this. And the DOE is not going to listen to what we say.

We could be unanimous in our opposition to this import, and it will make no difference.

5 Your comment's not going to make a difference. They're not listening, it won't be responded to in an honest way. The conversation is over, folks.

I urge you all to go home and tell your friends and your relatives and your loved ones that "You really do need to do other things to get active on the Hanford site, because they're just going to shove that waste there and walk away."

MR. DEE WILLIS: Time's up.

MR. TOM CARPENTER: Thank you.

MR. DEE WILLIS: Yes, ma'am, please come on up.

TPO-0017 MS. LYNN SIMS: My name is Lynn Sims. I thank you for having this hearing. And thank you everybody for coming out. It's difficult.

Over the years we've had a lot of these meetings, and we've gotten into some

TPO-0017 (contd)

trouble when we made our nuclear weapons to ensure our American way of life and our democracy.

And in the spirit of that democracy, I, too, am not happy that the comment period was not extended whenever the people asked for it, because we are the people.

1

And this is not our day job. It's the Department of Energy, the Government's job, the people that are supposed to work for us. So that is very alarming.

When we did our weapons production, it left us in a very fine mess. With the less than visionary, and the inept, and the sometimes immoral management, has made Hanford the number one emergency site and the number two emergency site in the DOE complex in the country. And that's why they call it the DOE complex.

2

All over the country they've left us such a terrible mess, it is a tremendous and daunting and complex and vexing and complicated eternal, lethal problem.

And we would love to be a showplace for cleanup here in the nation and eventually

TPO-0017 (contd)

for the world, but first we have to show that we can successfully deal with the blight that has been dumped on us now.

And you can't tell us, "Don't worry, it's going to Yucca or it's going to WIPP." We don't even know where to put low-level wastes.

They don't want it in New York or Ohio. They don't want it down in Texas. They don't want it at Barnwell or in Mourde Valley or Ruby Valley.

And it's a very difficult problem. And it's good that we've made some kind of progress and sort of some plans.

At Hanford, it's good that we've cleaned up some reactors and pumped and treated some waste and moved the dirty dirt back away from the river, but we need to do more.

We found out we can't build a wall between the waste and the river and stop it, or we can't freeze it. But waste is relentlessly moving.

3 We have to finally address the cumulative risks, the comprehensive groundwater. I don't know why we have such a problem in trying to make a comprehensive

TPO-0017 (contd); TPO-0018

picture.

4 5 6 We have to have more monitoring. We have to have a vitrification plant. And when we have the accelerated cleanup at Hanford, and when they show us that we can do this, then we can import waste from other sites.

And that would be a patriotic duty. And we are patriots, and we love our land and we love our rivers. And we don't want to be bankrupted and poisoned anymore.

And I would just like to thank all of you for participating. And for the agencies that work on this, day in and day out, thank you very much.

And thank you, especially, to the lawyers now who are helping us in speaking the language that helps us get something done. And thank you for speaking out.

MR. DEE WILLIS: Would anybody else right now like to comment on the EIS? Yes, ma'am.

TPO-0018 MS. PATRICIA SIMS: Thank you. My name is Patricia Sims. I live here in Portland. I thank you, gentlemen, for your presentation tonight.

TPO-0018 (contd)

And I'm sorry to say what I have to say. Because I think that it's got to be very difficult for you guys to come down and talk to us here in Portland, we're a tough crowd.

But we're also a very serious crowd. We really mean what we say. And we mean we don't want any more of this stuff.

1 This is very lethal. We are totally against it. I think that I speak for a great many people here tonight when I say that we really can't trust the Department of Energy.

2 And I'm not talking about you two, I'm talking about the guys in Washington, D.C., and the Bush administration.

I don't know how to stop this whole thing. I don't know whether it's even stoppable, because our Government is a pretty big force that just kind of keeps rolling on and on and on and on.

Litigation, and through our congressmen, is probably the only possibility that we have because the Department of Energy, with their emphasis on nuclear energy and nuclear weapons, is going to keep producing more of this stuff.

TPO-0018 (contd); TPO-0019

Nobody wants it, so what do we do with it? I don't have an answer to that. I don't hear that anybody else does either.

3 Certainly the information that was presented in the EIS, it's very clear, it's not going to solve anything.

But I think the only solution is to not do nuclear, and that's not going to happen tomorrow. But I, for one, feel that that is ultimately the only solution. Thank you very much.

