister Spring, active remedial alternatives should be implemented when TCE levels reach five micrograms per liter regardless of concentrations in the plume.

Fish tissue samples should be conducted annually to inform the public about the safety of fish
consumption from the Department of Conservation lakes and
the effectiveness of monitored natural attenuation.

At Burgermeister Spring, the trigger point for
uranium should be 100 picocuries per liter not 300 as the
document indicates. Additional monitoring of wells whose
number and placement coincide with recommendations by the
Missouri Department of Natural Resources should be
created to determine the current vertical and horizontal
extent of contamination and to confirm plume locations
and attenuation.

We would like to emphasize the need to
aggressively monitor groundwater contamination. By
allowing contaminated groundwater to continue to spread
to this high public use area, the Department of Energy is
effectively removing the value of the groundwater
resource from the Conservation Department property.

We respectfully request that the proposed plan
for final remedial action for the groundwater operable
unit, that the chemical plant areas of the Weldon Spring
Site be revisited with these concerns in mind.

Thank you for the good progress made to date
and your willingness to address and resolve remaining
contamination problems.

RAY PLEINESS: Thank you, Kathy.

The regulator that responds directly to those
things we need to do on this site is the EPA. The EPA is going to provide a comment this evening. That comment will be presented by Mr. Dan Wall.

Dan.

DAN WALL: Thank you, Ray.

Hello, everybody. I've been associated with the Weldon Spring site for roughly eighteen years now. So I know many of you pretty well. And I know quite a bit about the site, both past and present.

My job as a representative of EPA is to stay engaged on the project and ensure that the DOE conducts activities that are consistent with what's required under the law, the National Contingency Plan and program expectations.

I also occasionally offer some welcome input, and it's hard to comprehend that this somewhat, thin, unimposing plan actually has fifteen years of study and analysis behind it. We've been gathering -- or DOE has been gathering data out there. As I say, folks, you know, on groundwater for a good fifteen years or so. We've got -- been monitoring literally hundreds of monitoring locations.

There's been a thorough analysis for prospects for accumulative technology that involves, aquifer testing, have technology vendors to come in and discuss
prospects of their technologies. There was scale
testing, pilot testing and such. Tom went over most of
that.

And the reason I bring that up, the point I'm
trying to make is that this is not really a snap decision
or a decision that resulted from foregone conclusion or
anything like that. It's really a highly considered
proposal. And the result of that is that I think EPA is
prepared at this point to agree that the monitored
natural attenuation solution in the form presented,
scoped out here in this proposal is the appropriate and
reasonable approach.

I guess I'd like to address what I sort of see
as a misconception. I could be wrong, but maybe I'm
overinterpreting. But this is not a decision to do
nothing. It's not a decision to forego active
remediation.

It is the decision, it is a judgment, and it
represents a judgment that the active remediation
methods, pump-and-treat, that were tested out were not
particularly effective, were not effective for what I
will call a full-scale deployment. The hydrogeology is
not particularly suitable for these types of techniques.

The other thing to consider is that it's
localized or limited deployment for these sorts of
actions and are not expected to have a measurable impact
on the capacity to achieve the remediation goals over
time. So, in effect, they don't meet a cost effect as a
test.

You could apply some of them, both the
localized areas, you would still be faced with same
long-term management problem. And I guess I would also
add that's not an unusual situation. The Weldon Spring
site is not unique in that regard. I would say that
most, if not virtually all, hazardous waste site cleanups
involve groundwater remediation. Even those where it
involves sandy aquifers and conditions where treatment is
considered effective, are left with a residual condition
that often needs to be managed for the foreseeable future
and beyond.

So no one should think that this is an inferior
approach simply because we have residual that needs to
manage for the foreseeable future.

I think it's -- we're fortunate in this case
that that long-term management is doable. There is no --
the sources of the contamination have been removed, so
there's no ongoing contribution to the groundwater. We
don't have non-aqueous phase, contaminant plumes that
will continue to lead to groundwater contamination for
years.
So we’re really looking at a situation that we expect to be defined from here in terms of it being a problem. We don’t -- I don’t see potential for significant exposure to the general public under current land use and groundwater use conditions. There’s no particular pressure to use that impacted groundwater for drinking water purposes or for other uses that might cause exposure.

Most of the impacts are on public land, which makes it relatively easier to implement institutional control, although those are always problematic.

I guess that’s the majority of the points I wanted to make. I think this is a good plan. It should be pointed out that this is a plan in concept. We fully expect to continue to work on this sort of thing as Mimi was discussing. There will be a record of decision process. There’ll be the comment. There’ll be the process of addressing the comments that are received here, and there’ll be a remedial design and remedial action development process that will follow.

So we expect to have the opportunity to continue to work through the specifics of how this plan will be developed.

And with that, I guess I’d like to thank all the stakeholders that have participated. The Department
of Energy, the Department of Natural Resources, the
Department of Health, Department of Conservation, the
Citizens Commission, the St. Charles County Government.
Hope I didn’t leave anybody out because I really believe
that people paid more than just lip service to the
concept of cooperation here. I think we worked through a
true -- and it’s a truly successful consensus process.
And I expect it’ll continue through the design and we’ll
be able to get resolved the issues that the State has
with how this plan will be carried out.

That’s all I have.

RAY PLEINESS: Thank you, Dan.

With that, I’d like to get on with providing
opportunities for the public to have their comments. I’m
going to go over the stenographer again. The reason we
transcribe this particular meeting is it does become part
of the public record so that anybody can read it,
understand who said what. The transcript is part of the
administrative record. We here today will provide
comment/responses to the draft responses. I want
everybody to know if you need a response to your specific
comment, assuming there is time under the request for
time to give a response, that will be the draft response.
Each comment given here tonight will get a full response
in our Responses Summary. And that will be our official
DOE response to that comment. We'll try to give a quick overview of what comment might be this evening, but those are really just drafts. We finalize that with a written response to each comment.

We will have a facilitator, Wendee Ryan, in the back. Her full job will be to try to accommodate time and subject matter, and try to keep us on the fact we want comments on this proposed plan.

If you have a comment card, you're welcome to read it yourself. If you feel uncomfortable reading the comment card, you can hand it to -- put it in the box or hand it to Wendy Drnec, the box is there by Wendee Ryan, and we will be glad to read your comment and respond to it.

At this point, I'd kind of like to get a few -- how many people would like to comment either by having a card in the box or by presenting their own comment so we can establish kind of a timeframe on how long each person may have.

So if you were planning to have a comment, I'd ask you to raise your hand.

AUDIENCE: (Show of hands.)

RAY PLEINNESS: One, two, three, four, five, six, seven, eight, nine, ten, eleven -- approximately fifteen. Somebody else may decide they
want to, fine.

