U.S. DEPARTMENT OF ENERGY

DRAFT TANK CLOSURE AND WASTE MANAGEMENT ENVIORNMENTAL IMPACT STATEMENT

PUBLIC HEARING

March 8, 2010 6:00 p.m.

Seattle Center 305 Harrison Street Seattle, Washington 98109

Mr. James Parham, Facilitator

PANEL MEMBERS:

Ms. Mary Beth Burandt, U.S. Department of Energy. Office of River Protection Mr. Jeff Lyon, Washington State Departement of Ecology, Hanford Project Office



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1	MR. PARHAM: Thank you. So we are going to
2	get started with that, okay. I have said this a
3	couple of times, three minutes on comments, period.
4	This is a you have heard a lot of people
5	up here talk, now it is time for you to talk. Our
6	first person to speak is someone who has already been
7	up and that is Gerry Pollet from Heart of America
8	Northwest.
9	Gerry, do you want to make any additional
10	comments?
11	MS. POLLET: I prefer someone else and I will
12	come back.
13	MR. PARHAM: He will come back.
14	Richard Heggen, any additional comments at
15	this time?
16	MR. HEGGEN: Not at this time.
17	MR. PARHAM: Okay, thank you.
18	Next, Toby Nixon.
19	MR. NIXON: I am Toby Nixon from Kirkland,
20	Washington, former state representative for the 45th
21	Legislative District of Washington, member of the
22	board of directors of Heart of America Northwest, and
23	former board member for Republicans for Environmental
24	Protection.
25	We just saw the results of a magnitude



5 1 8.8 earthquake in Chile. It was quite impressive and 2 we just learned in the newspaper today that the city of Concepcion actually moved ten feet west, so we can 3 4 see -- and our area is geologically similar to that 5 area -- that my understanding is that the draft EIS 6 shows that there is an earthquake fault right on the 7 site that could produce up to a magnitude 6.5 8 earthquake right on the Hanford site, so imagine what 9 that kind of a quake would produce in the way of disturbance of the soil, liquefaction, those types of 10 11 things. 12 I think it is terribly irresponsible for us 13 to even consider leaving any of this radioactive waste behind when the potential for a very large earthquake, 14 it could happen today, we are told it happens about 15 every 300 years in this area and it has been 300 years 16 since the last one. We owe it to the future 17 18 generations to do everything we can to clean up our 19 mess as much as possible. We need to remove 99.9 20 percent or more of the waste from the tanks and not leave it behind, and that is to be simply in 21 2.2 compliance with Washington State law. We need to have a clean closure and restoration of the Hanford site as 23 much as possible to what it was before the Department 24 of Defense took it over. 25



1 You have got to keep in mind, back on the 2 earthquake issue, they didn't choose that site because of its geological stability, they chose it because of 3 4 plentiful cold water, plentiful electricity and its 5 remoteness so they could just move everybody off the 6 site. Geological stability just wasn't the issue. 7 I have recently, just to conclude my 8 comments, read an article in the IEEE Spectrum 9 magazine in which they talked about the deep geological storage of radioactive materials in 10 Finland. And Finland isn't, you know, considered to 11 12 be a real conservative area, they're very concerned 13 about radioactive materials there, too, and yet they, in Finland, have figured out how to deal with this 14 kind of a problem. We are a wealthier country, we are 15 at least as smart as the Fins, we should be able to 16 figure this out, too, and I expect that the Department 17 18 of Energy and the Department of Ecology to do exactly 19 that. Thank you. 20 MR. PARHAM: Thank you, sir. Next up is Eva 21 Kosmos, and after Eva will be Jim Kelley. So, Eva. 2.2 MS. KOSMAS: I am Eva Kosmas, I am from Portland, Oregon, and I just have a real quick 23 statement. I feel that clean closure is the best 24 25 solution to this issue and is the absolute best to



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1	preserve the health and safety of our environment and
2	the future populations of the Pacific Northwest. If
3	99.9 percent cleanup is a possibility, which it is,
4	then it is the best and should be the only solution.
5	MR. PARHAM: Thank you.
6	Jim Kelley, followed by Elizabeth Heffron.
7	Jim? No? How about Elizabeth, are you here?
8	MS. HEFFRON: Hi, I'm Elizabeth Heffron, I am
9	a writer and a teacher and I live in Washington State
10	with my husband and two children. I feel it is
11	extremely important that Governor Gregoire and you
12	guys with the Washington State Department of Ecology
13	take an active, not a passive stance in protecting
14	current and future Washington citizens. I think you
15	should take all steps necessary to fight for a full
16	cleanup of the existing waste, so that includes a
17	clean closure of the tanks and cleaning up all of that
18	soil that is under those tanks and everywhere else in
19	those unlined ditches.
20	I also would like you to do everything in
21	your power to prevent the DOE from importing
22	additional off-site waste to Hanford, no matter what
23	classification it is. Over the last 50 years,
24	Washington citizens have taken on more than their fair
25	share of the hazards from our national nuclear



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1	policies. It is time for our state to stand up and
2	say "no more." Thank you.
3	MR. PARHAM: Thank you.
4	Lisa? After Lisa, will be Lisa Lightner.
5	MS. VAN DYK: Hi, I am Lisa Van Dyk, I am a
б	field organizer at Heart of America Northwest. I just
7	wanted to thank the Department of Energy for holding
8	eight hearings on this document, even though I am
9	absolutely exhausted after organizing for all of them,
10	and thank everyone who's here for coming out tonight.
11	The more I learn about this EIS, and I've
12	written down some of the more detailed written
13	comments later, but as a resident of Washington, I am
14	simply stunned. When I look at the maps of
15	groundwater of contamination in the EIS, it is
16	extremely obvious that Hanford is an inappropriate
17	location for a national radioactive waste dump. It
18	simply doesn't make any sense that the Department of
19	Energy is taking this decades old plan to import waste
20	to Hanford. That is assuming that DOE has looked at
21	the impact analysis in the EIS. So tonight, I just
22	have a few points.
23	Empty the tanks to the limit of technology,
24	which is 99.9 percent or more; do not leave the tanks
25	and tank leaks in the ground where they will only



9 1 contaminate the groundwater again in the future; 2 vitrify all of the waste; and please, make an enforceable ban on no off-site waste coming to 3 4 Hanford. Thank you. 5 MR. PARHAM: Lisa Lightner. After Lisa will be 6 Janice Faris. 7 MS. LIGHTNER: Thank you. My name is 8 Lisa Lightner, I am a resident of Seattle, Washington. 9 Upon learning the history of Hanford, I have found that there are way too many examples of the US DOE 10 using flawed and piecemeal EIS reports and not 11 following through with what is necessary to protect 12 our health and our environment. We need clean 13 closure. The preferred alternative does not go far 14 15 enough. The reason for not using clean closure is risk to workers, but I wonder what impact and risks to 16 17 further generations will follow. Somehow this seems more of a political play than a concern for our future 18 19 and our generations -- and following generations. But 20 most importantly, do not add off-site waste to this site. Not in ten years, not ever. 21 MR. PARHAM: Thank you. 2.2 Janice Faris. After Janice will be 23 David Ortman. 24 25 MS. FARIS: I am Janice Faris from Renton,



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Washington. I have had many friends and relatives who were so-called downwinders, who were cut from here down to their chest when they were 18 years old to remove cancerous tumors and their thyroid gland. Okay.

6 Passing on nuclear waste to future 7 generations is cruel. It is our moral responsibility 8 to not create more waste and to treat and dispose of 9 current waste in the safest manner possible. That means on-site, not hauling radioactive waste down the 10 freeway to Idaho National Lab or bringing more to 11 Hanford. We all know the hazards involved with 12 highway travel and with rail travel, too. Given the 13 vulnerability of any cargo container that is in 14 motion, one can easily imagine it to be a perfect 15 target for a terrorist or mentally unstable person, to 16 say nothing of weather-related accidents or driver 17 error -- which, of course, never happens. 18

19So what about the vitrification plant? How20many years behind and millions of dollars overbudget21is it? How are the design plans coming? These are22all rhetorical questions. Are there design plans or23does it continue to be design-as-you-go, or should we24really be calling it the Forever Project? We have all25feared an insane sociopathic leader whose finger could



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11 ignite a worldwide nuclear war, but now we are faced 1 2 with an insane sociopathic alternative presented by 3 DOE which are just as fatal. "This is the way the 4 world ends. This is the way the world ends. This is 5 the way the world ends. Not with a bang but a б whimper, "T.S. Elliott. 7 Check out how-to websites and books to learn how radioactive contamination acts on all living 8 9 cells. Google depleted uranium and birth defects in Fallujah to see what uses our spent nuclear waste have 10 been put to. I think once you are informed, you will 11 12 agree that the use of depleted uranium should be 13 declared a crime against humanity, as should many of these DOE alternatives. Thank you. 14 15 MR. PARHAM: David Ortman. And after David will be Robert MacDonald. 16 17 MR. ORTMAN: Thank you. My name is 18 David Ortman, I live here in Seattle, Washington, and 19 after following Hanford issues for about 35 years, I 20 have concluded that Hanford must stand for half-ass energy foot-dragging on radioactive decontamination. 21 2.2 Three minutes to cover 6,000 --MR. BLANK: That is brilliant. 23 24 MS. BLANK: Could you say that again? 25 MR. ORTMAN: You can put it on a bumper



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sticker.

2 Three minutes for 6,000 pages is a bit formidable, so let me just cover four short points 3 4 here. One is looking through the summary and the DOE 5 material, Department of Energy material that is out 6 there, it is very clear they have a preference for the 7 word closure, not cleanup. I think most members of 8 the public would be surprised to learn that somehow 9 I think these tanks are still open for business. there was an assumption that these tanks had long 10 since been closed, and the use of the term closure, I 11 12 think, just simply muddied the water in terms of what 13 it is really needed, which is cleanup, because the time for cleanup is now and no new waste should be 14 imported into Hanford. 15

Secondly, there is virtually nothing except for the occasional pretty picture on the Columbia River. The ecology documents talk about things that have leaked and where waste may reach the Columbia River, but even the history of Hanford in the summary document really has nothing about the Columbia River, which is one of the main things we are trying to protect.