MR. DEE WILLIS: Anyone else at this point? Paige.

TPO-0019 MS. PAIGE KNIGHT: I was going to read just some portions of Representative Wu's letter about this, for the record. And I think that it's really good for people to know when their congressmen are supporting them.

I'm going to skip some of it. "On the heels of decisions by the Department of Energy to halt large portions of its current clean up efforts at the Hanford site, it is obvious that we have had our hands full disposing of millions of gallons of high-level

TPO-0019 (contd)

nuclear waste already at the site.

1 "Our first priority must be to remove the existing waste and treat it so that it no longer threatens the citizens of the Northwest before we increase the amount of new waste being shipped to Hanford.

2 "Despite the Department of Energy's revisions, I still have concerns regarding the use of unlined soil trenches for unspecified periods of time.

3 "Despite ongoing public concern, DOE's preferred alternative still recommends storing TRU waste in the low-level burial grounds for an undetermined time period.

"I again call on DOE to fully examine this issue and to demonstrate that its treatment and disposal proposals are safe beyond a doubt."

Now, there's a concept. Demonstration.

4 "Due to the complexity and the seriousness of the topic at hand, I have also joined my colleagues in requesting a 15-day extension of the comment period."

So has that happened, Gerry? We

TPO-0019 (contd)

4

have an extension now? Or that hasn't gone through yet?

MR. GERRY POLLET: Yes.

MS. PAIGE KNIGHT: "It is absolutely critical that the public has sufficient time to consider the important decisions associated with the actions of this document."

So I just know that Representative Wu has signed off. Senator Wyden's aide was here tonight. He didn't read the comment here from Senator Wyden. He read it last night in La Grande.

I have an idea of what we need to do next. I foresee a day, and I've been saying this for awhile, and I see it coming closer and closer where I think we have to have huge marches up to Hanford to stop shipments, to stop anything. I really foresee that day. And it is coming closer.

In the meantime, because I hate to have people come to these meetings and to hear Joyce say for all the work that she and Lynn and other people in our organization put in calling I don't know how many hundreds of

TPO-0019 (contd)

people over the last few days.

And to hear that -- to see such a small crowd, compared to the 260 we had last summer, people are discouraged.

So what can you do? And I suggest that you call, e-mail, write your senators and your representatives. And if you need to, write them again.

And I also recommend that we hold letter-writing parties, house parties where you have one of us come and speak to your group so you have enough information.

There are actually, on all of the web sites of the groups that are doing this problem, there are enough pieces of information and the same with the handouts that you received tonight, for you to put together a letter pretty easily, or an e-mail.

But that's what needs to happen. We need to bombard them with mail. And I just encourage everybody to do that.

I know it's difficult. I know time is hard. I mean, it was -- you know, I work all day too, I don't do this for a living.

And I spent the weekend on the plane

TPO-0019 (contd); TPO-0020

putting together my comments for tonight.

And then yesterday when I got all the backlog of news about, you know, these legal actions that are going on, now I wrote a letter to the editor. And I just though, "I have to keep doing this."

I mean, I feel crazed right now. I feel driven to do this, because our actions and our not giving up our only hope. Nobody's going to do it for us.

So I just encourage everybody. And I'm certainly willing, and I know the members here in Portland at Hanford Watch are willing to go out and talk with your neighbors, do coffee parties or whatever, so that you can write letters.

I think it's just crucial. I think that's the most important thing we can do.

Did you have a question, Nancy?

MS. NANCY METRICK: (No question).

MS. PAIGE KNIGHT: Paul, oh so Paul wants to speak. Thank you.

TPO-0020 MR. PAUL MCADAMS: My name is Paul McAdams. Well, what Paige said, in 1983,

TPO-0020 (contd)

I did a walk from Astoria to the gates of Hanford.

And we walked up there to stop the start-up of PUREX when PUREX -- or to do a campaign.

And, you know, you imagine walking into Hanford, or Richland, Washington in 1983, you know, it was 30,000 -- or 20,000 people working out there or something like that. It was a massive amount.

And we'd go out to the parking lot and leaflet the workers out there at the parking lot when they would get on the buses to go out.

And, you know, I mean, on that walk, we stopped in every little town and had meetings with people and talked to them about Hanford. And a lot of people didn't even know what Hanford was.

There was only two groups involved with Hanford, that was Snake River Alliance, and Northwest Action for Disarmament at that time.