    That leaves us approximately four -- three to four minutes per comment. Please, remember, even if you don't get all your comments to us today, you still have written opportunities up until September 3rd.

    So, with that, I guess we could start immediately unless everybody wants to take a quick break. If not -- you want to take a five-minute break, or would you rather just proceed? I'm going to leave that up to the group. Proceed? Proceed. Let's just do that. Okay.

Let's go ahead and start with comments, and we'll just work our way around the room, if that's fair for everybody.

    PAMELA THOMPSON: Ray, would you like to get a group up in the front that might be able to speak or have comments?

    RAY PLIENESS: Do you want to have them up front?

    AUDIENCE: Yes.

    RAY PLIENESS: Those that may answer a question, please proceed to the front of the room.

    Let's proceed with the comments. You can either stand there, or you're welcome to take over here.

    DON PRICE: I'll stand here. I have four
On Page 6, you talk about current groundwater and spring water conditions. On each of those four folded items, could someone give proximate distances on each of the areas there? Such as in the first one, you would say it's not near the pit area or it's in the pit area but not in the springs.

So, if you could, just using the map, give a quick estimation of feet or yards.

TOM PAULING: Well, the drawings, maybe if you get a better copy, you'll be able to see the legend at the bottom that shows the scale.

DON PRICE: I had the drawing there. What I want to clarify, which area, which spring. So rather than me estimating the distance, I'd like the authority to estimate the distance. If that's okay.

TOM PAULING: The distance from the pits, or the entire length of a plume or --

DON PRICE: No, no. From the pit area, and then you say it's not the springs.

So you're saying it's not my house, but it's close to yours. What's the relative distance?

RAY PLEINESS: I think he's referring to Figure 3; is that correct?
DON PRICE: You used that. Points on No. 6. You state that TCE is near the pit area but not in the springs.

TOM PAULING: Right.

DON PRICE: Identifying those two points, what's the relative distance?

REBECCA CATO: It's approximately a mile.

DON PRICE: Okay. One mile.

REBECCA CATO: To Burgermeister Spring.

TOM PAULING: One mile.

DON PRICE: The second area, an area two springs north of the site.

REBECCA CATO: Two springs north of the site?

DON PRICE: Yeah.

REBECCA CATO: You want to know how -- it's the same spring. Burgermeister Spring and the spring north of the site, we refer to it --

DON PRICE: Okay.

REBECCA CATO: And it's about a mile, yes.

DON PRICE: The next item on that one is the same? Distance of spring north and to the south, and springs to the south of this drainage.

REBECCA CATO: These are contour figures and shows -- I don't know, maybe half a mile to the first
spring, a mile to the second.

TOM PAULING: It's 6000 feet, so a mile
plus to the lowest spring.

DON PRICE: It's a mile plus from springs
north of the site?

TOM PAULING: That's south.

DON PRICE: South.

DON PRICE: And the last one: When you
say they're inside the locations, being southeast
drainage; correct?

REBECCA CATO: Same two springs, right.

DON PRICE: Okay.

My next question is clarification on Page 11.
Again, it has to do with distances. Just as a point of
clarification, you state no drinking wells or
agricultural wells are in the area of groundwater
contamination.

TOM PAULING: We're talking about this
area here would being encompassed by the institutional
control.

DON PRICE: Yeah. But, again, what is the
distance that you say they're not in the area.

REBECCA CATO: Approximately a mile to the
springs. So about a mile from the site, and then -- I
don't know. 2000 feet off the western boundary, a half
mile. There's a 1000-foot buffer around the 
contamination plume.

DON PRICE: Okay.

Then I guess, on Page 12, the third bullet item 
was a little confusing there because throughout all the 
approaches you were talking about use of straw, and I 
assume institutional controls. But then the Bullet 3 
says however used by hypothetical future residents, that 
presented an unacceptable risk.

How could you have hypothetical residents or 
real residents if you have affected ICs?

TOM PAULING: Well, you wouldn't. But if 
the institutional controls fail, if development 
encroaches, it's just a way of looking at a worst case 
scenario, and making that calculation. We hope that 
doesn't happen and --

DON PRICE: We're planning for the 
possibility of institutional controls not to be nailed 
down to solid to allow for failure.

TOM PAULING: Not planning for it, but 
we're calculating the potential effect that that might 
have.

RAY PLEINESS: It's actually the basis for 
establishment for institutional controls, is that exact 
statement; that we do have an unacceptable risk. If
somebody was to move there and utilize that water as their source of drinking water for thirty years day in and day out.

So the basis of the institutional control is to eliminate that, and the assumption is not that it won't work. It's that, if it did, it would unacceptable. Just why did we establish it in the first place. Otherwise, we wouldn't be responsible.

DON PRICE: Well, as a personal opinion, that comment seemed to weaken your arguments when you say we're allowing for a hypothetical incident that happened in a nontechnical sense because of ICs. But you're not allowing for any other hypothetical things that happen.

My last comment is on institutional control location maps, and in the handout, the last page, and I believe that's probably the one right there. Right there.

Of conspicuous note, to me, is the green shaded area called the area of groundwater impact. And it touches Lake 36. And I believe people fish in Lake 36.

TOM PAULING: Lake 36 is surface water, and this depicts our best estimate, based on the wells that we have in this area, as to how far north that groundwater contour might go, which is the drinking water contour for nitrate. So it's an estimate as --
DON PRICE: So it's a horizontal. But I believe then the question is the vertical.

TOM PAULING: Well, we've addressed the vertical extent to the RI and some of these other documents that we've developed over the years and the conceptual model.

DON PRICE: The question very simply is: It appears from that drawing the water in the groundwater is coming right up to the edge of the surface water.

TOM PAULING: The surface is what? How deep is that?

REBECCA CATO: The well water.

TOM PAULING: The --

REBECCA CATO: About fifty feet deep, and the lake is not fifty feet deep.

TOM PAULING: Did you get that?

DON PRICE: No.

REBECCA CATO: The well water is approximately -- the average is about fifty feet below the ground surface into the -- in the bedrock, and the lake does not extend into bedrock.

Unfortunately, it just looks like the nitrate goes into the lake.

DON PRICE: So they don't touch --

REBECCA CATO: They do not.
DON PRICE: -- but it goes under perhaps?

REBECCA CATO: Perhaps.

DON PRICE: For now.

Thank you.

WENDEE RYAN: All right.

Next person.

PAMELA THOMPSON: Anyone else have a comment they'd like to share verbally?

WENDEE RYAN: If you could, please, state your name when you have your comment. And ask you to speak up.

KAY DREY: Go up here?

WENDEE RYAN: You can, if you like, or you can stay where you're at.

I ask that you please speak loudly and clearly so that our Court Reporter can capture your comments.

