Panel Discussion (contd)

talking about the risk map for the groundwater?

MR. CLAY SMITH: Yeah.

MR. GREG deBRULER: That was actually done by, it was Pacific Northwest National Labs under contract to the Department of Energy, actually ran the model that did that calculation.

MR. CLAY SMITH: Okay. So they are just putting information that they suppose in a computer and supposedly come out with a supposed map?

MR. GREG deBRULER: They have seven models that they are using, and to do that calculation, I think Tom Stoops could really tell you how they got to these numbers, because this is Tom Stoops, he's a hydrologist, he does this kind of stuff, so maybe he wants to say something.

MR. CLAY SMITH: I have a question about that for Tom also.

How big is the aquifer underneath that area, or is there one? Water travels, you know, underneath the earth at various levels and you have aquifers, and then you don't have any, and some of the earth is porous. So it

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migrates around.

I suppose, did they choose that site back 50 years ago, because there wasn't any aquifers under there, or did they just choose it because there wasn't anything on top of the ground and they put it there because there wasn't anybody around it?

MR. THOMAS STOOPS: The bottom line is Col. Mathias chose the site because it was desolate and it had a good source of clean, cold water.

MR. DEE WILLIS: And power.

MR. THOMAS STOOPS: And power. The entire Hanford Site is underlain by an aquifer and it is in gravel, so it's a prolific aquifer. Underneath a portion of the 200 Area is a less prolific aquifer system, but it is still underlain by an aquifer.

MR. CLAY SMITH: How deep is it? How deep under the ground? I mean, what kind of level have we got between the waste and these two aquifers that are underneath there that this stuff is eventually going to get to?

MR. THOMAS STOOPS: Depending on the location of the waste site, there are

Panel Discussion (contd)

soils up to about 250 feet thick.

MR. DEE WILLIS: Okay. Questions or comment?

MS. KAREN HARDING: Karen Harding, Mt. Hood.

DOE people, do you honestly believe that this administration's plan to essentially cut the budget and the time period will benefit the citizens of this area, much less the country or the world?

You are on the ground. Do you think shaving off a billion dollars in however many years is going to clean up Hanford?

MR. GEORGE SANDERS: I will have to give you my perspective from my keyhole, because I am obviously not in the political part of the administration, and don't think I'm going to sit up here and make a lot of derogatory statements about the administration. Okay? So I'm just not going to go there.

However, what I will tell you is I am fairly familiar with the efforts to accelerate the work. Okay?

I have not participated in any

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discussions that said we are going to do a lower quality work, we are going to kick a bunch of stuff off the table, and we are not going to do it.

The work that I have participated in has been, how do we make this work more efficient, how do we save money, how do we do it more effectively, and so those are the kinds of discussions I have participated in.

Now, have they set goals? You bet they have. They have said, well, why don't you tell us if you can do it for this much less. And those kinds of goals have been set. And we have been stressed and strained to try to meet those. And we are still in the process of it. Okay?

That's not a given, that that's all done. But I will tell you that there is a lot of intent of accelerating and moving that cleanup this way and getting a lot of the things done. And you will just have to be the judge of how it turns out in the long term.

MR. DEE WILLIS: Panel?

MR. GREG deBRULER: Karen, the concern I have is this: Back in the mid '90s

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they did a thing called BEMR, Baseline Management Environmental Report, and they looked at basically the whole complex, came up with some numbers. One time it was like -- BEMR, like a BMW, BEMR. Anyway, it came up with 350 billion dollars was a high number, 250 billion dollars was kind of a low number.

And in those days of course they had never characterized all the sites, they still haven't. They didn't know -- they got an estimate. It was we will call it a best case guesstimate. About maybe what it would cost.

But in those assumptions, there was the assumption that they wouldn't ever clean up the groundwater. Not just at Hanford, at a lot of the sites throughout the whole country, they would leave it contaminated, and there were a lot of other issues.

So, if you looked at the numbers when they were reported back in those days, we had discussions, this was during the O'Leary administration. In fact I had a great conversation with Tom Grumbly, who was The undersecretary of Energy, and I said, "What do you think those numbers are worth?"

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He said, "I think those numbers are fairly accurate, considering the limited cleanup this institution wants to do."

So, keeping that as a historical note.

Now, then you have this new administration that comes in, says they're going to whack a hundred billion dollars off of it. They did this before they had the technical basis to satisfy, quote, the nation that they could technically achieve that.