And there was a guy named Norman Solomon. He wrote a book, Killing Our Own,

TPO-0020 (contd)

about the effects of radiation on workers and the atomic vets.

And, you know, I mean, I don't know how many meetings I've gone to these meetings. It's just -- I hear now it's the same thing, "Oh, we're going to put lined, you know, trenches. Yeah. And we're going to put stuff in the trenches."

I mean, hey, they didn't put it in the trenches before. They used to cascade plutonium in the trenches up there. They used to pour the stuff right into the ground.

And it just -- I mean, it's just like business as usual. I mean, this is what it is.

And I've been involved with Native Americans. And I was honored -- I mean, I was down on the Navaho Reservation. And when you see --

I remember at a place I stayed at, there was a screen there. And I said, "Boy, that's a nice screen." And I said, "Where did that screen come from?"

And they says, "Oh, that was the shaker screens that came out of the uranium

TPO-0020 (contd)

mill." And the people, the Navahos, they're the best recycling people there is.

I mean, they recycle everything. And when they tore down the uranium mill, everything went to the homes. And the school at Tuba City was built out of the tailings.

There was a Dairy Queen. The dirt that filled in the land for the Dairy Queen was uranium tailings. The kids used to use the tailing piles as their playground.

And to see what happened, you know. And, I mean, and that uranium went from the Navaho people to Hanford. And it effected the Native Americans at Hanford -- I mean, up at Yakima.

I mean, I was at a meeting, a dinner, and a woman walked up to me. That was back in the early '80's, and she said she was from -- she's in Yakima.

She said, "Why are our children dying of leukemia?" And, you know, the fish was their main thing.

1 And people say the Hanford area, I don't know if many people know across the river, right across the river, at White Bluffs,

TPO-0020 (contd); TPO-0021

that's where Chief Joseph hid. And that's all Native American.

And that whole land, all that area in there was the Native American ceded grounds. I mean, they used to go do their gathering there.

MR. DEE WILLIS: One and a half minutes.

MR. PAUL MCADAMS: And it just -- I mean, I hear "Just put it -- dig the trenches. Put the stuff in the lined trenches." And it's business as usual.

I mean, we'll see down the line, in another 10, 20 years they'll maybe dig them back up and we'll have to do something else.

TPO-0021 MS. CHERIE HOLENSTEIN: Hi, my name is Cherie Holenstein.

My comments are for the TV/cable audience: The Department of Energy has never listened. If listening means action, then action means clean up.

Let us give a strong loud applause for the long distance folks who keep us advised at the many meetings: Gerry, Paige, Greg, and others; the video programers, Bob, Paul, Jim,

TPO-0021 (contd)

and others.

The citizens numbering in the thousands over the years who testify and show support by attending year after year.

I'd like to acknowledge that many folks who used to come have since died, many from cancer. And what they and we all wanted is to clean up this nightmare that is Hanford.

Like many concerned, passionate people, I could just save my speeches, change the date, and start talking, because little has changed. I was very dark-brown haired, and I didn't need glasses when I first came.

2 As has already been said, it's a shell game. It's about money. It's about fast track and the importation of more poison waste to Hanford.

As I was parking, a friend riding his bicycle stopped to say hi. He was leaving before the formal hearing. He said he was too depressed to handle any more.

I suspect the Department of Energy wants more of us to leave, depress us, keep us out. We have iterated and reiterated the same

3 message: We want no more poison waste.

TPO-0021 (contd)

Because it's not waste, it's poison.

We want what is at Hanford cleaned up. We want no more weapons, because that is a foundation of Hanford. We have had enough. This is insanity.

Since 1970 -- a woman talked earlier about cats. Since 1975, every cat I'd had, all strays, usually pregnant strays, have all died from cancer. And I believe the American death rate now is one in three die from cancer.

The young man in the back of the room, Soren, I met Soren at a peace rally, March 12th. And we walked together and talked awhile.

He's doing a documentary on energy to show the folks in Denmark. I'm real sad to acknowledge that what the folks in Denmark will see is that the American learning curve is all downhill.

It's all downhill, folks. 50 years of this mess, and they want to import more poison here.

To the TV folks watching: Call your senators, call your representatives. On the back of my car, one of the many bumper stickers

TPO-0021 (contd)

I have says "Invest in America, buy a congressman."