KAY DREY: My name is Kay Drey. I live in University City.

No doubt the U. S. Department of Energy's primary contractor for the Weldon Spring Site Remediation would like to finish packing up and closing down the last traces of the Weldon Spring assignment.

But those of us who live nearby or downstream -- I don't know where my glasses went -- live nearby or downstream and downwind do not have the option of walking
away from the Weldon Spring environment. We will be
breathing its air and drinking its water for the rest of
our lives. That's why tonight's meeting is so important.

If the Department of Energy is allowed to leave
radioactive uranium and thorium and their counterparts in
the terrain that lies beneath this site, the groundwater
that flows to the Missouri and Mississippi Rivers
upstream from St. Louis will continue to pick up and
disperse these toxins into our biosphere far into the
future, billions of years, as anyone here can imagine.
I wish I knew how many times I have said that or written
that over the past twenty-five years.

We have been hearing recently about the
hazardous effects on our U.S. troops of effects of
uranium munitions used during the two Gulf wars. To
quote from a speech last month by the former director of
Army's depleted uranium project, uranium dust is so fine
that it acts like a gas, seeping into the tiny holes of
protective masks. Quote, "It contaminates the air, water
and soil for all eternity", end quote.

If, as predicted, uranium remains radioactive
for billion of years, could be spread by sedimentary
material and plants in the springs, how then would the
levels of uranium meet federal and state standards in the
timeframe predicted by the DOE; namely from four to eight
years.

Is it reasonable to expect that uranium will remain attached in perpetuity to the surface vegetation growing in and along rapidly flowing spring water? Or would some of the uranium not be released in plumes or clumps to be transported in both dissolved and particulate forms? Could the organic materials to which the uranium is absorbed cause the dissolution of the uranium, thus accelerating the migration rate of the uranium.

The proposed plan clearly states that no reduction of toxicity, mobility or volume through treatment would be accomplished because the contaminated groundwater would not be treated. Then, as downstream water consumers, we can only urge you to be as forthright as possible in explaining that our generation, those alive today, and those in the future will continue to be exposed to the Weldon Spring uranium, thorium, radium, radon, plutonium, titanium, protactinium and so forth.

I am submitting some documents, a bunch of my old letters, which have questions about groundwater, but also some documents that talk about particularly how hazardous the materials are that we have here at Weldon Spring. These materials will be exposed in concentration with impacts on health. They cannot be accurately
monitored or predicted, and most probably cannot be naturally attenuated to levels assessed by future scientists and physicians to be safe or even permissible.

As I understand it, natural attenuation is a process usually relied upon for volatile organic chemical components, for substances that break down into various degradation products, a progression that will take virtually forever for some of the radioactive materials at Weldon Spring. Thorium 230 has a half life of 75,000 years. Uranium 238, a half life of 4.5 billion years, and Thorium 232, a half life of 14.1 billion years.

Are you really asking us to wait forever while these materials continue giving off radioactive particles and rays? The uranium and thorium to, quote, naturally attenuate? Are your monitoring tools and weld seams going to last that long? And if the concentration levels of contaminants remain greater than the current established standards, are we not entitled to a contingency plan more realistic and complete than merely additional fish sampling at Lake 34 in Busch Conservation Area, some additional monitoring?

The proposed plan is to wait for the radioactive waste to dilute and disperse themselves somehow at some point in the unknown future. I believe that monitored natural attenuation, walking away from the
contaminated ground water in this heterogenous, complex
hydrogeology is not a proposed action but is instead, I
believe, a proposed inaction.

DAN McKEEL: Hello. I'm Dan McKeel. I'm
an stakeholder, M.D., physician and an pathologist. And
my comments are as follows:

I think this document, the proposed plan for
groundwater, is similar to the long-term stewardship
document draft that was offered us last August. It's
very brief.

I'm particularly concerned about the sections
on Pages 14 and 15 dealing with triggers and contingency
plans. And it seems to me, although I know that there's
some of those mentioned in the evaluation document, but
here's some language that really bothers me in this kind
of report that we're supposed to take some action and
make a comment.

Page 15, quote, "Within the plumes, the trigger
concentration will be representative of historical
highs." I don't know what that means. "B) At the
springs, the trigger concentrations will consider health-
based values and historical trends," end quote.

This type of wording is so vague that no
regulatory or scientific meaning flows from it. What are
health-based values, for instance? How will historical
highs actually be used to set triggers?

The second comment is that, in this process, for the general public, there's really been no opportunity thus far for us to have any input into the remediation alternatives. And as a result of that, I don't think that the alternatives offered are the ones that we really should be considering.

I favor, I would call it a fourth alternative, and propose this. And that is that we have active treatment based on the latest technology. And I would like to use the groundwater remediation effort at the Fort Lewis Washington Super Fund Site as a model.

There they have a TCE plume problem that's migrated. They have the same options available as we do in terms of traditional methods that have been referred to, in-place treatment of the TCE neutralization. They came to a completely different decision. That they said let's use multiple remediation technology by over-mediation, as well as the traditional methods.

And they predict that they can leave the groundwater in unrestricted use within forty years. Here, our Preferred Alternative 3 will take a hundred years to comply with the applicable statutes.

One thing that's not mentioned, and I would like somebody to comment, to respond to it at the end of
this, is we haven't said anything about how much cost has
to do with the alternative chosen. And reading between
the lines and knowing what is happening to Super Fund
funding, I want somebody to address whether there was an
active consideration that it would cost too much to apply
these remediations, active remediation strategies, and
that's one reason that they were chosen.

I want to mention, it's been brought up several
times by the Conservation Department and Natural
Resources; that they want to have vertical plume maps for
specifics. I'd just like to mention that I had
requested two years ago from four agencies, DNR,
St. Charles County, Department of Energy, USGS,
specifically that; a 3-D uranium plume map.

I was told by a multiple of those agencies that
it was coming, it was in the works, it could be done, but
it would take time. So I've been patient two years. I
don't see any 3-D plume maps, and people are
acknowledging now that that's really necessary to say
what we're going to do with groundwater.

I have a comment about the interceptor trench
design.

WENDEE RYAN: You need to wrap up your
comments, and we'll get to you again after the
additional --
DAN McKEEL: If you want to cut me off, just say so, and I'll quit.

WENDEE RYAN: You want to respond his questions?

DAN McKEEL: I really didn't -- I don't want any of my time taken up with responses. I would rather finish my comments or be cut off.

WENDEE RYAN: Well, the cutoff's right now. Thank you.

Is there someone else who would like to speak?

CLARISSA EHEON: My name is Clarissa Eheon. I'm from Hematite. I'm here on behalf of the Citizens with Weldon Spring and the American public in general. That's E-h-e-o-n, Clarissa.