24Third is you have to go through those 6,00025pages all the way through Appendix Q to find out any



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useful information or useful can be about half-lives of the radionuclides that are filtering through the groundwater and elsewhere. This type of information needs to be summarized and put into the summary and into the fact sheets in a much better fashion so people can understand what is at risk, not having to plow through to some Appendix Q in some Alice and Wonderland hole to find out what is going on.

9 Finally, although there is a mention that the Bureau of Reclamation's EIS in the Yakima Basin water 10 storage has determined that no new irrigation dams in 11 12 the Yakima Basin has had a positive benefit cost 13 ratio, which is no kidding, including the proposed black water project, the Yakima Irrigation District 14 lobbied the Bureau of Reclamation not to make a 15 finding record of decision on this particular 16 conclusion, which simply keeps the door open, and I am 17 18 here to tell you that former Congressman Sid Morrison 19 has not given up on this project and this is going to 20 come back and I would like to encourage both Ecology 21 and Department of Energy to keep the lid on that 2.2 particular irrigation proposal as it would potentially have an adverse impact on Hanford as water may seep 23 out of the dam through Hanford and take things back. 24 25 Thank you very much for the opportunity and we will



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see what happens next.

MR. PARHAM: Robert MacDonald? Robert? Robert MacDonald? No? Cherie Eichholz, from Physicians of Washington, and after Cherie will be Thomas Buchanan.

MS. EICHHOLZ: Hello, my name is Cherie Eichholz, I am with Washington Physicians for Social Responsibility, I am the executive director. PSR is a nonprofit advocacy organization that is a medical and public health voice for policies to prevent nuclear war and proliferation and to slow, stop or reverse global warming and toxic degradation of the environment.

As a public organization, we represent approximately 5,000 health care professionals throughout Washington State. We have worked hard to promote the safe, effective and timely cleanup of the Hanford Nuclear Reservation and to educate the public regarding the disastrous consequences of nuclear weapons. We strongly believe that failing to take action today is a prescription for a deadly future.

In addition to my work at PSR, I'm a veteran of the US Army. I served in 2003 and 2004, and since serving, I have had the opportunity to meet many other veterans, including many poisoned by depleted uranium



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15 1 and Agent Orange. These men and women carry these 2 effects of these poisons, and some may have cancer, others have had trouble conceiving children. 3 These 4 veterans carry scars similar to many residents of the 5 Columbia corridor who have been poisoned by waste 6 hidden on the Hanford Reservation which has seeped 7 into the soil and water. Most veterans who have been 8 poisoned by DU or Agent Orange had no choice in the matter, nor did the native victims of those respective 9 countries, but the people of Washington State have a 10 choice. 11 12 The EIS as presented and if it's accepted 13 will poison hundreds of people in the near future and thousands within a generation. In effect, in 14 accepting this EIS, we will sign the death sentence 15 for thousands when other alternatives are available. 16 17 What specifically am I advocating? I am 18 asking that this panel and the powers that be consider 19 this EIS with an eye on the future and respect for the 20 millions of people who will be impacted. Permitting anything less than 99.9 percent of tank waste to be 21 2.2 removed would be a danger to public health and unconscionable. Using the clean closure standards is 23 24 the best way to protect current and future

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generations.

1 In addition, the idea of transporting 2 hazardous waste to Hanford should be taken off of the 3 The dangers to those who live along the table. 4 shipping roads, coupled with the risks associated with 5 adding additional waste to a still contaminated area 6 make this an unreasonable proposal. Hanford cleanup 7 must center on removing the toxic threat that already 8 exists and is still not adequately dealt with. Veterans know that war is easy to start, hard 9 to stop, and that those most often hurt are 10 bystanders, and physicians similarly recognize that 11 taking action after the fact or after harm has been 12 13 caused is a poor second choice to taking preventive action. I urge the US DOE to consider the standards 14 involved and take action that prevents further harm. 15 Thank you. 16 17 MR. PARHAM: Thank you. Thomas Buchanan, and 18 after Thomas Buchanan will be Amy Easton. 19 MR. BUCHANAN: Can I face the people? 20 MR. PARHAM: Just there. 21 MR. BUCHANAN: My name is Thomas Buchanan, 2.2 also with Physicians for Social Responsibility. Thank you to the panel for at least giving citizens of this 23 24 Seattle area a time to comment on the 6,000-page 25 document. But let's be perfectly clear about some of



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17 1 the proposed actions and the options. Given the 2 unsafe and intensively radioactive waste in the forms 3 of leaking single- and double-shell tanks and the 4 billions of gallons of radioactive and chemical toxic 5 waste already escaping from Hanford, we will not 6 accept any more importing of so-called off-site waste 7 until the present storage is safe in the environment 8 that it is in now. Imagine 17,000 truckloads of radioactive waste on our nation's highways from 9 private nuclear waste to Hanford. That is a nightmare 10 waiting to happen. We will oppose any new shipments 11 12 of these new wastes into Hanford. Further, this EIS has no consideration for an 13 option of dry test storage on radioactive waste sites, 14 15 including the power plant sites, as an option not to store it in a central repository. That dry option is 16 17 safe, it is above ground, it is can be easily monitored, and there's no -- not a mention of it in 18 19 this 6,000-page document. 20 With all of the high-tech equipment, processing buildings, tank farms, and storage cribs 21 2.2 storage at Hanford already, the principal storage medium of radioactive wastes at the Hanford site, just 23

like the rest of America, is cardboard and dirt. From

the most extremely radioactive nuclear fuel cell, to a

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1 Mason jar of plutonium found in a safe in a trench at 2 Hanford, to the corroding barrels of waste and Tank 105A, most of the wastes are kept in over 40 miles of 3 4 unlined trenches, ditches, and holes at Hanford. Most of these -- most importantly, these dirt 5 6 and cardboard mediums leak into the environment and 7 are now seeping into the Columbia. This national 8 treasure, our Columbia River, is currently carrying 9 micro curies of radioactive plutonium, uranium, iodine, tritium, technetium, cesium, zinc, and 10 These radionuclides have been 11 strontium downstream. 12 detected as far as the Puget Sound and the Willapa Bay 13 on the Washington coast. I am going to skip a couple and then I will 14 go to the final issues. When we also suggest that the 15 16

first tank that be cleaned -- that should be cleaned, containing its wastes and leaks be Tank 105A. And the reason we suggest that is this a double-shelled tank, that when its contents were heated up in 1965, the emergency demanded more water be poured into the tank to cool it off and some of it was intentionally dumped into the ground. The excess heat still caused an explosion. That explosion, which blew out a hole in the tank about the size of a mini bus and dumped more waste and the zone of the surrounding soil, it still



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1 measures now, that soil, at over 200 degrees of temperature near that tank. This tank and some of its 2 known faults are an ideal test case of prototype. 3 We 4 want to take the worst case and solve that and do it 5 safely. 6 So we want a small vitrification plant 7 facility, not the whole big project all at once. Make 8 it safe and a smaller operation, and we recommend that 9 the contractors also begin stabilizing the trenches and begin the so-called capped landfills and dig 10 underneath and start emptying and cleaning up the 11 These so-called low radioactive waste sites 12 soils. 13 are the principal storage of mediums right now for all the radioactive waste and they need to be cleaned up 14 because it is not just a soil column that is 15 contaminated, the column has moved and it is in many 16 17 ways approaching and is already contaminating the 18 Columbia. So finally --19 MR. PARHAM: Three minutes. MR. BUCHANAN: -- this cleanup matters to all 20 21 of us. 2.2 We get started safely and with no more radioactive waste imported into Hanford, no more 23 radioactive waste into the Columbia, make the cleaning 24 25 process legal, and accept outside state and EPA



20 1 inspectors on-site to monitor all parts of the cleanup 2 process. Thank you very much. MR. PARHAM: Thank you. Next is Amy Easton, 3 4 and after Amy would be Michael Baron. Amv? No? Michael Baron? After Michael will be Joan Lawson. 5 6 MR. BARON: Thank you, Mr. Moderator, 7 panelists, fellow speakers, fellow citizens, thank you 8 for this opportunity to put my views into the record. 9 Hanford was created by the Department of Defense under their responsibility to protect our 10 borders and our citizenry. I am a member of that 11 12 population, as is my wife, my two children, my 13 83-year-old mother, my friends, my 1800 co-workers, as well as the six-and-a-half million citizens of 14 Washington and the more than three-and-a-half million 15 citizens of Oregon. With the transfer of the Hanford 16 site to DOE, the responsibility for our protection 17 18 that justified the very creation and the operation of 19 that facility does not just evaporate as if we had 20 made an investment with dirty math. That 21 responsibility to no small degree is now in your 2.2 hands, therefore, you have two choices. 23 Option one, cleanup Hanford completely and without delay. Completely means clean closure. 24 25 Treating this exceptional site as if it were an



1 ordinary landfill is an approach worthy of Milo 2 Minderbinder. Completely means dismantle site cleanup -- dismantle and site cleanup for FFTF. 3 4 Completely means not bringing in more radioactive 5 waste to the shores of the Columbia River. 6 Or option two -- I hope you like this --7 reinstate the draft. Then draft all citizens whose 8 health will be negatively impacted by radiation 9 releases you're allowing so that their injury or deaths can be rationalized as the unavoidable 10 consequences of war. 11 12 If you cannot muster the political will to 13 enact option one, then at least arm us with option That way the Geneva Convention might afford the 14 two. 15 10 million residents of the states through which the Columbia River flows, the protection these vocal 16 17 citizen advocates have been fighting for for over three decades and will continue to fight for. 18 19 MR. PARHAM: Joan Lawson. After Joan is 20 Al Rasmussen. 21 MS. LAWSON: Hello, my name is Joan Lawson, I 2.2 am from Seattle, Washington. I have a friend whose neighbor probably said to his dog, "not in my back 23 24 yard," so the dog dumps his waste in my friend's back 25 yard. My friend takes his shovel and throws the poop