It seems they only listen when they're running for office, they're public servants then. They're not really public servants otherwise.

As a final statement, I want to ask the audience here remaining: What do you think the kind of song would be that Woody Guthrie would sing about, would write about the Columbia River? Our Beautiful Columbia River. Thank you.

MR. DEE WILLIS: Would anybody else like to talk now about the EIS before we move on? Okay.

So let's shift to a more informal format. I'd like to invite Mike, Paige, Gerry, Doug up here. Let's turn some chairs around. Here's the drill.

UNIDENTIFIED SPEAKER: Fire-side chat.

MR. DEE WILLIS: Fire-side chat. Yeah, we'll call it that. Here's what I want to do: We'll take questions from you. And I'll take questions first from people who

have not spoken.

And then one of these four people will respond and we'll let them talk to each other and talk to you in responding to the question that's on the floor.

When they finish, we'll take another question. All right. You guys ready. And you need to be concise in your answers, share the mike.

The first question. Yes, ma'am. And give us your name.

MS. MAXINE WILKINS: My name is Maxine Wilkins. My questions are all for Mike. And from everything that I've heard here, it seems to me like we're in the wrong country looking for weapons of mass destruction.

One of my -- the first question, I have about three of them, if you don't mind.

MR. MICHAEL COLLINS: Go ahead.

MS. MAXINE WILKINS: Back in 1942, I think it was, my father worked on building something at Hanford, and I don't know whether they ever were told what they were.

MR. MICHAEL COLLINS: Not in 1942, they probably weren't. Probably by 1945.

Panel Discussion (contd)

MS. MAXINE WILKINS: So what were they made out of, concrete?

MR. MICHAEL COLLINS: They were building reactors and they were building spent nuclear fuel separations plant to take out the plutonium.

MS. MAXINE WILKINS: And we had nuclear reactors back then?

MR. MICHAEL COLLINS: Yes. 1942 is when the construction of the first one started at Hanford -- I'm sorry, 1943.

MS. MAXINE WILKINS: Then my question about these containers that you were talking about building with the plastic in between, the gravel, rock --

MR. MICHAEL COLLINS: The liners for the bottom of the trenches, yes.

MS. MAXINE WILKINS: -- those lines, how do you test those? You said if it started to leak from the top and went down in, how are those tested then to see if they are going down into the lower part of this container?

MR. MICHAEL COLLINS: Well, what happens is there's sensors between the

Panel Discussion (contd)

first and the second liner. And when they sense something getting through the first liner, they immediately start pumping it out.

MS. MAXINE WILKINS: And you hope the sensors will work?

MR. MICHAEL COLLINS: They have. And we have practical experience to say that the three lined trench that we have, the two small ones and the very large Environmental Restoration Disposal Facility we have does --

MS. MAXINE WILKINS: And another remark that you made was about getting the waste ready to take to New Mexico. What is the danger in that process that goes on with getting the waste down to New Mexico, but it has to go in some other form than what it's in?

MR. MICHAEL COLLINS: Not necessarily. What it is is it's processed to make sure that the waste that we're sending them meets their waste acceptance criteria.

For example, they can't have certain things in the drums that we send them. Things like four-liter bottles that are empty.

Things like spray cans that haven't been punctured to make sure there's nothing in

Panel Discussion (contd)

them.

MS. MAXINE WILKINS: And my last question has to do with transportation --

MR. MICHAEL COLLINS: I think Gerry wants to --

MR. GERRY POLLET: There's a lot more that can't go in. All the chemical wastes right now have to be treated to a certain degree, or not -- PCB wastes currently are restricted.

And the very hot stuff, called remote-handled, that DOE wants to ship to Hanford from the other sites can't go to New Mexico at all.

And there's no facility right now to handle that and re-package it. But much of this not only needs re-packaging, but possible treatment as in separation of chemical wastes, solidification, stabilization, or other chemical treatment.

And that's what I was referring to earlier with the slide I put up that said the treatment of that waste at Hanford would involve risks that would, in the event of likely foreseeable accidents, cause offsite

Panel Discussion (contd)

fatal cancers, as well as fatal cancers amongst the workers. So it's a very serious set of risks.

MR. MICHAEL COLLINS: Can I add a couple of add-ons there to what Gerry's saying --

MS. MAXINE WILKINS: There's different qualifications, then, for each one of these dump sites?

MR. MICHAEL COLLINS: Yeah, depending on the geology and that sort of thing.