I want to give testimony and a warning to the general public about the severity of what's going on here.

As I said, I'm from the Hematite area whose drinking water was contaminated by one of the oldest nuclear fuel fabrication plants in the United States. My family and I were drinking over a hundred and sixty carcinogenic chemicals as a result of the nuclear operations in Hematite. The water contamination was discovered only after my neighbor out of fear requested her water to be tested when a home near the plant was
found to be contaminated.

The workers at the facility were also exposed to TCE and other volatile organic chemicals used to degrease, clean the shop floors and equipment. The plant was also left with residual radioactive from the Cold War. Sorry, I'm a little nervous.

With all the technology, knowing past practices, all the highly-educated physicists, geologists, chemists, experts hired by this industry to monitor the hydrology flow, geology structure of the areas, specifically being in a flood plain, I'm not convinced this is a surprise to the responsible parties, and if it is, why is that a surprise?

Today I have with me a jar of Hematite country tea prepared especially for you all; DOE, DNR, anyone responsible for what's happening in Hematite and here at Weldon Spring. It's only fair that you have a glass that you helped to brew, the real brisk one. My family and I have consumed many glasses over the years, and today I'm dealing with many health problems that were diagnosed all in the last year because of, I believe, the chemicals that we were consuming.

Many skin rashes, burns that would appear on my neck, chest and scalp, irritable bowel syndrome, acid reflux disease, having to take glucofauge to stop my
pancreas from overproducing insulin. I also had four polyps removed, all at the ripe age of thirty-three. I have never had allergies until I moved there. I'm extremely upset at this juggernaut in Hematite and all around the State of Missouri, which will have to be changed to Misery if this mess is not addressed and corrected now. Time is not an ally.

The rivers, lakes and creeks here in Missouri have become personal industrial trash cans at the public's expense of health and safety, which we all know has been sacrificed. Just like the products that were manufactured here in our state, we will not go away.

We're here to hold you responsible for being naughty neighbors, employers and officials for allowing the debilitation of our neighborhoods, parks and water supplies and air.

The weapons workers, your employees, our fathers, mothers, husbands, wives and citizens, are now the fighting soldiers, not for the Cold War but for the hot war against all of us, even your children.

We must have sound remedies to this pollution. Some are just fighting for their last breath, and we also need aggressive action. Please do not let them -- do not sit by and let this go on. They're trying to walk away.

Also, my son is twelve years old. He's a
little shy. He has a comment. I'd like to read that for him.

It says, "Hello. My name is Collier. I'm from Festus, Missouri. My drinking water was contaminated by a nuclear plant at Hematite, Missouri. Me and my family were drinking poison from this bad business. These poisons will remain in my environment and my future for many, many years. I think the people responsible should be spanked and have to write 4.5 billion sentences saying I will not pollute Missouri no more, one sentence for each year their products will remain on this earth.

Please do not rob me of my future. You should also be punished for dumping poisons in our state parks.

Thank you."

AUDIENCE: (Clapping.)

NANCY ADAMS: My name is Nancy Adams. My dad worked at Mallinckrodt Chemical Works and here at Weldon Spring for a while. He decided to go back there because he thought it was so terrible here, the stuff he was working with. He didn't realize how bad.

My dad died a terrible death. Suffering from lung disease and bladder cancer for that last ten years of his life. Very bad. I don't want to get into all of that.
I myself am a cancer survivor, and I don’t want to drink any amount of uranium, whether it’s 20 picocuries or a 100 picocuries. I don’t want to drink 1 picocurie of uranium. Because we know now that uranium causes all kinds of disease.

Sixty years ago when they started this Mallinckrodt plant, the men were told that they were working with safe -- they were safe, that the contamination amounts were within acceptable amounts. I’m hearing people talk about ARARs. That is based on current scientific, medical and technical knowledge.

What’s going to happen in sixty years when they find out that one picocurie of uranium can do terrible things, just as they did with the stuff that my dad worked with sixty years ago.

So I’m saying take the high road and work on this and get rid of this stuff. Don’t let it stay in the water, the groundwater. Do whatever you have to do, even if you have to fence off all of Busch Conservation area, do it. Tell people, put signs up. Be honest with us.

Thank you.

WENDEE RYAN: Would you spell your last name?

NANCY ADAMS: A-d-a-m-s.

MIKE GARVEY: My name is Mike Garvey. I’m
a local orthodontist. I have been involved in the Weldon
Spring Site for many years. I originally got involved as
one of the citizens as a resident of St. Charles County.

The first thing I'd like to do is show
appreciation for the excellent work that the Department
of Energy has done, and the subcontractors and also the
Missouri Department of Natural Resources' involvement
over the years. I think we've greatly improved local
conditions, and the public health of the residents.

I think we got in early. I think part of the
reason we got into the funding earlier is because of the
citizens being vocal. I think the Department of Energy
really didn't know how to handle that early on. But I
have seen continual improvement on their part on this
thing here.

But the St. Charles County residents are also
grateful but concerned about the long-term potential if
some unexpected loss of safety exposed the well. And the
contaminated groundwater left in place and also surface
water after the act of remediation.

Finally, my biggest comment would be, and I
know this has been considered, the first thing is it
seems as though the discussion of course topography, I'm
totally stumped because -- and amazed because it seems
like this last report has been one that's been the most
honest regarding the hydrologic and geological conditions under the site. We're seeing now things like highly fractured limestone -- these are all quotes, solution voids, complex hydrogeology, large fractures, rapid groundwater transport.

So my point has always been that should the disposal cell be placed in an area where there's already contaminated groundwater, how can you then identify if it's effective even in the future?

And, you know, perhaps maybe the site should have been somewhere different, but it was done here. But still this leaves us with a difficult solution in that we have to identify whether, in fact, the disposal cell is continuing to hold the contamination in it. As Kay mentioned, thousands and millions of years.

So it's under this heterogeneous, highly fractured groundwater medium of totally connected voids which may hold contamination. Again, we're starting to hear these things.

So some of the things I'd like -- you know, like I'd like to know what the screening intervals of the detection wells are. Based upon some of the -- it seems that this discussion, in honesty, regarding rapid transport, the County has actually been inundated with chemicals that have migrated off site for many years into
Lakes 34, 35 and 36, Schote Creek, Dardenne Creek, and groundwater moved to Lake St. Louis, and showing up in various places, especially with a lack of delineation and vertical extent of contaiminations and migrations and plumes, which would fall out.

It seems the institutional controls location map, Page 14, seems artificially drawn to only include the chemical site at two springs, and they may be too small.

I know it's somewhere, but how was it determined that Twin Island Lake was not degraded by the DOE sites, the well there.