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22 1 back over the fence. If only we could do the same 2 with the nuclear waste. We in Washington State do not even want our own nuclear waste and are waiting, 3 4 waiting, waiting, for the solution for its disposal, 5 so surely we don't want our neighbors' waste. 6 My brother worked at Hanford some years ago, 7 making good money as those whose tyranny for Hanford 8 also did, the contractors, the people who make the 9 tanks and build the facilities, and the executives from companies with names like Clean Energy. He said 10 11 to me one day another container of liquid waste was 12 opened up and it too was empty. Where did the 13 contents go? I saw a billboard today that said Washington 14 Poison Center. I looked it up on the web and see that 15 16 national poison prevention week begins March 14. Ι suggest it begin tonight and that large signs be put 17 18 all over Hanford announcing Washington Poison Center. 19 MR. PARHAM: Thank you. Al Rasmussen, and after Mr. Rasmussen will be Valerie Schubert. 20 MR. RASMUSSEN: Up here in Seattle we say 21 2.2 Rasmussen. 23 MR. PARHAM: Thank you. I am not from here, 24 that's true. 25 MR. RASMUSSEN: I know, you said that.



23 1 As with all important issues, the questions 2 of cleanup at Hanford should be considered very broadly instead of with just narrow focus on the 3 4 technical issues. A basic step in correcting a bad 5 situation is simply to stop doing the things that make 6 it worse. In the case of radioactive waste at 7 Hanford, this basic step is simply to stop bringing in 8 more waste. Considering the question broadly, which 9 is how I started, this leads to examining the creation elsewhere of waste that cannot be successfully stored 10 or treated. Weapons development and new nuclear power 11 12 generation programs should both be abandoned --13 (Audience applauds.) MR. BUCHANAN: -- for substantial reasons of 14 15 their own, as well as the addition of nuclear radioactive wastes that they produce. 16 Instead of sending radioactive waste from 17 those places to Hanford, money saved by abandoning 18 19 those projects instead should be sent to Hanford to accelerate the cleanup here. 20 21 (Audience applauds.) 2.2 MR. PARHAM: Thank you, sir. Valerie Shubert, and after Valerie will be 23 24 Bobbie Morgan. 25 MS. SHUBERT: I have already sent in some



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1	written comments on this and I'm assuming that I am
2	hoping that the comments I made on earlier versions
3	have also been forwarded and are still being kept on
4	file. Basically I have not been able to get through
5	this document. I don't have a stable of readers, I
6	don't have the time to do it myself, so I have gotten
7	through most of the summary and there is a couple more
8	comments I wanted to make before at this point and
9	then I will make more later.
10	One was that I am getting through the
11	definitions and I am glad there is a glossary, because
12	frankly those definitions are nothing like the
13	vernacular definition of the terms would be, and I
14	would like to have some indication in the document of
15	who developed those definitions and what the input
16	was.
17	And the other thing is that there are
18	statements in several places about endangered and
19	threatened species, but they're not listed. Maybe
20	they are listed somewhere else, I haven't gotten to
21	that part yet, but they are not listed in the summary.
22	And furthermore, they're not they are
23	parts of communities and there are species that are
24	not endangered or threatened yet that may be in the
25	future and I would like to see an overall study of



1 what impacts these things will have on the environment 2 in general. And that is basically what I had to say. MR. PARHAM: Okay. Thank you. Bobbie Morgan 3 4 and then Adrian Villarreal. 5 MS. MORGAN: Hello, my name is Bobbie Morgan 6 and I live on Bainbridge Island. I am a retired 7 speech language pathologist and so I have a long 8 commitment to good communication. I am here with what 9 seems to be a very simple message. We know what the right thing to do is here. This EIS statement needs 10 to go back to the drawing board and you need to just 11 12 cleanup Hanford, period. 13 I am also here because I am a grandmother, a brand-new grandmother. Last week our first grandchild 14 was born and I want to be able to imagine her future, 15 and I want to be able to pretend that 50 or 75 years 16 from now, that I look back on her as a grown woman and 17 possibly a grandmother, and I want to be able to say 18 19 we did the right thing for you, sweetheart. You are 20 able to drink water here, enjoy delicious salmon, play 21 safely in our gem of the Columbia River. I don't want 2.2 to have to imagine myself looking back from the mists 23 of time and say I am sorry that you have cancer, we didn't do the right thing. 24 25 So I am here as a person, I want to call you



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26 1 Mary Beth, I want to call you Jeff, that we have had a 2 lot of facts, a lot of initials and acronyms, but we are here as people to remind you to do the right 3 thing. Thank you. 4 5 MR. PARHAM: Thank you. 6 Adrian Villarreal, and after Adrian, it will 7 be Robert Stagman. 8 MR. VILLARREAL: Good evening, everyone. Ι 9 am from Bellingham, Washington, and I am a registered nurse, and when I first learned about this at the 10 University of Washington, Bothell, when Gerry came 11 12 over to do a presentation on the subject matter, after 13 the end of the presentation, I was kind of like ready to hit my head up against the wall, because I couldn't 14 understand how this complex matter was actually made 15 into a bigger problem than it needs to be. 16 I mean, it is not rocket science, okay? I mean, when it comes 17 18 down to it, you have nuclear waste that is in the 19 ground, okay, it is going to our groundwater, okay, 20 and it is already contaminating the Columbia River, okay? Any type of radiation, okay, that human beings 21 2.2 come in contact with, besides any other type of life 23 form, okay, it puts that organism at risk for developing cancer, if not dying. I mean, there is no 24 25 reason that the preferred plan should be just



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99 percent, okay, removal of nuclear waste. It should be 99.9 percent or that 100 percent, okay? Whatever is humanly possible.

To hear this evening that the concept of the preferred plan was accepted because of minimal risk to the workers that are currently going ahead to do the cleanup process, I think we are slapping the workers in the face by going ahead and allowing the work that they are currently doing to go ahead and cleanup Hanford, okay, to just be cut short. So therefore, they think what are they doing then? And they are already risking their lives now. We already have over 30 workers that have been subjected to beryllium poisoning, okay, because that toxic metal that is in the environment, you know.

The tanks, they need to be clean closure, 16 okay? The environment needs to be cleaned up. 17 The 18 flux capacitator, no contaminants need to be shipped 19 over to Oregon or Utah or any other state, okay, everything needs to be contained, okay, we need to 20 21 clean this environment. There are too many -- right 2.2 now, our biggest environmental issue is that the 23 United States is facing a water shortage. We need to 24 make sure that our underground water supplies that are 25 available, okay, are clean and able to be used, okay?



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28 1 We do not need to go ahead and continue to pollute a 2 valued underground water supply. Every state is pretty much activating, okay, laws to prevent the 3 4 exportation of water. We need to conserve the water 5 that we have and we need to prevent the spread of 6 radiation to our population, okay, because we don't 7 need to promote a society built on cancer, okay. 8 It's -- Rachel Carson clearly said it, we 9 have the right not to be poisoned. We have the right not to be exposed to toxins. At the same time that 10 Hanford was being developed, our government clearly 11 went ahead and was reckless with the use of 12 13 pesticides. Let's not be reckless about forming another plan, okay, that does a half-ass job of 14 cleaning up the issue. Thank you. 15 MR. PARHAM: Thank you. Robert Stagman, and 16 17 after Robert will be Oliver Bazinet from Hanford 18 Challenge. 19 MR. STAGMAN: My name is Bob Stagman and I am 20 a retired surgeon, specializing in diseases of the 21 head and neck. Included in my responsibilities was 2.2 the management of tumors of the thyroid gland, which 23 have been unequivocally associated with radiation 24 exposure and most importantly during childhood. 25 My personal health history includes a course



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of low level radiation therapy to the head at age five as part of a national misadventure to treat enlarged tonsils and adenoids. The unintended result of this treatment has included a plethora of thyroid tumors, among other conditions, occurring usually after a lag period of many many years, and that lag is important to understand.