One thing I want to just add on to Gerry is one of the things we're doing in the EIS is this use of T-plant, modified T-plant, is to use that, to do that treatment certification process for these, they're called remote-handled wastes.

That's something we need to do regardless if we get any wastes from offsite or not.

MS. MAXINE WILKINS: Well, my last question has to do with the transportation description. And I'm not quite sure exactly -- I didn't get the wording down that you had,

Panel Discussion (contd)

they redesigned it or it had to do with re-qualifications or something for transportation.

MR. MICHAEL COLLINS: I think what you're asking, and I may be wrong here, in the first EIS, what we did, we didn't do any transportation analysis in the EIS itself. We relied on another Environmental Impact Statement to do that.

This time around, we added an analysis of the impacts to Oregon and Washington of sending waste to Hanford and sending transuranic waste down to New Mexico.

MS. MAXINE WILKINS: So the re-qualifications of the transportation, what does that mean? From an 8-wheeler to an 18-wheeler?

MR. MICHAEL COLLINS: I guess I don't understand what you mean.

MS. MAXINE WILKINS: It was on your transparency, and I can't remember the word that you used.

MR. DOUG HUSTON: I think what Mike is referring to is is that in the original Draft EIS there was no discussion of

Panel Discussion (contd)

transportation impacts.

In this EIS there is a discussion, but it's basically a reiteration of the analysis in the Programmatic EIS. It's not a route-specific analysis.

MS. MAXINE WILKINS: No, I wasn't talking about route. I don't think that's the wording that was in there that left me with that impression.

MR. MICHAEL COLLINS: Can we move to a different question to see if I can find it?

MR. DEE WILLIS: We'll come back to your question. Anybody else want to ask a question? Yes, sir. Name please.

MR. TOM LECHNER: My name is Tom Lechner. I have a question about stuff that's sunk into the ground already.

I don't know if this is right, but the current Draft EIS does not deal with stuff that's sunk into the ground already, is that right?

MR. MICHAEL COLLINS: It doesn't deal with it directly. It deals with it as part of what are called cumulative

impacts.

As part of an Environmental Impact Statement, you have a certain scope that you directly look at, but you still have to put it in the whole context of Hanford, in this case Hanford.

And one of the things we do, and we partially, using this Systems Assessment Capability, say, "Okay, what has already been disposed on the ground? What was unintentionally and purposely put in the ground? What do we think is happening." Those sort of things.

So in some ways it does account for the large amount of liquid waste disposal that we used to do. It does account, in some way, for tank leaks.

But I don't want to oversell this Systems Assessment Capability, because it still is a relatively new tool that's still being developed.

MR. DEE WILLIS: Let's let other people on the panel respond to the question.

MS. PAIGE KNIGHT: Yeah. One

Panel Discussion (contd)

of the things that it doesn't deal with is things that are going to be put into the ground from other processes not having to do with the waste that's being transported in to the site.

For example, the tank waste. That's one of my big issues is the tank waste. Right now they haven't determined how they're going to treat the tank waste since they made the decisions not to glassify all of them.

There is going to be waste coming out of any treatment process that they do for those tank wastes, even if it is glassified.

There's waste involved in that. And that's a cumulative impact that has been left out. And that's really, really important. And I think Gerry is going to correct me.

MR. GERRY POLLET: Yeah. It assumes, wrongly, that the glass is going to be -- that it's all going to be turned to glass and buried in these shallow burial grounds.

And even turned into glass, it says that a very large area of Hanford's groundwater would essentially exceed drinking water standards for thousands of years and move towards the Columbia River.

Panel Discussion (contd)

But that's -- the problem is it assumes that it will all be turned into glass. And we all know that this administration has issued a decision saying 80 percent won't be glass. So that's the failure to consider what they're actually doing with it.

MR. DOUG HUSTON: That's true. And another concern of ours is with the SAC itself, the Systems Assessment Capability.

While it has improved considerably from the initial version, it still has some serious problems. And we're not real comfortable with the way it models groundwater flow and impacts.

MR. MICHAEL COLLINS: Can I add one thing about the vitrification process? There are discussions within DOE -- and as a matter of fact, there's going to be a follow on the Environmental Impact Statement that does talk about alternate treatment technologies.

As far as this EIS is concerned, no. You would not be able to do that with this Environmental Impact Statement.