And I'd like to know what are the results of the sampling of the other perennial springs seen in Figure 3 on Page 6? And perhaps if the groundwater flowed from the plant site to the north as this indicates, then some of these springs might be able to look at the background levels.

WENDEE RYAN: You have to wrap up your comments.

MIKE GARVEY: I'd like to know where one could find the Missouri Department of Health's private drinking well reports.

I'd like to know whether signage will be placed at Burgermeister Spring regarding being told not to drink
the water.

I know the Department of Conservation is worried about the concern regarding whether this contamination of Lakes 34, 35 and 36, but I do strongly feel that -- and also Fem-Osage slough north and south, that they should make it catch-and-release only. That's only logical.

But my biggest comment is regarding the feasibility of looking at, now that the points are made that the groundwater flows in the upper surface areas to the Burgermeister Spring, is let's look at the possibility of using that site to consider the feasibility of long-term remediation at that location, using both active and passive means.

The groundwater at Burgermeister Spring has for too long inundated St. Charles County.

Thank you.

WENDEE RYAN: Would you spell your last name?

MIKE GARVEY: G-a-r-v-e-y.

VIRGINIA DOWDEN: My name is Virginia Dowden, and I live in the New Melle area. And I am just commenting on the surveillance plan, not on past history.

I believe the proposed remedial action plan is a good starting point, and we'll probably need to fine
tune as we solve the input of the various agencies and
citizens. I have a few questions on things I would like
to happen

All monitoring wells shown on the map that will
be available to the citizens, as well as reports be
available on the monitoring of the wells and remedial
actions if necessary, based on the charts.

Is the remedial action plan written in stone,
or is it a living document that can be amended if
contingencies arise by reconvening various agencies to
deal with problems?

We could talk for sixteen years about what
we’re going to do, but we need a starting point. And I
think this document is a starting point. And I’m sure
comments will be taken into consideration by the
Department of Energy and the EPA.

I hope that funding will be available for a
hundred years or more. I’m not sure this plan is going
to be around in a billion years at the rate we’re going.
As long as it is deemed necessary, I hope the funding
will be there, and that if there is something that really
comes up that is a terrible problem that everybody will
be reconvened once again, and that this site will not
just be an empty site that the surveillance comes from
Colorado or some other place like that.
But it's a good starting point, and we have to start somewhere because we've talked and talked and talked.

WENDEE RYAN: Would you spell your name?

VIRGINIA DOWDEN: Dowden, D-o-w-d-e-n.

Virginia, just like the state.

RON GRAEF: First I'd like to state I always thought all the figures out here -- I've always found them to be polite, thorough and very detailed, especially those back here.

And I guess, as an ordinary citizen, I've heard lots about Weldon Spring for other reasons, and I have a very difficult time comprehending all the complicated details and that. I guess my basic question is: Has there been any other studies done by independents other than what I call taxpayer supporter studies, state and federal and the EPA, et cetera?

I based that on the studies done, especially one done in 1999, done by Oak Ridge Health Studies, and the study found that the results of the study done by the DOE were six times off.

And I just wonder: Has there been any other completely independent studies done? Somebody that's evaluated this that's completely independent of taxpayer's support, politically involved? People of St.
Charles County who want St. Charles County to be very attractive.

PAMELA THOMPSON: I can answer that. To the best of my knowledge, no, it has not been.

WENDEE RYAN: Can you please spell your last name?

RON GRAEF: G-r-a-e-f.

DENISE BROCK: Hi. My name is Denise Brock. That’s B-r-o-c-k. And I am the Director of the United Nuclear Weapons Workers in the St. Louis region. Several of my board members are here this evening. And I am, by no means, a toxicologist, nor do I deal with compensation claims for the thousands of locals that have been affected by this radiation exposure.

I do have a few questions I’d like to ask tonight. First of all, I’d like to know if I could get a detailed report of the groundwater remediation. I mean the actual ICO treatment study, and would I be able to get the results to that.

RAY PLEINESS: Yes.

DENISE BROCK: Yes?

RAY PLEINESS: Yes, absolutely.

DENISE BROCK: And will the report actually tell me or give me the results of the ICO, the groundwater conditions; is that correct?
PAMELA THOMPSON: It should.

DENISE BROCK: That will actually give me the results, the ICO?

PAMELA THOMPSON: The problem is it's proprietary to the vendor. But we have a summary of those -- we have a summary of the results of the chemical oxidation that we could release that helped us base our decision on the effectiveness of chemical oxidation.

You can request the actual report done by the subcontractor who developed the chemical oxidation and, implemented it for us. You would have to submit it to them because they have marked it proprietary because of some of their activities, their chemical compounds and how they are used, how they injected them, is proprietary to their business.

And if you wanted their actual report, ask them to give you that, or we can give you the summary that we have that we based the decision on.

DENISE BROCK: To get the actual report, I would actually need to approach you, and you, in turn, would approach that vendor?

PAMELA THOMPSON: That is true, yeah. We'd have to approach her somehow.

DENISE BROCK: I wouldn't necessarily be needing a form for a request or anything like that. I
can just -- I have not had real good results with formal requests from the Department of Energy.

I'd like to also have -- what is the degree of contamination? I mean is it the aquifer? Excuse me if I missed something in there because I didn't understand it. Is it just the aquifer? Is it the contamination or the continuation of the contamination south of the raffinate (sic) pits, or is it the spring? And I'm not sure how to say that. Is it -- it sounds like a bad beer I heard somebody say.

I mean is it all of those that we're looking at here? What is the degree of contamination?

REBECCA CATO: Well, the groundwater at the chemical plant that's shown on the figures that shows the plumes, in the shallow bedrock, the upper bedrock is contaminated.

DENISE BROCK: Okay.

REBECCA CATO: But that groundwater does discharge through some rapid transfer features, and does express itself at Burgermeister Spring, and then there are two springs in the southeast drainage.

DENISE BROCK: So it's kind of an all-over situation then?

REBECCA CATO: Well, this plume, and then there's some rapid smaller features that reach out.
DENISE BROCK: I'm curious, and maybe I didn't understand, are you -- as I understand it, I think back in November 2002 wasn't there something that stated where vegetation was actually established there would be need for groundwater or surface water monitoring.

Are you doing groundwater monitoring or surface water monitoring, or are you continuing to do both? I mean I understand you're doing groundwater. Are you going to continue with the surface monitoring as well?

TOM PAULING: We have a permit from the State of Missouri Department of Natural Resources through their Clean Water Program that we believe once it's established we will not need to monitor the surface water at its discharge site.

So we're in the process of requesting that be determined. We will continue with it. If there's a problem with it, of course, then --

DENISE BROCK: If there's a problem. I guess I don't understand.