8 At the age of 42, I was diagnosed with a 9 tumor of the inner ear, and at the age of 44, with a tumor of the thyroid gland, both clearly linked to 10 11 childhood radiation exposure by multiple clinical 12 studies. Radiation exposure is a potentially lethal 13 risk for our citizens, particularly for our children. We need not be unduly alarmed by a vague potential 14 threat from Al-Qaeda when we are being subjected to 15 continuous chemical nuclear terror being inflicted 16 17 upon us by our own United States Department of Energy, 18 via tragically and misguided and irresponsible plans 19 to transport through our communities and dump vast quantities of dangerous radioactive material into 20 21 Hanford, where responsible cleanup of all nuclear 2.2 waste has never been accomplished and active nuclear contamination of our soil and groundwater continues 23 24 unabated and certainly encroaches the lifeline of the Columbia River. 25



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30 1 Radiation exposure of our Northwest citizens 2 currently is certainly much higher than generally 3 conceded and will escalate dramatically as current 4 leakage continues and escalate incredibly if new waste 5 is added. The only acceptable action for Hanford is 6 clean closure of all existing waste sites and no 7 addition of any further nuclear waste at Hanford. 8 Thank you. 9 MR. PARHAM: Thank you. Oliver is next, and after Oliver, Richard Frith, I believe. 10 MR. BAZINET: Hello, my name is Oliver 11 12 Bazinet and I am a volunteer with Hanford Challenge. 13 I've read the summary of the draft EIS. I didn't get through all 6,000 pages of the actual document, and I 14 15 quess I have two things that I would like to focus on. First of all, one percent of 54 million gallons is 16 17 still 540,000 gallons, and that is a totally 18 unacceptable amount of waste to leave in the tanks. Ι 19 am very disappointed with that aspect of the cleanup 20 proposal, as well as just the clean closure 21 alternative presented in the EIS in general. Ι 2.2 believe that it only includes remediating the soils three meters below the surface of the tank. Some of 23 these tanks have been leaking for over 30 years or 24 25 more. It seems like three meters is awfully shallow



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1	to dig. We should probably dig a little bit deeper.
2	I would also like to address the new waste
3	that DOE is proposing bringing on-site. As Toby Nixon
4	pointed out, Hanford is a very geologically active
5	site, not to mention in the flood plain of a river
6	that is dammed quite a bit upstream. It doesn't seem
7	like a very good idea to put more waste there.
8	MR. PARHAM: Thank you.
9	Richard, I messed up your last name, and then
10	after Richard is Dorli Rainey.
11	MR. FRITH: Hi, my name is Richard Frith, I
12	am from Seattle. Unlike a lot of the other speakers
13	here, I am going to have to identify myself as a
14	strong supporter of nuclear energy. I believe that
15	nuclear energy is valuable and has great possibilities
16	for the future, as soon as we show that we can clean
17	it up. Now, as soon as you can show you can clean it
18	up, this is the time and place to show you can clean
19	it up. This site was contaminated 50 years ago and
20	this is the time and the place to show you can clean
21	it up. In the meantime, we should not put any more
22	waste here until you can show you can clean it up.
23	Formerly I was a certified residential
24	heating oil tank remediation specialist. I did that
25	for myself and also for the city. When you remediate



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1 a tank, frequently at the bottom of the tank you will 2 find a tiny little hole, usually smaller than a quarter. Under that, you find a humongous plume of 3 4 contaminate, and those you start digging and you dig 5 for a long time. Three meters, I have done that for a 6 300-gallon residential tank. For the City of Seattle, 7 we did sub-subbasements, we dug up entire city blocks 8 down near Westlake. The contamination underground can 9 be massive, and we all know this, we're not -- lots of us here have had our tanks yanked out of our own yards 10 There is nothing here that needs us to be so 11 here. 12 disingenuous as to say we will remove the tank or the 13 contents of the tanks and somehow magically we won't look underneath because there won't be any problems 14 down there. 15 16

The DOE -- or Department of Ecology would not let us get away with that here, the City of Seattle would not let me get away with that here, why on earth would the feds be allowed of being that disingenuous. There should not be any new waste when we clean up the old.

The problem about why not clean it up completely? Well, there are two reasons I hear about. It costs a lot of money -- a complete cleanup would cost a lot of money. It is better to just hide the



1 problem and take part of it out and cover the rest up 2 with dirt and concrete so you can't see the problem. There is a lot of money available. It is DOE's 3 4 bailiwick now, but this is the military that did this 5 and we have a huge military budget. The amount of 6 money in the military budget, we should clean this 7 site up and we should because this was a military 8 project. So there is not a money problem here. There 9 is a lack of will and a lack of willingness to show just how bad the situation is. We have the money, we 10 11 have the ability, it is the military's budget, that is 12 where the money comes from. 13 In closing, when we clean this site up, we will have to recognize that geologically this is a 14 terrible place for the waste. In the meantime, let's 15 not bring any more new waste in until they clean it 16 up, and the problem with our new waste will be moot 17 18 because this is a lousy place geologically. 19 MR. PARHAM: Thank you. Dorli and then 20 Richard Ellison after that. 21 MS. RAINEY: Hello, I am Dorli Rainey, I'm a 2.2 citizen of Seattle. I have a brand-new hobby, it is 23 going back a few years, I attend Hanford meetings. I have learned language that I never thought I would 24 25 ever hear and my children say mom, you go around the



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1 house mumbling things like fast flux and covered stuff 2 and names of contaminants, what is this with you, you used to be fun. 3 4 Now, I look at what is going on now. We have 5 this problem with cleanup, and just recently the 6 Department of Energy has decided that they were going 7 to permit a new nuclear power plant. Will they try to 8 send their spent uranium here? Why are we now 9 allowing new nuclear power plants after Chernobyl, after Three Mile Island, after the problems of 10 Hanford? I think we need to once and for all say we 11 12 need clean energy, but not through nuclear energy, and 13 I think we need to also cleanup Hanford once and for all, and not 99.9 percent, but 100 percent and get it 14 done, and this man who said take it out of the 15 military budget, he is right on. 16 17 MR. PARHAM: Thank you. Richard Ellison, and after Richard will be 18 19 Lane Rasberry. 20 MR. ELLISON: Hello, my name is Richard 21 Ellison, I would like to encourage, first of all, that 2.2 these hearings in the future be televised. I think we are at that level of technology now and I think we'd 23 24 have more input from citizenry if people were able to

observe hearings.

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35 I -- I am a professor who teaches biology and 1 2 environmental science at a local community college, and I had the honor of visiting Hanford about 25 years 3 4 ago. I was a graduate student with a congressional 5 aide, and it was very interesting because the head of 6 the Environmental Services there assured me that from 7 the leaks that occurred at Hanford, none of it could 8 ever reach the groundwater, that was the lingo at the 9 So my experience from that meeting, many things time. that were said to both of us, the congressional aide 10 and myself, is that Hanford has a long history of 11 12 wishful thinking. Hanford will never be safe. You can tell me 13 you are going to clean it to 99 percent, 99.9 percent, 14 or 100 percent, I don't believe it. I don't believe 15 that we are capable of doing that, because for one, I 16 have observed this process for a long time, it has 17 18 taken a long time to cleanup. I see numbers dallying 19 up, well, the year 3890, this and that and that and 20 this, where civilization is barely a thousand or two 21 thousand years old. 2.2 I see -- the question I wanted to address was, what are the effects of climate change on 23 24 Hanford? Because we don't really know how things are 25 going to swing, and I think a lot of the repository



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nature of Hanford is to no rainfall, nine inches or ten inches of rainfall. What if the rainfall rate was to increase? What if the Columbia River was to raise in level, because part of the problem is that the water table is so close to the surface.

I think we can only go for full clean closure and I think that is a very modest and noble goal should we ever actually get there. I think the best available technology, what we are looking at, I think we can only try and use the best available technology, and as the years go by, as we go towards 3890, we will see more technology will come forward to help us clean it up. I don't think you can put a cap on it and it'll go away.

I think when we call a waste nuclear reactor from a submarine as low level nuclear waste, as it's defined, I think that's a misnomer, and I think part of the problem is there is so much waste at Hanford that really it is an impossibility to try to cleanup and make it safe. So how do we make it as safe as we can I think is what we are trying do. I think we need to support as much full closure as we can get.

I agree that the money can come from a lot of places like the war in Iran and Iraq, from a lot of all of these places that we want to have fun in. I



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don't think we should have any more nuclear waste imported into Hanford. I don't think we should be generating nuclear waste. I don't think that one percent left behind is a good idea in any storage tanks. I would agree that any plumes underneath leaks.

I mean, part of the leaks that occurred that 7 8 made science magazines, I think in the '70s were 9 130,000-gallon high level liquid waste leak was that 10 the technician was out there everyday, recording down the levels of the tank were going down everyday. 11 He 12 would write the number as it would go down everyday, 13 but his boss is away on vacation for a month. When he came back from vacation, he saw oh, my gosh, we have 14 lost all of this high level nuclear waste. Well, 15 human error is a big factor. Chernobyl was a big 16 17 factor, Three Mile Island was a big factor and human 18 error was involved very much in the causality of a 19 huge problem, so I don't believe that we can just 20 science away this thing, and I think that as much 21 money as we can spend, as much as we can do, I applaud 2.2 your efforts of trying to do something to clean it up, 23 but the reality is we are still waiting, and the citizens of the state have said in a citizens' 24 initiative, we don't want any more nuclear waste. 25 We



38 1 don't want anyone's nuclear waste. We didn't want it 2 in the first place. We don't want anymore. Thank you 3 very much. 4 MR. PARHAM: Okay. Thank you. 5 Lane Rasberry. After Lane, it'll be Casey 6 Howard. 7 MR. RASBERRY: My name is Lane Rasberry, I 8 live in Seattle. I don't like toxic waste and I don't want any more brought here, but I don't think that is 9 really what you are asking about. Unfortunately, I 10 11 don't know why you are here. I -- just to say 12 something about myself, I don't want to talk about 13 myself, but I studied chemistry at the University of Washington, I have got a degree, I work in science. I 14 feel like I ought to be able to understand something 15 about what you are saying, but when you were speaking 16 at the beginning of this hearing, I couldn't 17 18 understand you. I don't know what you are talking 19 about. I read the Hanford website before I came 20 21 here -- I went to Hanford, I took the tour last year, 2.2 and I have been reading about Hanford in my free time, 23 I am interested, I am an interested person. I can't understand your website. I don't understand these 24 25 posters you have. They are beyond my understanding.