I am all for accelerating cleanup, and I think that Nick is perfectly right on it, yes, they do things kind of slow out here. Yes, the slower they go, the more money they make. That used to be the whole system.

Now they have accelerated cleanup. But is it valid, and are they going to cut corners?

You bet. For example, transuranic waste, or waste which was generated before 1970 which is a mixed bag of stuff, they might have 70,000 drums out there.

The Department of Energy, if they had their way, they don't want to take the

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stuff out of the ground. They just want to leave it there. So there will be these random waste sites all over the country.

Transuranic waste prior to about 1999, the Department of Energy didn't really even want to talk about that stuff too much, because we have a waste site out there called 618/1011, that when they originally estimated the cost to clean it up, it is really hot stuff, really hot remote handled stuff, the first of them they estimated was about 700 million dollars. That was like over three-quarters of the Hanford budget. Then it dropped down to about 350 million dollars.

Okay. Well, when they did that assessment and they were grappling with the idea of getting rid of this transuranic waste out of there, I got some great information from Headquarters that said, you ain't going to touch that stuff. That's what Headquarters was telling Richland. You ain't going to touch that stuff. Because if you have to deal with that waste out in this dry arid climate, you are going to have to deal with the waste at Savannah River that has got a worse problem

Panel Discussion (contd)

because their groundwater is five feet below the surface, and Oak Ridge and the other sites. So --

MR. MICHAEL COLLINS: Could I follow up, just one little fact. The EIS assumes that 618/1011 transuranic waste is dug up.

MR. NICHOLAS CETO: In fact there is a ROD that was signed by -

MR. DEE WILLIS: ROD?

MR. NICHOLAS CETO: A Record of Decision, that was signed by DOE and EPA, and as part of the Tri-Party Agreement, that says that waste site will be dug up and taken to the waste facility in New Mexico. So, --

MR. GREG deBRULER: I never said they weren't going to do it. I said their intent wasn't to do it.

MR. GEORGE SANDERS: And I wasn't in on that conversation with Grumbly and Greg, so I can't attest to any of that.

But I will tell you what the official position of the Department is with respect to all the burial grounds.

We have committed to retrieve all of

Panel Discussion (contd)

what is called the post '70 burial grounds. That's approximately, what, 77,000 drums or drum equivalents of waste, which has got some transuranics in it, it is going to have some low-levels in it, a mixed bag. We will pull that out.

The balance of those burial grounds are going to be subject to the CERCLA process, which EPA oversees on the site. All those burial grounds are going to get looked at.

And we will do some risk assessments, we will take a look at what those risks are, and individual Records of Decisions will be made on the basis of the investigations and the work that's done on the CERCLA process.

And Nick and EPA are the folks, along with the state, who will oversee that part of the process.

We have not made decisions on how we are going to deal with those pre-'70 burial grounds yet, but the CERCLA process will be the regulatory process with which we deal with it.

MR. MICHAEL COLLINS: And those investigations are part of the Tri-Party Agreement.

Panel Discussion (contd)

MR. DEE WILLIS: One more follow-up question.

MS. JUDY MERRILL: So is the groundwater not part of the Tri-Party Agreement?

MR. NICHOLAS CETO: Yes.

MS. JUDY MERRILL: It is? It is not going to stay there. I don't understand how that could not be part of the cleanup, the groundwater.

MR. NICHOLAS CETO: No. It is. I guess I am confused a little bit. Why don't you think it is part of the cleanup?

MS. JUDY MERRILL: The groundwater that's in the vadose zone, or that is the same thing, never mind, the water that is contaminated, that huge amount of land that's contaminated, is part of the Tri-Party Agreement?

MR. NICHOLAS CETO: It is part of the SuperFund site cleanup, it is part of the Tri-Party Agreement, and no final decisions have been made on what's going to happen with it.

MS. JUDY MERRILL: Okay.

Panel Discussion (contd)

MR. NICHOLAS CETO: Right now we are trying to see how well we can do with source control, we are trying to see what technologies are out there to deal with it.

There's a goal, and I talked about this I think the last time I was in Hood River, there's a goal to try to restore those aquifers to the extent they can be restored.

And that is the, and it's not the million dollar question, it's a lot more than that, it's the question that people are going to have to decide, how much they want to spend and what is worth doing, and that's going to be the biggest, toughest decision that Hanford has to make in the next decade, is how far do we go with groundwater restoration.