Are you going to also continue to monitor --

REBECCA CATO: The springs we already did. The springs will be continued. This is already monitored and also being proposed as a monitoring location in the future.

DENISE BROCK: Then the only other
question I had is: I'm a little confused about the cell and it not working. But I understand that with the cell that there's actual seepage going into groundwater. In my mind I'm thinking, my gosh, if something goes in, where does it come out? Is it passed along? Does that go into your groundwater or your soil or --

PAMELA THOMPSON: When we built up the cell -- I'll be glad to answer. I need to be sure first there are no seepage into the cell now. There was water where we constructed the cell that was in the cell, and we have a drainage system in the cell that takes that water out.

DENISE BROCK: Okay. Thank you very much.

DEE DEE AUBUCHON: My name is Dee Dee Aubuchon. That's A-u-b-u-c-h-o-n.

I have a question about safety and DOE being here tonight telling everybody that everything is low risk and all that. Then what happens when things are not low risk? You're not allowed to talk? How does that work? I guess, say, the lake all of a sudden had uranium water in it, and you were not allowed to tell the public about it?

Why are you able to tell us it's safe, but you're not able to tell us if there's a problem?

PAMELA THOMPSON: Well, Dee Dee, I don't
know that I've ever said we're not allowed to let you
know. If we find a result, be it in ground water or in
any surface water monitoring that we have, then as a
health risk level we report it, not only to the State of
Missouri and the Environmental Protection Agency, but to
the Department of Health.

So we're not just disallowed telling you if
there's a health risk.

Or am I confused about what your question was?

RAY PLIENESS: I think actually we
reported today that we are above the unacceptable risk if
somebody put a house here and utilized this water, and
that's why we have institutional controls. So I'm not
quite sure what your point --

DEE DEE AUBUCHON: That's a hypothetical.

RAY PLIENESS: Well, it's not hyp -- it's
hypothetical because nobody lives there. But a plume is
an unacceptable risk. The contamination that's left here
would be unacceptable if somebody utilized it.

So, if your question is, well, what about
somebody using the lake that's presently there, we have
that exact same knowledge and responsibility, but we
would be at the point to let everybody know if we had an
unacceptable risk any place.

DEE DEE AUBUCHON: How do you do that
without signs?

RAY PLIENESS: Well, if there was an unacceptable risk, you include putting a sign up or create institutional controls.

DEE DEE AUBUCHON: I think the absence of signs allows people to assume that it's completely safe, to unrestricted use.

RAY PLIENESS: I think it would allow them to understand that, in accordance with the standards that are established by EPA, affected -- you mentioned, well, maybe those standards aren't correct. Unfortunately, they're the best technological data we have, toxicological data we have. And within those standards, they are safe.

Can I stand here and say fifty years down the road they may not change? I cannot. But within the record books that we have today, the data that we have today, the scientists that do this work, I would say they're safe from unrestricted use. That's correct. Based on the data we have.

TOM NELSON: Dee Dee was asking about signage. Now don't we have a committee working on preparing the signage?

WENDEE RYAN: You have to identify yourself for the Court Reporter.
TOM NELSON: I'm Tom Nelson.

PAMELA THOMPSON: We do have a group that's working with the Department of Energy to get historical markers at the site to identify to the public areas of interest, areas that were contaminated, that have been remediated and tells the history of that particular area. We've been working with the Department of Conservation. We've been working with the citizens to develop that signage. And we are in the process of getting the final part of that. And it goes back to the group that will put the signs up.

These are not warning signs, Warning: do not build a house in a recreational area, or Warning: you can build a house in a recreational area but don't drink the water out of it. These signs are going to be designed to tell what is there, what was there, and the story of the cleanup of this site. So we are developing historical signs to warn people and to continue to bring people here to the site to ask these questions.

DEE DEE AUBUCHON: Pam, but there's no warning signs to tell them.

PAMELA THOMPSON: That's correct.

LOUISE MCKEEL: Along the same line --

WENDEE RYAN: Identify yourself for the Record.
LOUISE McKEEL: Yes. My name is Louise McKeel.

Will there be warnings such as uranium or radiation on any of the signs?

PAMELA THOMPSON: Yes, there will be.

TOM PAULING: I guess I just, to elaborate on the question, I don't think you could drink too much of this water unless you established a residential presence at Burgermeister and use it as your drinking water source every day. And at some point, John Vogel would run you out of there. So it's -- the quantity and the taste would be of a residential nature.

DEE DEE AUBUCHON: What is the cutoff between residential and recreational?

TOM PAULING: Well, our example was that -- well, maybe Mary could talk to this a bit.

MARY PICEL: The way we did the calculations so that we could see what's reasonable use, that's recreational. So we say possibly twenty cups of water a year during the years. Now you could decide for yourself if that's too little or too much for a recreational visitor to the area.

DEE DEE AUBUCHON: Somebody would have to look that up.

MARY PICEL: Yes.
And then when the other end of the range is the
rest of the area which is considered to be the most
conservative, the most -- and those you could possibly do
-- drinking water, two liters a day in twenty years.

The assumption that we may get will vary in
the area, for thirty years, standard consumption.

So that's the two extreme -- the two ranges
that we use to look at. Somewhere in between there maybe
you can hope to prorate that. But that's how we
calculated the numbers.

DEE DEE AUBUCHON: Okay. As far as
information, I'm just not sure everybody that goes there
would know that. That's why I'm worried.

MARY PICEL: I think we can inform them of
that.

DEE DEE AUBUCHON: Can you talk about the
number of years? I don't have it here, but I can't
remember what you said. But what is the pit area? What
is a thousand and what is the --

MARY PICEL: You want to know the numbers?
For example, TCE in our pits we have --

AUDIENCE: Can you speak up, please?

MARY PICEL: The TCE by the raffinate pits
we have concentrations of the contaminant TCE that will
give you one chance in ten thousand.
DEE DEE AUBUCHON: One person --

MARY PICEL: Not so much one person in ten thousand, but your chances of getting the -- your chances of getting cancer will be increased by one chance in ten thousand, because all of us that lives in this country would have -- one in three of us is supposed to develop cancer in a lifetime. So let's say that's .33. And see we're adding .00001 to that .33.

DEE DEE AUBUCHON: Okay. I'm just interested in your numbers and then your rationale.

MARY PICEL: You're increasing it by a little amount.

DEE DEE AUBUCHON: Well, I understand that part. But I read something about cancer that says every little bit --

MARY PICEL: Yeah.

DEE DEE AUBUCHON: -- increases your chance.

MARY PICEL: Yeah.

DEE DEE AUBUCHON: And I think there are people who probably have cancer from various sources.

MARY PICEL: I'm just explaining from the standpoint of my calculations and what the EPA gives us as guidelines to do that calculation.