39 1 And I really tried. You've got that book back there, 2 it is 6,000 pages, I can't read that. Who is your target audience? It doesn't seem to be me. I don't 3 4 know who you are writing these things for or who you 5 are speaking to. 6 I don't have any comment about what this 7 proposal or what you are talking about doing, because 8 I just don't understand it, and I don't know how to 9 get that understanding. I could propose some things. I really wish that you could advise someone to revise 10 your website, make it comprehensible, more 11 12 comprehensible to laymen. You can't make it too 13 simple. I think if your target audience was maybe high school kids, that would be appropriate for me. 14 Т am glad that you have a Facebook account, I don't know 15 if any of you know this, but Hanford has a Facebook 16 account, and I understand you also have a Twitter 17 18 account, I am following you, thank you. Your use of electronics is first rate. 19 I 20 really like your videographer. You have a lot of 21 videos, continuing ed. videos. Why don't you have a 2.2 DVD of your videos here? Not everyone can access YouTube and I really wish that I could take a DVD of 23 your videos and show them to other people. 24 It's 25 really not fair that you are not distributing these



40 1 things. 2 I really want to understand, but you make it 3 very difficult for me. I wish you could do more to 4 meet me. Thank you very much. 5 MR. PARHAM: Thank you. 6 Casey Howard? After Casey, we will do Kate 7 Hellenthal. MS. HOWARD: Hi, I am Casey Howard. 8 I am a 9 UW student and I am representing the growing number of citizens with a vested interest in Hanford cleanup. 10 We are next in a long line of generations to deal with 11 the contamination in the future. 12 13 Hanford is scary, all of us here think that. We are concerned that the transport of new waste will 14 15 affect the way we can clean now and in the future. The radiation will be there forever. We need to do 16 17 all we can to remove all of the current waste. We didn't ask for this mess to cleanup, and I don't want 18 19 to leave an even bigger mess for future generations. 20 Thank you. 21 MR. PARHAM: Thank you. 2.2 Kate Hellenthal, and after Kate will be Warren Jories. 23 24 MS. HELLENTHAL: So as an aside, I'm Kate 25 Hellenthal, I am from Spokane, Washington, and I am a



41 1 Seattle University undergraduate student and I am involved with Heart of America Northwest. Despite 2 3 that, this EIS really confounds me. I feel that it is 4 extremely inadequate in addressing the dangers that 5 Hanford presents. Entombing it does not solve the 6 problem. It's a Band-Aid approach that only postpones 7 the true impact. Clean closure is the only feasible 8 option, and the contamination of the lands and water 9 needs to be addressed. Furthermore, outside waste from around the 10 11 country cannot be transported to Hanford. If Hanford 12 becomes a national nuclear waste dump site, especially 13 before the current mess is cleaned up, our health, the health of future generations, and our environment are 14 15 then sacrificed for the DOE's purposes. Hanford must be cleaned and cleaned fully. 16 17 The tanks must be emptied completely, the 18 contamination in the land and groundwater must be 19 alleviated, and the proposal to transport national 20 nuclear waste to Hanford must be dropped. Thank you. 21 MR. PARHAM: Thank you. 2.2 Warren Jones? No? Frank Zucher; is that right? Frank? 23 24 MR. ZUCHER: That is fine. 25 MR. PARHAM: Okay.



42 1 MR. ZUCHER: My name is Frank Zucher and I 2 live in Seattle with my wife and child. I find it disturbing that we have to keep coming back here to 3 4 these hearings to remind the Department of Energy, 5 which is now run by Nobel physicist, we have to remind 6 them about lessons that we should have all learned in 7 kindergarten, and I find that they're now teaching in 8 preschool, and these include, if you make a mess, 9 clean it up. Before we bring out the new toys, put away your old ones, and don't run with scissors. They 10 11 are fairly simple. 12 Specifically, I urge the Department of Energy 13 to reconsider their preferred options to cleanup to 99.9 percent of the toxic waste, the tank waste, 14 excuse me. Don't leave the worst one percent of the 15 tanks to leak and kill future generations. Clean up 16 the contaminated soil. Clean closure, not sweeping it 17 18 under the rug with a capping. Start vitrification as 19 soon as possible and start planning for building more 20 vitrification plants immediately, not five years from 21 now. 2.2 In terms of no running with scissors, don't chop up the FTFF and send it to Idaho and bring it 23 24 back. Don't bring in more waste until you cleanup

what you have got. Thank you very much.



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1 MR. PARHAM: Thank you. Let's see here, 2 Jacinta Heath; is that right? And after that, Reed 0 -- 0'-B-e-i-r-n-e. 3 4 MS. HEATH: Hello, my name is Jacinta Heath, 5 I am a student here at the University of Washington, 6 and I am pursuing a career in international 7 environmental law. I'd just like to retouch on an 8 issue that I think is really important and we haven't 9 spent enough time on, and that is the concept of environmental justice. I am going to use your own 10 words from your summary, "Environmental justice, the 11 12 fair treatment and meaningful involvement of all 13 people, regardless of race, color, national origin, or income, with respect to the development, 14 implementation, and enforcement of environmental laws, 15 regulations, and policies. Fair treatment means no 16 group of people, including racial, ethnic, and 17 18 socioeconomic groups should bear a disproportionate 19 share of the negative environmental consequences 20 resulting from industrial, municipal, and commercial 21 operations, or the agencies to make achieving 2.2 environmental -- I am sorry, I lost my place -- should 23 bear a disproportionate share of the negative 24 environment consequences resulting from industrial, 25 municipal, or commercial operations, or the execution



1 of federal, state or local or tribal programs or 2 policies. "Executive Order 12898 directs federal 3 4 agencies to make achieving environmental justice part 5 of their mission by identifying and addressing 6 agencies disproportionately higher than groups in the 7 agency programs, policies and activities on minority 8 and low income populations." 9 So if we take that into account, I would like you to -- I challenge you to attempt to view this from 10 different perspectives and create more incentives for 11 12 clean closure, not the development of new nuclear 13 energy plants. I think we should all consider changing our views of nuclear energy and realize that 14 it is not clean or safe, and that it is 15 disproportionately affecting people that aren't 16 reflected in your policies. 17 18 MR. PARHAM: Thank you. 19 Reed? And after Reed will be Lex Voorhoeve. 20 Did I blow that one too? 21 MR. O'BIERNE: Hello, my name is Reed 2.2 O'Bierne, I live in Seattle, Washington, thank you all for being here. 23 In the last two months, I live in a house 24 25 nearby here, actually we found that the heating fuel



45 1 tank in my front yard, which was actually, ironically, 2 put in the ground around the time that World War II ended, that tank has been leaking, similar to what the 3 4 gentleman spoke about earlier tonight. It is a 5 relatively small hole. We have dug the whole ground 6 up, dug up the tank, done an incredible amount of 7 environmental remediation, both in the front of the 8 house and the back of the house, which has a slope 9 towards the back. We had to pay for this out of our own pocket. The remediation is still going on. 10 11 People came to my house today and actually poured 12 these microbes in the ground that supposedly eat the 13 contamination. The question is, how can we possibly be 14 forced to pay for this kind of stuff, which I am happy 15 to do, because we need to clean it in my yard, but 16

something the size of this, what is going on in Hanford, has there even been any thought as to whether we would clean it or put ground in it, and talk about not digging all the way down to the bottom of the ground to where the contamination is and removing it. Ultimately it has got to be removed. The only way to do it is to do it right the first time. That's my main comment.

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My second point is I would like to point out,



46 1 or like to ask, we have got, on one hand, this long 2 convoluted question about what to do about this stuff and there is other conversations somewhere that DOE 3 4 and Ecology are involved in about licensing additional 5 open nuclear -- putting in nuclear power plants. Ι 6 don't see how you can have such a complicated issue as 7 what is going on with Hanford remediation, and none of 8 us being able to agree on how you are going to solve 9 that problem, and still consider the possibility that you are going to produce more of this stuff.... by the 10 way, no commercial enterprise will fund. So my second 11 12 comment is I wish that DOE and Ecology would make 13 comments from whatever department you are in to whatever department issued those licenses and share 14 some of this information with them, because the 15 consequences of this and the cost of this need to be 16 17 taken into account. Thank you. 18 MR. PARHAM: Lex? Carol Isaac? Is Carol 19 Isaac here? 20 MS. ISAAC: I am Carol Isaac, I have spent 25 21 years in the Department of Surgery doing research and 2.2 a couple of years working with earthquake remediation. First of all, our Department of Ecology, I 23 would like to address that. I would have been 24 25 appreciative had you done more to bring up your own



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alternatives rather than only accept what the feds have given us.

(Audience applause.)

MS. ISAAC: One alternative that really stands out and that is the cap. That cap is cosmetic. There is no other way around this. If you were in my Department of Surgery at the University of Washington and you walked up to a patient and say yes, you have a horrible mess there, that is a boil, huge infection under there, one of the worst in the country, as we have, we are going to put a Band-Aid on it, don't worry about it, you won't see it. It might go through your bloodstream, don't worry about it, it has a beautiful Band-Aid. We can't do that to Hanford. We can't do that to the worst place in the country. We have to be the model for cleaning this up.

Now, when you have this situation -- also I am also one of the people who had the oil tank with the nickel hole in the bottom of it. In the Summer of 2008, under that whole routine, I could look down, I swear I saw China on the other side. We had to do that, 250 feet. If there was oil under there or coal under there, we have the technology to get it out in no time and certain people would get the money for that.



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48 By the way, I think the military owes us this 1 2 and a lot more, and this cleanup delay is cleanup denied by the military. 3 4 (Audience applause.) MS. ISAAC: We have this problem sitting 5 б there. It isn't just materials going down into 7 possibly the groundwater, spreading out like crazy. 8 This is a 40-mile trench of absolutely toxic 9 radioactive material. We don't know how much, where it is going, we aren't following this stuff to where 10 it is really going. What we do in the Department of 11 Surgery, we have monthly morbidity and mortality 12 13 reports so we track what our record is, what we are doing, who is being harmed. Even if you can't clean 14 it up, we should have somebody out here telling us, or 15 giving us a protocol for surveying what is going on 16 with the human population in the area and the fish, of 17 course, and all of the other ecological problems with 18 19 the species. This is wrong. 20 Even if you are not going to put the money 21 right now into cleaning up, you should be there 2.2 monitoring, and we should be asking -- we should be telling, we should be telling the military come here, 23 look at our collateral damage while you're making it 24

over there. We need this taken care of here first.