MR. DEE WILLIS: Panel?

MR. GEORGE SANDERS: I just need to make a couple comments.

One of the things that we are doing as far as accelerated process is we have an initiative that was in our Hanford management plan which was initiative 6, and that was dealing with high risk waste sites in the groundwater.

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And so what we're trying to do is effectively go after some of the higher risk areas. We have got some discharges that are still open to rain water and recharge, we are going to try to eliminate as many of those as we can, we are going to go after sources, we are going to do things like we've got leaky waterlines on the site, the water leaks out into the waste, can move it into the vadose zone.

We are going after the leaky waterlines. We are going to try to clean those up.

So there is a whole series of what I call near term activities that we are going to embark upon to try to deal with the most urgent pieces of that.

Now, there's a long-term groundwater solution. That's the ones that Nick was referring to. We don't have answers to all of that yet. And that's going to be ongoing.

MR. DEE WILLIS: Greg, and then Tom.

MR. GREG deBRULER: Here is a reality check.

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The Tri-Party Agreement was signed in 1989, and everybody knew that the groundwater was contaminated in 1989. They also knew that the state law and federal law, everything says you have to clean up to the highest beneficial use, which is drinking water. This is their idea.

150 years out, 300 years out, 150 years out right now, basically you aren't going to be able to use the groundwater.

There are planning assumptions that for 300 years you won't be able to use the groundwater under Hanford. There are planning assumptions that say that you can't use the groundwater in N-Area which is right on the Columbia River when they release it at as being clean in 2012.

Nick brought the point up at the groundwater workshop which the Department of Energy referred to come to, but Nick and the state of Washington came to, the groundwater workshop was hosted by Columbia River Keeper in Portland and here, and they refused to come. That's why that coffin is laying up there.

And it was very clear that there is

Panel Discussion (contd)

no intent right now or planning or funding or any projected funding about what they are going to do.

In 1989 they knew the problem. Do you think they spent money and time and energy to develop the technologies to get rid of this problem? No. They have piece mealed it around.

And of the real sad part of the problem is the guy who's running EM-50 right now is a guy named Jim Owen --

MR. DEE WILLIS: EM-50?

MR. GREG deBRULER: EM-50 is their research and management side of it?

MR. MICHAEL COLLINS: Technology and development side.

MR. GREG deBRULER: Technology and development side of it.

He's the gentleman that wrote a letter to the state/tribal working group and said, there's going to be one shot at cleanup at Hanford, you are going to do it the way, expediting it now, and after that if you want it any cleaner, you are going to pay for it yourself. He is running the science and

Panel Discussion (contd)

technology.

Do we have a problem? Yeah. Nick brought it out real clearly. He said if the people of the Northwest demand that cleanup of groundwater is a priority and has to happen, we are the only ones that are going to make it happen, because the institutions don't have the capability to fight that battle.

And my question is, to everybody that's here still, what is an acre-foot of water worth today, in an arid climate, in a hundred years, and 150 years, and 300 years, and you look at that resource value, and then go back to them and say, excuse me, you know, it's unconscionable.

They spent 5.5 trillion dollars making this bloody mess by making weapons, and now they want to spend 100 billion to 200 billion to clean it up.

Excuse me. The priorities are wrong. So that's my biggest problem. Thank you.

MR. DEE WILLIS: Tom Stoops.

MR. THOMAS STOOPS: I did want to indicate that when EPA did their five year

Panel Discussion (contd)

review of the cleanups at the Hanford Site in 2001, they noted that Hanford was, for lack of a better term, delinquent in their focus on groundwater, and were able to convey that to DOE.

DOE has responded to that. When they put out their acceleration strategy, there was not a strategy number 6 for groundwater focus.

When it got reviewed, they heard that comment, they heard it very loudly from the agencies and the stakeholders, and they put that strategy portion in in rather quick order.

The next issue though is keeping the pressure on to keep the funding flowing to get the work done.

MR. DEE WILLIS: Next question.

Okay. If there are no more questions, anymore comments? Panel?

MR. GREG deBRULER: I have a thank you comment.

MR. DEE WILLIS: Hold that thank you.

MS. JUDY NELSON: I know it's

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late.

MR. DEE WILLIS: Ms. Nelson. Speak into the mike.

MS. JUDY NELSON: This goes back aways. Judy Nelson.