MR. GERRY POLLET: I mean, the joke here is we already talked about being

Panel Discussion (contd)

piecemealed to death. That is exactly what the National Environmental Policy Act says you cannot do. This is one of the tests of adequacy.

You've got a proposed -- more than a proposed action, you've already adopted a plan not to glassify it.

And yet you failed to show the impacts of that plan and say "Oh well, we're going to choose to bury this stuff in this EIS. And then we'll come back and talk about how much greater the impact will be in another decision."

It's not okay. And it needs to be in this EIS. And why this EIS needs to be deemed legally inadequate by EPA, Ecology, and the Department of Energy. Withdrawn again. Come back again, do it again until you get it right.

MR. DOUG HUSTON: I just want to make sure we've answered your question. Did you get your question answered?

MR. TOM LECHNER: Yeah, I think so.

MR. DOUG HUSTON: Okay.

Panel Discussion (contd)

MR. DEE WILLIS: Do you have a follow-up, sir?

MR. TOM LECHNER: No.

MR. DEE WILLIS: Who's next? Bob, Bob Hedlund.

MR. BOB HEDLUND: Yeah. My question's for Mike. On these liners, is that the regular rubberized Visqueen liners?

MR. MICHAEL COLLINS: It's a hard plastic. I want to say it's polyethylene, but that doesn't -- polypropylene is usually what it is.

MR. BOB HEDLUND: The same thing that they use for waterbeds, for waterbeds basically, right?

MR. MICHAEL COLLINS: It's similar. It's usually thicker. They put a little more hardening agent in it so it's not as bendy.

MR. BOB HEDLUND: Yeah, it's flexible. I lined a reservoir down in St. Helens for one of the mills about a quarter mile reservoir with that stuff.

The problem is that the stuff that we're dumping in up there, you know, besides

Panel Discussion (contd)

all the radioactivity, all the different chemicals and stuff, they react together.

And there's some chemicals that will eat right through, that quick (indicating). I mean real quick, because we've dropped some stuff on it and -- yeah.

Another thing is: Did DOE address what they're going to do about the people that do die up there? I mean, there's one in fifty Indian kids dying from leukemia and stuff around there, you know.

You'd think that they'd address the problem of all these people that spent hundreds of thousands of dollars in medical bills trying to save their kids and their lives and stuff.

I personally borrowed a hundred and twenty thousand for funerals and all sorts of medical stuff for my family, because of chemicals.

So besides working at Trojan and stuff, I mean when I left Trojan, I was real sick.

But I think DOE's -- or EIS's estimates on how many people they're going to kill, I mean, they far exceeded that just in

the time limit that I've been coming to these meetings.

MR. DEE WILLIS: So the question is?

MR. MICHAEL COLLINS: There's two questions. One of them is: What is DOE doing about harm to workers? I don't know much about it.

I know there is a program that they've been handing out checks. And there was some press release two weeks ago. You may know more about this than me, Gerry.

MR. GERRY POLLET: A check.

MR. MICHAEL COLLINS: They've sent out one check so far. Apparently there's a program, though, to start handing out checks to sick workers to help them with their medical bills. But I don't know too much about that.

The other thing about the liner, itself, one of the things that goes along with disposing of waste and RCRA-compliant facilities is you have to do RCRA-type of treatment.

And what that does is that prevents you from putting in those incompatible

Panel Discussion (contd)

chemicals. For example, the acids that may eat it away or those sort of things.

You have to treat that before you -- you have to get rid of those, that hazard, before you dispose of it.

MR. DEE WILLIS: He asked about mortality estimates in the EIS.

MR. MICHAEL COLLINS: Mortality estimates?

MR. DEE WILLIS: Right.

MR. MICHAEL COLLINS: They way the EIS is put together, we try to -- predict is probably not the right word, but we try to determine what are the potential impacts.

And throughout the EIS there are situations where there's a potential for what are called latent cancer fatalities.

And you'll see that in the sabotage of truck analysis, you'll see that in accident analysis for facilities, you'll see that if in fact groundwater is drunk.

So, I mean, those are in -- there's lots of places in the EIS that do talk about latent cancer fatalities. And there's places in there that do talk directly about what if

Panel Discussion (contd)

you get into an accident.

Especially in the transportation, because transportation ends up that in a non-terroristic type of mode, your greater impacts are a direct crash. It's not the load its carrying.

So it does talk a lot about the potential for cancer fatalities and other deaths.