WENDEE RYAN: Identify yourself.
CALVIN DRESSER: Calvin Dresser,

D-r-e-s-s-e-r.

Could you show in your report the extent of the
public lands that are surrounding this? I don’t remember
seeing it anywhere in these reports. You do show the
extent of the DOE lands.

RAY PLEINNESS: That’s going to have to be
a written response.

WENDEE RYAN: Anybody else have something?

MIKE LANG: Mike Lang, L-a-n-g.

At the present time, are you saying that are
traces of uranium in Lake 34, 35 and 33?

PAMELA THOMPSON: (Shaking head.)

REBECCA CATO: No.

RAY PLEINNESS: When’s the last time it was
tested for it?

REBECCA CATO: When’s the last time it was
tested?

KAY DREY: The surface water? The water
or the sediment. What happened in the contaminated
sediment? Did you take it out?

MIKE LANG: The spring had water in it.
The spring was flowing into these lakes. Wouldn’t the
lake have it in it?

REBECCA CATO: Lake 34 and 35
characterization showed nothing above background levels in the sediment.

And, Tom, you can address Lake 36; can't you?

TOM PAULING: Well, yes. Lake 36 had slightly elevated levels. The Conservation Department drained that lake and removed sediments six years ago or so.

MIKE LANG: And how often are they tested for it?

TOM PAULING: For what?

MIKE LANG: Are the lakes tested for any --

TOM PAULING: Well, that's what we're not quite sure on. I'd have to see our lake samples. They're still doing samples.

MIKE LANG: Well, I mean as a sportsman that would like to use these areas out here, if there is any trace of uranium in any of the lakes, like the lady said earlier, why would not a sign be put up to let the public know that's coming in to use it and make it their choice if they want to fish in the lake that has uranium traces in it or not?

PAMELA THOMPSON: What's your comment?

LOUISE McKEEL: Along the lines, I believe you said TCE, how does that --
MARY PICEL: Excuse me. Go ahead.

LOUISE McKEEL: And I'm asking you about regular baseline.

MARY PICEL: We have four leading contaminants in the soil, but uranium is the most vulnerable one. And we have sampled all four in the past, and through the years have determined that only uranium is in the groundwater. And there are two wells in particular that have rate of concentration that are about 60 picocuries per liter, 20 being our MCL standard. We're about three times over the standard in two of our wells.

And there are also uranium concentrations in a few other wells, but they're not very high. They don't exceed that point.

LOUISE McKEEL: And all these reports are available to the public?

REBECCA CATO: Right. And, in fact, we summarize that in the proposed plan.

MIKE GARVEY: If I might, it goes along with the same discussion and background. It seems like background is a very illusive communiqué.

Is background for uranium 10?

MARY PICEL: I think it's 1.

MIKE GARVEY: It's 1.
REBECCA CATO: Might be 2.

MIKE GARVEY: Now wouldn’t it make sense since the plume of surface water contamination from Burgermeister Spring flows directly into Lake, you know, 34, for one to expect that uranium inundates Lake 34? Yes or no.

REBECCA CATO: The sample has indicated that you cannot distinguish the levels in Lake 34 from background levels from the lake.

MIKE GARVEY: That’s not the question that I asked.

MARY PICEL: Would you ask it again, please?

MIKE GARVEY: Okay. Let me not ask that question. Let me ask another question.

MARY PICEL: You can ask it. I just didn’t hear the whole question.

MIKE GARVEY: Would it not be logical to assume that uranium concentration is higher because the surface water flow from Burgermeister Spring, which averages from ten to a hundred picocuries per liter or one to a hundred, flows directly into it? Yes or no.

REBECCA CATO: Okay. Burgermeister Spring does discharge to Lake 34.
MIKE GARVEY: Right.

REBECCA CATO: Another lake was selected to establish --

MIKE GARVEY: Didn't you --

REBECCA CATO: -- what --

MIKE GARVEY: You did not answer my question.

REBECCA CATO: Yes, I am answering your question.

You're trying to compare it to background levels. And we have taken and we have established what background concentrations would be in the surface water in this area. And that's how you can compare other water bodies to it to see if you have impacted it. And you can't tell the difference between Lake 34 and the background location.

So I would say, no, that uranium has not impacted Lake 34.

KAY DREY: How can it not be in the sediment, though?

MIKE GARVEY: Let me say one other thing to try and delineate the point that I'm trying to make. Have you looked at all of the water of Busch Wildlife Area to see if, in fact, there's a plume, albeit below background, of contamination of uranium within the
waters? That's the point I was trying to make about the
springs that are shown on the map. Your spring,
Burgermeister Spring, is showing a higher level of
uranium.

But to look at the local background, you should
not look at what USGS determined in Darst Bottom.

REBECCA CATO: That's not what we've done.
So I think we need to take your comment and answer it --
I believe you have a lot of questions in there, and we'll
have to provide you with a written response.

RAY PLIENESS: It's nine o'clock, and I
think probably one or two more questions or comments.
And then we're going to Procedure 6.

If somebody hasn't commented yet.

RICK HAMPEL: I'm Rick Hampel,
H-a-m-p-e-l.

One of the things, there's been a lot of
discussion about risks. People have to understand that
there's risks in everything you do. Being alive means
that there's risks. For instance, radiation in your
homes, standing outside you get radiation there. You get
in your car, you're taking a risk right there.

When you talk about risks, you have to
understand that there's risks in everything. What I'm
hearing again tonight is people want zero risk. There's
no such thing in life as zero risk. You just need to understand that as you come up with your comments. Because there’s no way anything can be done at this site that includes zero risk. Okay.

There were technical experts who looked at a number of alternatives. What you have to understand, that’s their job. They understand how to look at things. You could possibly have an independent study to look at the same data they looked and see if they come to the same conclusions. That’s good a point.

But if you accept the data, as collected, observed, and you can be sure it was accurate and precise. Going from there, we said it’s not technically feasible to do treatment at this site. And that treatment feasibility not only was economical because that was one component of it. I think a major component of it was it was not technically feasible. You would get no benefit over the course of time by running those versus monitored natural attenuation with very specific enhanced monitoring. That’s part of the monitoring that you’ve done with attenuation.

So I just -- I think we need a little bit of a balanced approach here as far as the risk at this site.

And another thing, I would encourage everyone to get a hold of some of the background documents and the
studies, et cetera, and read them for yourself. You
don't have to be technically minded to absorb at least
eighty percent of it. You will understand what has been
done and make better decisions and comments on what's
going on.

Thank you.

RAY PLEINESS: Okay. We'll take one more
question.

DENISE BROCK: I've already commented.

RAY PLEINESS: That's okey. Nobody else
stood up, so you're on.

DENISE BROCK: I have another question.

It has to do with background.