It's my understanding those single wall tanks are sludge, 25 percent sludge, and there is no intention of doing anything about that.

Can anybody explain that, please?

MR. GEORGE SANDERS: I'm afraid tonight that you haven't got the right set of people here to give you those answers. So, we just don't have the right folks here from the Office of River Protection.

MS. JUDY NELSON: It is unconscionable in my mind that we have been talking about these tanks, I will tell you all what I have been saying for year, I used to hire a babysitter to come, they are now 28 and 30, they don't need a babysitter anymore, and nothing has changed, tanks leak, some of those same wall tanks have imploded or exploded as much as 12 feet from being super heated, and you are not going to do anything?

Panel Discussion (contd)

What's down at the bottom of that tank that would make a metal wall heat up and collapse to the tune of 12 feet, and then leak, and you are going to leave 12 percent -- or 25 percent of it as sludge and just ignore it?

MR. GEORGE SANDERS: I can give you one response on that, because I did work in the Tank Farm project for about four or five years. And some of this is done with an agreement from the state of Washington, consent decree and some other things. But over a period of time we have pumped the liquids out of the single-shell tanks.

So, of course we did have leaks that went out, but we also spent a lot of money getting the liquids out of the tanks.

Now, there is still sludges in it. But those sludges aren't going to come out of the cracks and things as the tanks begin to fail, the single shell tanks. The sludges will tend to stay in here.

So that's an interim. In fact the title of the thing was the interim stabilization. It wasn't a permanent solution. But it was an effort to get the liquids out of

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those tanks so they could not keep the pressure on and leak.

MR. DEE WILLIS: Let's move on.

MS. JUDY NELSON: (Inaudible).

MR. GEORGE SANDERS: Well, that's ongoing. Again, the details of that, you don't have the right folks here to explain that.

MR. DEE WILLIS: Okay. Greg deBruler.

MR. GREG deBRULER: I don't represent the Office of River Protection, because they refuse to come to meetings, but on that little fun pun, I had to throw that in there, Judy, 149 tanks of the single-shell tanks, okay, they are down to where they are in the sludge zone.

The Tri-Party Agreement requires that they clean up all but 350, what's the word, liters or something, a little bit, like less than 1 percent, 1 percent, that's what they require.

But the new Office of River Protection manager who refused to come to the

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last meeting, which is Roy Schepens, he has a dream, and he wants to clean up 40 percent of these tanks -- pardon me, stabilize 40 percent of these tanks and call them closed, or, what's the word, official word? Closed, 40 tanks in the next few years.

His idea is, as far as we're concerned, not legal, but's pushing forward with that.

You see, if you had a gas station in the state of Washington, you'd have to dig up the tank, you'd have to dig up the soil.

Well, if you think about Hanford and how hot the tanks are, that's kind of a risky business, you know. So, maybe there is a better way, but it isn't leaving the sludge there. And he wants to demonstrate this in the next few years to do 40 tanks.

So, it's going to be a real battle.

And then we also heard today that, or was it yesterday, or a few days ago, we hear there's coming out of the Department of Energy, the river protection side, that there's going to be a three-year delay to now the start of day for vitrification.

Panel Discussion (contd)

That one I hear is coming soon to a neighborhood by us, and if that happens, we could have problems.

MR. DEE WILLIS: I just want to point out the tanks are not the subject of this public meeting. It is okay to talk about them. But they are not the subject of this meeting.

Any final comments?

MR. GREG deBRULER: Just thank you for coming, for those that are still here.

MR. DEE WILLIS: This meeting is closed.

MR. GREG deBRULER: And we appreciate your support. Thanks.

(10:00 p.m.)

STATE OF OREGON)
) ss.
County of Umatilla)

I, William J. Bridges, do hereby certify that at the time and place heretofore mentioned in the caption of the foregoing matter, I was a Certified Shorthand Reporter for the State of Oregon; that at said time and place I reported in stenotype all testimony adduced and proceedings had in the foregoing matter; that thereafter my notes were reduced to typewriting and that the foregoing transcript consisting, of 156 typewritten pages is a true and correct transcript of all such testimony adduced and proceedings had and of the whole thereof.

Witness my hand at Pendleton, Oregon, on this 19th day of May, 2003.

William J. Bridges
Certified Shorthand Reporter
Certificate No. 91-0244
My certificate expires: 10-31-03

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