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1 We are the taxpayer. 2 I think I will let it go there. Thank you. MR. PARHAM: Phoebe Warren. After Phoebe 3 4 would be Ken or Merry Ann Peterson, whichever would 5 like to go. 6 MS. WARREN: Thank you for coming to gather 7 our comments today, and thank you, my fellow citizens, 8 who have the energy and intelligence to study this 9 topic for decades and decades. I am a mechanical engineer, I work in Seattle, my name is Phoebe Warren, 10 and I went into mechanical engineering 30 years ago to 11 12 look at alternatives for nuclear power because it was 13 clear 30 years ago, as it is today, that we aren't up to the task. 14 In simple terms that are being proposed to us 15 today, I would recommend prohibition of off-site waste 16 entering Hanford and I recommend vitrification of all 17 18 high level waste, clean closure. But I don't really 19 think these are the proper terms, so stepping back for a moment, as far as I understand it, and this is not 20 21 after a huge study, there are people in the room who 2.2 know a lot more than I do, what we have at Hanford is numerous outcomes of previous cleanup efforts. After 23 24 a lot of work and many decades, we have got 25 contamination that is pretty befuddled from previous



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efforts.

So if we proceed now, ignoring secondary 2 waste and GTCC waste, in coming up with proposals and 3 4 recommendations, we are likely to come up with another 5 muddle that will produce another solution that will 6 create another generation of contamination. These 7 things don't just go away. They get mixed, they get 8 displaced, they get contained to various degrees. 9 As an engineer, all I can say is that we don't want the best possible technology. What we want 10 is to figure out what the hell we are going to do and 11 12 not piecemeal. And if as a society we have any sense of ethics, we should be coming up with minimum 13 standards that need to be met, by whatever is being 14 proposed. 15 So, for example, if we are not meeting 16 drinking standards, why aren't we spending more money? 17 18 The military in the United States is probably the 19 richest organization in the world. If any 20 organization could make these costs, the military could. It's a deliberate decision to permit such 21 2.2 conditions. I think part of the problem with these 23 dialogues is that a lot of the real basics aren't 24

brought to the table. You know, if we have a



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1	vitrification plant that is being built without a
2	design and we are looking at levels of future
3	pollution without considering GTCC waste and secondary
4	waste, we are not really thinking clearly, and I am
5	sure no one in the room is individually responsible,
6	but as a society, it is reprehensible. Thank you.
7	MR. PARHAM: Thank you. Merry Ann Peterson.
8	MS. PETERSON: I am Merry Ann Peterson,
9	M-e-r-r-y, A-n-n. Please, let's clean it up 100
10	percent, no excuses. Thank you.
11	MR. PARHAM: Thank you. Roxy Giddings
12	followed by Ryan Jarvis.
13	MS. GIDDINGS: Hi, I am Roxy Giddings. It's
14	fun to see all of my buddies and friends who have been
15	coming to these things forever and a day. I am a
16	downwinder, went through fourth grade through high
17	school, that is your growing up and maturing years. I
18	pray everyday that I won't do what my sister did, get
19	breast cancer, and dad died of non-Hodgkin's lymphoma,
20	which is cancer of the lymph system, and he and mom
21	grew up on Whidbey Island and that was a good thing,
22	because it seemed to be kind of clean out there, so
23	they got a good start.
24	I've got these things that have been coming
25	out in the paper lately, very interesting. Hanford



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might become a national park, January the 25th this year. Boy, the National Parks really knows how to take care of stuff. How far behind are they in their cleanup?

A new era for nuclear industry, this is from the Tacoma paper. I live in Tacoma now. February 17, "The federal guarantees authorized by Congress in 2005 were seen as an essential for construction of any new reactor because of the huge expense involved." I am sure it doesn't take any energy to make one of those plants, I mean, really, we are saving energy by having the new plants.

Nuclear waste politics trumps science, sense, that is certainly something I would agree with. That is an opinion from the editors at the News Tribune. Mixing politics with radioactive waste is never a good idea. Boy, you have got that. Everything that has to do with radioactive waste is mixed with politics.

Hanford to restart shipments of nuclear waste to the southwest. Okay. So they are going to cleanup contractors, CH2M Hill Plateau Remediation Company has hired 60 more employees to help dig up waste and determine if it is suitable for shipment. Well, we will see.

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Oh, my favorite one, where is my favorite



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1 That is the one where we are going to build a one? 2 new plant -- no, my favorite one is where the Vermont Yankee plant is leaking tritium out now and they said 3 4 it wasn't, they said they didn't have the kind of 5 pipes that would do that, and then in the same article 6 it says something about there's a whole bunch of other 7 plants that are leaking tridium too. 8 And today, I just got this from the AAA 9 magazine, Hanford tours reveals atomic age secrets. Don't you believe, don't you believe what they tell 10 you, because they lie, the people that work at Hanford 11 12 lie to us all the time, and so do all the people that 13 build the nuclear plants. We have been lied to for 50 -- how long has it been? 50 years? Let's see, I 14 am a great-grandma now. 15 Two botanists find rare life on an old 16 nuclear reservation. This article is so full of 17 18 errors, I can't believe it, but it is a result of 19 simply the distance between my grandparents, my parents, and my generation. There is, you know, some 20 21 more generations beyond me now. 22 Are we out? Oh, that is too bad, because I wanted to tell you that we need to follow the state 23 law, we need to have cleaner than the clean closure, 24 no more waste dump, no more stuff brought in, and that 25



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1 tridium can't be removed from the groundwater. 2 MR. PARHAM: Thank you. Ryan Jarvis. After Ryan, will be Karin Engstrom. 3 4 MR. JARVIS: Hi, my name is Ryan Jarvis, I am 5 a law student here in Seattle. I would just like to 6 address a couple of things. First of all, I learned 7 about Hanford just last year for the first time, and I 8 was really amazed that it is the most contaminated 9 site in the western hemisphere, and I was actually more amazed to learn about the befuddled cleanup 10 attempts that have been going on longer than I've been 11 alive. I'm only 23 and as I understand, not much has 12 13 happened, and some attempts that went down in flames to cleanup. So I urge the Department of Energy and 14 Ecology to really make the effort to do what is right 15 here. Empty the tanks to 99.9 percent of what is in 16 17 there, use state waste management laws to really -- to avoid landfill closure and clean closure, and also no 18 19 off-site waste. 20 It seems a little absurd to me to consider

accepting more waste to Hanford, considering it is already the most contaminated site in the western hemisphere. And then finally, I would like to address Mr. Lyon. I was a little disappointed that as you stood up here and discussed what the Department of



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1 Energy has put in their EIS and you have considered 2 it, but you haven't really taken a stance as of yet, and I would just like to read to you a provision from 3 4 your organic statute, the statute that created the 5 Department of Ecology. It says, "The legislature 6 recognizes and declares it to be the policy of this 7 state that it is a fundamental and inalienable right 8 of the people of the State of Washington to live in a 9 healthful and pleasant environment, and to benefit from the proper development and use benefit of its 10 natural resources." 11 12 I don't understand how the Department of 13 Ecology could -- this could be their guiding statute, and yet at the same time not take a stand on what is 14 right at Hanford and really insuring that our strong 15 state laws are enforced there to do what is right. 16 17 Thank you. 18 MR. PARHAM: Thank you. Karin Engstrom? 19 Sylvia Haven? Sylvia? 20 UNIDENTIFIED SPEAKER: She left. MR. PARHAM: She left, okay. Anne Jess? 21 2.2 Anne? Helga Kahr. After Helga will be Brian Bessembinders. 23 MS. KAHR: Helga Kahr, Seattle, three minutes 24 25 is inadequate to address this draft EIS, so I am going



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to reserve my right to submit extensive written comments.

When I was in the fourth grade, our class was taken on a field trip to the Zion nuclear plant in the state of Illinois, one of the first nuclear plants -commercial nuclear plants in the United States. I remember standing on a catwalk looking down at the spent fuel pool glowing blue. That was in April. In September, the girl who was standing next to me, my best friend, Leslie Collins, came down with a rare aggressive form of leukemia and died within two months. It was several decades later that I found out what killed her. I was representing atomic workers and medical workers who had radiation injuries.

The EIS is entirely inadequate in addressing the biological effects of ionizing radiation. Briefly, there is no safe level of ionizing radiation to which human tissue can be exposed; and second, there is no way to hide from gamma rays. You simply can't.

Plutonium 239 is an isotope that remains dangerously radioactive and toxic for 250,000 years. The draft EIS doesn't begin to look at that time frame. One pound of plutonium in the atmosphere, breathed in by the people, will kill every human being



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1 on this planet, and yet we are discussing, you know, dealing with this stuff. That is insane. 2 The draft EIS talks about how many adult men 3 4 will get cancer in the future from the drinking water 5 from the leaching of radioactive isotopes into the 6 ground. They do not address what ionizing radiation 7 will do to children, and ionizing radiation harms 8 children more because their cells are dividing more 9 quickly. In the state of Belarus, which is where most of the Chernobyl contamination went, the medical 10 doctors there are writing reports about the health of 11 12 the children there. There is not one healthy child in 13 the entire country of Belarus. They all have thyroid disorders and cancers and childhood leukemias. That 14 is what radiation does. 15 There is really no ideal solution to this 16 problem of nuclear waste, but we need to do the very 17 18 best we can do, and that is to vitrify as much as 19 possible and to develop a deep geologic site to put 20 the waste. That is not Hanford, that is not Yucca 21 Mountain. Any other solution is insanity. 2.2 MR. PARHAM: Thank you. Brian, and after Brian will be Ruth Yarrow. 23 MR. BESSEMBINDERS: Okay. So first, this is 24 25 a horrible place to put nuclear waste. It is going to



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get into the drinking water, it is going to get into farms, agriculture, shipped around the country, bottled water, I don't know, do we take any from this area, we should look at that. And yeah, it is affecting Oregon, Washington, anyone down river, and it is guaranteed to cause cancer. At what amount, you guys can argue.