I guess maybe I don't understand that either.

Years ago when the TNT/DNT plant was here, was there ever
background monitoring done prior to that? I mean what is
background based on? Is it based on a mixture of
contaminants that has arrived here, or is prior to the
TNT/DNT plant?

MARY PICEL: Typically when you come to a
site, of course, it's too late to get background. It's
already been contaminated.

So what we do is we go to a different area
that's got similar characteristics and take samples from
that area. That's our background.
DENISE BROCK: This whole area is already contaminated before any background levels were ever charted.

MARY PICEL: And for TNT and DNT, they're man-made organics so there shouldn't be any background. These should be zero.

DENISE BROCK: And I understand that the why the DOE -- that were definite remediation problems as it was let go. And I was just curious, too, if that, in fact, had anything to do with your background prior to? Is that after it's done?

MARY PICEL: We are comfortable and confident with our collection background.

DENISE BROCK: Thank you.

RAY PLIENESS: Last comment. I'll flip. We have three hands. So, Ben, I don't think you commented yet. You have the last comment.

BEN MOORE: I'm going to be a private citizen here.

It's come to my attention recently in looking through your website at background documents that a number of documents that were originally listed as a part of that database have been removed, and apparently aren't available through the website.

And that may or may not apply to some of the
documents that are pertinent, and you very possibly can. But I didn’t look through to see if it did.

Several meetings back the DOE made a commitment to a very thorough electronic database of pertinent site documents, and I would encourage you to follow through on that.

RAY PLIENESS: I think I will address that. We not only made that commitment, we followed through with that commitment so thoroughly that we actually put a few documents that had proprietary information on them, such as on-track proposals, and those were the documents that have been taken off. I don’t think you’ll find any documents about any technical data relative to this issue that was taken off.

If you find any that are not proprietary that you think were taken off, you let me know. But we were so zealous in getting the four hundred and ninety-seven --

PAMELA THOMPSON: Seven hundred and ninety-five.

RAY PLIENESS: How many was it?

PAMELA THOMPSON: Seven hundred and ninety-five.

RAY PLIENESS: Seven hundred and ninety-five, yes. They got the documents on and
available to everybody as we committed as we didn’t recognize that there were some that were proprietary.

AUDIENCE: I’d like to say that just a few days we asked for a document related to risk evaluations, and we got a call from Pam asking why do you need that document, you should have it.

So, at least some of the technical documents that were released by the project are not on the website and are not listed on the website. I don’t have anything else.

NANCY ADAMS: Could you give us an e-mail address to get to you? Because I found the same thing.

RAY PLIENESS: That’s a really good question. And I don’t have it.

PAMELA THOMPSON: I have the website address.

RAY PLIENESS: Oh. Actually it’s the -- PAMELA THOMPSON: It’s -- weldoncomments@gjo.doe.gov.

NANCY ADAMS: weldoncomments -- RAY PLIENESS: It’s on Page 2 of your proposed plan provides that website.

AUDIENCE: Are these documents stored at a local open library?

RAY PLIENESS: Yeah, they’re also in the
library.

AUDIENCE: Which library?

RAY PLIENESS: Most of them. Which?

PAMELA THOMPSON: The documents that are either pertinent to the administrative record index is at the St. Charles County Document Library, which is Middendorf-Kredell. They have selected copies of those documents in their administrative records.

Any documents that is an administrative record that you would like to see that is not available at the library and not available in full sets on the website, you can request it of us and we will provide it to you, a hard copy.

AUDIENCE: What was the library? I'm sorry.

PAMELA THOMPSON: Middendorf-Kredell.

AUDIENCE: Okay.

PAMELA THOMPSON: It's the St. Charles County/City Library, document library. It's on Highway K.

CLARISSA EHEON: I have one more question.

RAY PLIENESS: Okay. Why not?

CLARISSA EHEON: This uranium that they found, was it 234, 35 or 38?

MARY PICEL: Again, in the chemical plant
area, we found all three.

CLARISSA EHEON: Because 238 is rather transient. It moves kind of easy; doesn't it? And what did you do with that water when you drained it out of the lake?

MARY PICEL: Don't know.

CLARISSA EHEON: You put it in another lake?

TOM PAULING: Conservation Department discharged that water.

CLARISSA EHEON: Sorry.

TOM PAULING: Conservation Department discharged that water.

CLARISSA EHEON: Where did it go?

TOM PAULING: On the ground in this little off site.

CLARISSA EHEON: Oh.

RAY PLIENESS: I think I'm going to cut it off here. I really hate to do this, but in the essence of time, I'd like to go over the next steps because this is not the end of the process.

I have heard the comments here, and I guess the reality of this is I don't assume -- I have a daughter that's twenty-three. I would say without a doubt the comments I've heard here are what I would say if I was a
citizen. I would expect full, complete safety of everybody that's in my family. Every age.

So I can state here, thoroughly and conservatively, saying I believe this plan to be effective and reasonable. I also think there's improvement. That's why we came here today to get public comments. That's why we have an additional opportunity to write comments. Don't pass this opportunity up. I know you won't, but I ask you to also go to your neighbors.

If they have comments, return them please. Provide those comments to us. Because we will take them seriously.

I think I've been at this site five times on public venues, and I can honestly say I believe we take the comments, we provide your response. I don't know that our responses are always what you want to hear, but I can assure you we take them seriously and a lot of time goes into it, because that's what we believe is important.

So with that, at the end of this period, we will finally have completed draft ROD, that we have reviewed by EPA and MDNR. Again, at the end of that period of that review, DOE will publish the final ROD. It will be available in the newspaper for everybody to
see and understand. And whatever outcome that ROD requires us to do, we will start to implement that decision in 2004.

I think I want to go back to the slide that identifies where you can send your comments. Mail or fax any additional comments by September 3rd to Pam here at the site. There's a fax number or phone number. We're available to continue to have discussions outside of the world of the groundwater, anything about this site, until pretty much at least ten o'clock if anybody's interested.

But at this point, I'd like to close the formal portion of the groundwater ROD proposed plan discussion.

(Thereupon, the meeting adjourned at 9:14 P.M.)

* * * * *
NOTARIAL CERTIFICATION

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

I, MARY T. WEBB, a Certified Court Reporter and Notary Public duly commissioned and qualified in and for the State of Missouri, do hereby certify that the aforementioned hearing was held on the 13th day of August, 2003, at the Weldon Spring Site, St. Charles, Missouri, Highway 94, County of St. Charles, State of Missouri, that the proceedings taken by stenomask by me and were reduced to typewritten form under my supervision, and that it is a true and accurate record of the proceedings.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this __9th__ day of __September__, 2003.


[Signature]

MARY TERESA WEBB
Notary Public within and for the State of Missouri.