MR. DEE WILLIS: Other panel members?

MR. GERRY POLLET: Just to repeat something that we talked about last night in La Grande, which is that the health impact analysis is very limited.

And it is true not just of this EIS, but all DOE EISs, latent cancer fatalities is a single outcome.

And it does denounce "This does not include more susceptible population of children, same dose causes five to ten times greater incidence of cancer." And the risk analysis is done only for adults.

But if you were doing a RCRA unit analysis in a workplace, normally you would

Panel Discussion (contd)

look at non-cancer fatality impacts as well. Other impacts to worker health.

And you don't see any of that. It's only fatal cancers here, which is a significant flaw.

The other question you had about the liners. I hope that was a comment that got recorded, because one of our major concerns is any time you try to use these massive landfills and try to put all different types of waste together, the liners are not compatible, nor are the caps with all types of wastes.

Even after treatment, the radiation from different types of radionuclides causes releases of gases in some materials, and not in others, that go through the liners or caps.

And you have to design different caps for different types of waste. And instead what's proposed here is one-size-fits-all without any consideration of the great variation in the chemical and radionuclide content.

MR. DOUG HUSTON: I have a comment, I guess, with respect to liners also. And this goes to a question or a comment that

was made earlier in the meeting.

And that was the fact that the liners are only good for 30 to 40 years or something along these lines.

I think some people misunderstand the purpose of the liner in a trench like this. The idea behind the liner is to minimize the waste getting to the groundwater while the trench is open.

And the trench is not going to be open for 500 years. So you put the liner in there to prevent the waste from getting to the groundwater while the trench is open.

Once the trench is closed, your groundwater mitigation is the cap that's put over it.

Once you close the trench, you build a cap over the top of it, consisting of various layers of materials that should minimize the amount of infiltration that occurs from rainwater.

MS. PAIGE KNIGHT: Well, let me argue that one a little bit. Now, I don't think it's -- to me, when I look at this and I think this is, you know, rational even though

Panel Discussion (contd)

I'm not a technical person, the wastes that you put in are eventually going to corrode.

They're not going to last in this perfect form for hundreds or thousands or millions of years.

So you are eventually going to have something happen to that liner, you know. And you don't know where it's going to happen.

And so if you have a huge trench with all this different kind of waste on it, it's all capped over. How are you going to probe every inch of that trench to find out if something's leaking or not?

So I think it's just a very -- it doesn't make any sense to me. It doesn't make any sense at all.

And I frankly think that all waste should be treated and put in the best containers possible, which will cost a small fortune, and we really wouldn't be able to have any more wars after that.

And put it possibly above ground. The vitrified waste was originally supposed to be put in containers and not buried shallowly. It was supposed to be put in vaults.

And that plan, in and of itself, is alarming considering how, you know, how lethal the tank wastes are.

So I think that this whole thing about the liner, we have to look at what's going to happen inside after the cap is over. And I don't think it's going to be perfect.

MR. MICHAEL COLLINS: Well, and the fact that the EIS shows it's not perfect. I mean, at some point in time you will get some leaching through the vadose, that groundwater.

And the latent cancer fatalities that we talked about earlier are based on that happening.

MR. DEE WILLIS: We have four people stacked up. One quick follow-up here, Bob.

MR. BOB HEDLUND: Okay. I'd like to make a comment. You said earlier that they were going to have some tourist site up there eventually, right?

MR. MICHAEL COLLINS: I didn't say that. But right now a large part of what's Hanford is considered a national monument.

And there's an ongoing effort by

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some historical groups to market not only the natural part of it, but some of the historical stuff that's gone on at Hanford too, particularly related to the Hanford's mission to make nuclear material.

TPO-0023 MR. BOB HEDLUND: Okay. Are these people aware that in 1948 DOE deliberately started releasing stuff on the people? They released double the amount that Chernobyl released, you know.

1 And this is a large area. I happened to be working over there in '57. I got -- well, anyway, that whole area is contaminated.

And beta radiation is just as deadly as gamma or alpha. So, I mean, this stuff doesn't go away. It's in our food chain, it's everything.

That's why we got double the cancer rate than we did a few years ago is because of it.

MR. DEE WILLIS: We'll take that as a comment. Thanks, Bob.

Joyce Fouingstad.

1 **TPO-0024** MS. JOYCE FOUINGSTAD: Well, I