This keeps happening in many places. Where I am from in Omaha, we had a drinking water plant that was going to be put in. There was a former weapons manufacturing plant in the area, and basically they were like, you know, it is not going to leak in until, you know, 30, 40 years, but we are going to put this drinking water plant, which will suck more water out. It is providing water to a city with the richest man in the world, so it is still happening there.

Tennessee, I mean, all over the country, gigantic pools of sludge from coal power plants, I mean, no matter what energy you are talking about here, except for renewable resources, which we can actually utilize, are going to cause a negative effect. Natural gas, tracking, putting benzonite into the water.

You know, we just can't keep fighting this. We can't keep fighting it forever. We can't have



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59 1 these alternatives. We can't have these half efforts 2 at cleaning it up. It has been happening forever, and basically policy is to just keeping having these 3 4 meetings and saying, well, we will take that 5 opportunity to bury the waste in the areas you care 6 about most. 7 The federal government is overtaking the 8 state standards, make no mistake. There are state standards that do not allow this to happen and why 9 isn't the federal government taking this into account? 10 Yeah, Governor Gregoire, she has the 11 12 authority to stop this, why isn't she? She needs to 13 use her abilities to stop the permitting process. Ιt should not happen in the future, it should not happen 14 We shouldn't have to keep on fighting this, but 15 now. it seems we're going to have to. 16 17 Environmental impact statements are only 18 supposed to be 300 pages, they are supposed to be 19 understandable to the common layman, the public. 20 These are becoming legal documents, rapidly, and as we've seen earlier, chemistry professionals can't 21 2.2 figure this stuff out. I mean, this needs to be on 23 the Seattle channel, this needs to be broadcast to 24 people. We need to get over -- we need to realize it 25 is our own greed that causes this, too, and it has



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60 1 caused a lot of the other problems. 2 Yeah, clean closure, I mean, clean -- we need 98 percent, whatever we can do. We need to switch to 3 4 clean energy. We need to stop trying to push the 5 nuclear agenda, and we need to consider that -- I 6 mean, is Obama -- hopefully what he is trying to do is 7 offer this ridiculous proposal in the hope that the 8 people around the country will realize that we can't 9 build nuclear power plants, and hopefully, you know, we actually comment and we say this is ridiculous and 10 hopefully that is his plan. 11 12 MR. PARHAM: Three minutes. 13 MR. BESSEMBINDERS: Yeah, water will be more expensive in the future. Go to Portland. 14 15 MR. PARHAM: Thank you. Ruth Yarrow, and after Ruth will be Barbara Zepeda. 16 17 MS. YARROW: My name is Ruth Yarrow, I am an 18 ecologist who came here to work with Physicians for 19 Social Responsibility on the Hanford issue 13 years 20 ago. At that time, the Department of Energy said there are 200 feet of soil beneath the tanks, and if 21 2.2 any leaks, it would adhere to the soil particles and would not enter the groundwater. Six months later, 23 there were blaring headlines in the newspapers in 24 25 Seattle saying radioactivity found in the groundwater



under Hanford.

2 When I read about the amount of radioactivity that is considered acceptable or on the verge of 3 4 dangerous, if you graph that, it has gone down very steeply over the many decades that we have dealt with 5 6 radioactivity, to a tiny fraction of what we 7 originally thought was what human beings could take. 8 In other words, given the mistakes that DOE thought 9 that the groundwater was not going to get contaminated, or our original naivete about what 10 radioactivity could do to the human body, I think we 11 need to put a huge chunk of humility into any of these 12 decisions and realize we don't have any idea of the 13 long-term effects, the synergistic effects of what is 14 15 happening at Hanford. So that is one point I would like to make. 16

17 The other is the money is there. I made a graph once at one of these hearings with a piece of 18 19 string, and one represented the billions that have 20 been spent on producing and delivering nuclear and --21 weaponry and it went all the way around a building, a 2.2 room this size. At that point, the DOE was saying we don't have enough money to do the cleanup. The amount 23 24 that was being asked for for cleaning up Hanford was 25 like that much. So we have spent incredible amounts



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62 1 in producing this waste. We can find the money to 2 clean it up if the political will is there and if our Department of Ecology will stand up and use the laws 3 4 that it has at its back to demand what cleanup is 5 needed. Thank you. б MR. PARHAM: Thank you. Barbara, and then 7 after that, will be Blair Anuntson. 8 MS. ZEPEDA: Yeah, I live in Seattle and I 9 have been coming to these things for years. I was a Bomber, a Richland Bomber, I was -- I went to high 10 school in Richland and my mother died of pancreatic 11 12 cancer, she worked in a decontamination lab. Thev 13 were very low paid workers, all of the workers, and so there was one person there that I had to listen to her 14 all through high school come home and complain about 15 how none of the supervisors there would allow them to 16 really follow the safety rules. They'd have safety 17 18 meetings, but they were never allowed to follow them, 19 except for Russ Knights, and I don't know if you can 20 find any Russ Knights in Hanford anymore, because 21 essentially, the problem with Hanford is the problem 2.2 with the military industrial complex that Eisenhower talked about, and it is intellectual and economic 23 incest. 24 25 It is the worst form of incest, because it



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hides the facts, it hides the dollar facts, and if you 1 2 can't even get the dollars straight, how in the hell can you get all of the protons, neutrons, and the 3 4 million chemical formula right? It is deliberate and 5 yet they are brilliant people. I was late to this 6 meeting because I was listening to European Journal on 7 CBTBS, a Tacoma PBS station. A German -- one of the 8 best German engineers was talking about why the new 9 subway train tunnel in Cologne was a catastrophe. It flooded, it undermined a building there and museum, 10 and he said the reason is that they are allowing the 11 12 contractors to monitor themselves. You cannot have -- and I would -- if you 13 would take this book and print it in your -- this is 14 Eldon Caldicott's book, a New Nuclear Danger, and 15 talks about George Bush and the military industrial 16 17

complex, but this goes back to Eisenhower and it is a list of the Dirty Dozen, the ten top contractors that have been involved in the weapons and in so-called cleanup and the so-called peaceful uses of nuclear energy, which our leading politicians, Andrew Jackson and John Adams pushed, and they bought off the environmentalists because they gave them some little parks. They didn't tell them the parks -- that the water running through those parks was all going to be



1 nuclearized with those darling little plants. And here is the other -- this is the 2 political incest of the military industrial complex, 3 4 with the documentation of the major corporations that 5 have played this game because they need more money, 6 the more messes they make. When you have got an 7 economic system, like Wall Street, you not only 8 destroy the environment, you destroy the economy, and 9 while you're ruining the world. And then here I have -- I am going to give 10 you these 20 pages from 159 pages of the latest City 11 12 Light bond prospectus. In this is a hidden subsidy of City Light through the Northwest Energy that we are 13 subsidizing nuclear plants and this is what allows 14 Obama to come forward with this big plan, because he 15 can hide it in the budget, because in here, they tell 16 you, okay, it's like 50 million but it has gone up to 17 18 500 million within ten years of financing within City 19 Light, because we have got all of this wonderful 20 unused bonding capacity, which the municipal ownership lead built the first public utility in the 21 2.2 United States at City Light in 1905 and it has been bastardized. Thank you. 23 24 MR. PARHAM: Blair Anuntson? Jim Kelley. 25 MR. KELLEY: I am Jim Kelley from Seattle.



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Thank you for giving us the opportunity to comment. I wanted to say, first off, I am not a scientist. My training is in communications and the law, and because of that, I am not going to make a scientific argument, but I do want to make a personal appeal and I am going to direct it to you, because you are the two public employees who are here.

8 I am a former state and county employee, and 9 so Jeff and Mary Beth, I just want to say that, you know, I am a citizen of the United States and a 10 lifelong resident of Seattle, Washington, so you both 11 12 work for me, and you both work for all of the people here, but more importantly, you work for all of these 13 people's children and their children and future 14 generations that will go on, hopefully, for many, many 15 generations, and you might be also pleased to know 16 that I haven't reproduced, but it is important to keep 17 18 that in mind, because when government deals with big 19 issues, and I mean, really important issues, like the 20 abolition of slavery and the kinds of things that have 21 made this, you know, have made this a great country, 2.2 when it has always taken heroes to step up from the 23 ranks of everyday workers, and, you know, the thing is that when you work for government, it is so easy to 24 25 just do things the way it has always been done, and



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this environmental impact statement, I am sorry to say, I have worked on some EISs myself, this environmental impact statement is the perfect example of that.

5 This is a 6,000-page document that no one can 6 understand, because chemists can't understand it and 7 attorneys can't understand it. What we can do is we can try to boil it down and understand bits and 8 9 pieces, and yes, I'll make the same points that everybody else here has made, you know, that the --10 about the cleaning up to 99.9 percent and all of that, 11 12 but that is not the important issue here. The 13 important issue here is for someone, and I'm saying this for the record, someone who works on these issues 14 at the US Department of Energy, at the state 15 Department of Ecology, and the governor's office, and 16 the Oval Office, somebody should step up and say 17 18 enough is enough. This has to change. Our approach 19 to the way we deal with the cleanup of nuclear waste has to change. 20

This is a critical, critical issue to the health of our future generations and to the health of our environment, you know, our ecosystems and everything else that depend upon clean water, and boy, I am just begging you, please, step out of that --



67 that inertia that comes with being a part of a system 1 2 that does things over and over the same way. Step out of it, be a hero. Thanks. 3 4 MR. PARHAM: Fred Miller. After Fred Miller 5 will be Robert MacDonald. 6 MR. MILLER: My name is Fred Miller, I am the 7 president of Peace Action of Washington and a board member of Peace Action, which is America's largest 8 9 peace organization. First, I want to talk a little bit about 90 10 percent and 99 percent and 99.9 percent. Speaking to 11 someone whose formal education in mathematics ended 12 13 when I was 15, recently there were headlines about a middle-aged white man who went to the Pentagon and 14 started killing people. I am a middle-aged white man, 15 and his father and mother had reported that he was 16 My father has been saying I was crazy for 17 crazy. 18 years. And he hadn't spoken to his parents for quite 19 a while. I haven't spoken to my parents for about 20 three weeks now. So I want you to think, okay, what 21 are the chances that middle-aged white men in this 2.2 audience are psycho gun toters? Would you keep your 23 job if you knew that you were going to a place where 24 there was about 50 middle-aged white men and you knew 25 that 90 percent of them were not psychotic gun toters?



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Would you keep your job if that was 99 percent? Would you keep your job if it was 99.9 percent? Which means about, oh, one headline nationwide every 20 hearings. 99.9 percent is not that high.

5 We had an attorney and a chemist with much 6 more education than me, who couldn't understand the 7 It only took me a few minutes and I have no EIS. 8 college background. One thing I noticed is it doesn't 9 seem to talk about the ecology of the Hanford area in the time we are talking about. I have spoken with 10 atmospheric scientists and I asked them, I was just 11 12 having fun, okay, how bad could it get? Could we have 13 West Texas weather in Hanford? You know, West Texas, they get thunderstorms that dump an inch of rain in 14 four or five minutes, that dumps a foot of rain, and 15 this not wildly unusual. It happens someplace in --16 17 actually East Texas more or less every year, a foot of rain in 24 hours. He said we have no idea. 18 It is 19 entirely possible that we could make East Texas weather look placid. 20

Are you planning to have it clean enough for who knows what kind of weather is heading for Hanford in the next hundred years, to say nothing about a thousand years? How clean are you planning on making it? Thank you.



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1	MR. PARHAM: Thank you. Robert MacDonald,
2	it's a late sign-up. Robert? No?
3	Have I covered everyone who signed up? I
4	believe I have. There are a lot of names here. I
5	would like to turn now to people who have not signed
6	up who want to offer comment.
7	Is there anyone who would like to provide
8	yes, sir. Come on up.
9	MR. HEGGEN: Hello, my name is Richard
10	Heggen, H-e-g-g-e-n, and I am a former ecology
11	employee who used to work on the single shell tanks,
12	and I will keep this kind of brief. Basically, in
13	reviewing the EIS and my knowledge of other documents
14	and issues on Hanford, there is about four key points
15	I would like to make.
16	Institutional controls, this is the first
17	point, institutional controls, like covers, liners,
18	fences, et cetera, will fail over time and a shorter
19	time than you probably think. Existing the second
20	point is existing contamination has already been shown
21	to show serious human health and environmental
22	effects. Even if you clean it up to 99.9 percent or
23	better, you have already got issues out there. You
24	can't get to some of these amazing amounts of
25	chemistry and radiological inventory from past ditches



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and cribs and so forth, which actually kind of thwarts 1 2 the tank form inventories. Point No. 3 is that the EIS is incomplete. 3 Ι 4 covered those points earlier in Gerry's presentation, 5 and the last point is a lack of meaningful 6 characterization out on-site. This has been going on 7 for years, just kind of a real slow paced 8 characterization. There is not enough 9 characterization to actually support the modeling done in the EIS. It is pretty standard methodology is to 10 validate your model characterization, go out and take 11 some field samples, find out if that model is valid or 12 13 not. I didn't see that in the EIS. Because of all that and other issues, I would 14 15 just like to say for the record US DOE needs to conduct the most thorough possible cleanup on-site, 16 and I am talking at least 99.9 percent or better. Dig 17 18 those tanks out, you know, take a good look at the 19 linings and other containmented areas on-site. And 20 also, the most important point is not to bring any more waste to Hanford whatsoever. 21 Thanks. 2.2 MR. PARHAM: Thank you. 23 MR. DIPESO: Good evening. Jim Dipeso, 24 D-i-p-e-s-o. Good Italian name. Please spell it 25 right.



1 I'm with the Republicans for Environmental Protection. We will have detailed written comments to 2 3 be submitted later. Very briefly, the primary theme 4 of our letter is there should be no further 5 consideration of importing off-site waste into 6 Hanford. Hanford should not be a nuclear waste 7 repository, or as -- if you will forgive me the humor 8 for the lateness of the hour, a former Nevada senator 9 once said in regard to Yucca Mountain, he called it a 10 nuclear waste suppository. Anyway, importing off-site waste is at cross 11 purposes with thorough cleanup of the radioactive and 12 13 chemical wastes that endanger the Columbia River. We 14 support 99.9 percent cleanup standards, a clean 15 closure, not landfill closure, because all landfills leak. Anything else is irresponsible and thank you 16 17 and we will be in touch. 18 MR. PARHAM: Thank you. Anyone who has not 19 provided a comment yet is invited to at this time. 20 No? We'd like to turn to people who have 21 already commented who would like to provide additional 2.2 comment. MR. POLLET: Gerry Pollet with 23 24 Heart of America Northwest. I have several points I 25 would like to make tonight. First, I would like to



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start thanking those who have stayed to this late hour. Your participation and your presence makes a big difference, and hopefully someone back on the top floor of the Forestal (ph.) building, Energy Department headquarters, will hear about your comments tomorrow morning, and perhaps someone at the governor's office as well.

8 First off, in this very room, not so many 9 years ago, several people here remember that there was a hearing on the proposed restart of the FFTF nuclear 10 reactor, and there were probably 3- to 500 people here 11 12 that evening. There are at least 100 people I counted 13 here tonight talking about the legacy of nuclear weapons and reactor production at Hanford and a need 14 for full cleanup. Luckily, we won a decision after 15 five or six years of hard citizen organizing that that 16 reactor was to be shut down. 17

What is beyond me and inexplicably is why the 18 19 Energy Department is even asking the question as to 20 whether or not you fully remove the reactor. There is 21 a standard in state law that for all energy facility 2.2 sites, we restore the site by removing the reactor. Oregon did this with the Trojan nuclear reactor on the 23 Columbia River. For the other nine nuclear weapons 24 25 production reactors along the Columbia River, the



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1 Energy Department has long agreed that it has to 2 remove them entirely. So what is different about this FFTF reactor? There is no difference. It should be 3 4 removed entirely, not just to grade level, but remove 5 it entirely so that that portion of the Hanford site 6 can be restored for other uses, including treaty 7 rights to use that portion of the site, which are not 8 compatible with leaving it under account. And this 9 decision is one that is so by bizarrely sensible that I have been listening to presentation after 10 11 presentation and going, how come the State of 12 Washington ignores its own site closure standard for 13 reactors and energy facilities, when it says in its presentation, we agree there isn't much difference 14 between capping it or taking it apart and removing it 15 entirely. 16 17 Did the State of Washington Department of

18 Ecology forget about its own site restoration 19 standards? Yes, apparently so. And that's not 20 excusable. The Energy Department should have been 21 reminded of that standard. It wasn't really -- it was 2.2 up to the contractor and the Energy Department to be knowledgeable about it, but it is certainly logical 23 24 for them to rely on the State of Washington to say, 25 hey, we are a cooperating agency, you need to know, as



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you draft this, that we have such a standard. So what is going on here? I would like to hear from the State of Washington how it missed this. I would really like to hear that answer.

5 It is important that the reactor be entirely 6 dismantled and the site restored to as beneficial use 7 a condition as is possible. As has been stated over 8 and over again tonight and in prior hearings, caps 9 fail. Caps fail and result in exposures to people. Sometimes they fail because of deliberate intrusions, 10 so it's not wise to have isolated spots all over the 11 12 560 square miles of Hanford where you have got caps as 13 opposed to trying to consolidate as much of the waste as possible on this one small area in the central 14 That is inevitable, but the landfills that 15 plateau. are proposed are also projected to leak without even 16 adding off-site wastes, and let's think about that in 17 a final thought for tonight. 18

The landfills will release far in excessive standards, even without off-site waste being added, and therefore, the reasonable alternative is not only to not add more off-site waste, but this EIS needs to ask the question how much of Hanford's existing waste should be exhumed, dug up, treated, and sent to deep geologic repositories elsewhere in the country? Not



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1 above groundwater, not next to rivers, but dug up and 2 removed and sent to deep geologic repositories because it doesn't belong next to a major river, it doesn't 3 4 belong above potable groundwater. Thank you. 5 MR. PARHAM: Thank you. Anyone else who 6 would like to provide a comment who has already. Yes, 7 sir. 8 MR. RASBERRY: No one has brought this up, 9 but I think it is of interest to most people here that the US Department of Energy just had a press release 10 on March 4th, tours of Hanford are available. 11 You 12 usually can't go to Hanford, it is usually closed, but 13 one day a year, they make reservations for the rest of the year. If anyone wants to take a tour, then you 14 have to register on that day. The tour is free, it is 15 information intensive, it is rather exhausting, it is 16 about five hours. You are going around Hanford site. 17 18 The date to register is tomorrow. If you 19 want to go on a tour sometime in the next year, you 20 have to go to the web site tomorrow early and 21 I have been on the tour, it is a lot of register. 2.2 fun, I recommend going if you are interested. You get 23 to meet some of the people there, it is what it is. 24 If anyone would like to talk to me about it, I will be 25 around. Thank you.



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1	UNIDENTIFIED SPEAKER: Does it say when the
2	tour is going to be?
3	MR. RASBERRY: It is April until September,
4	tours.
5	MR. PARHAM: Do we have an additional
6	comment?
7	UNIDENTIFIED SPEAKER: Can you give us the
8	web site?
9	MR. RASBERRY: I will be around.
10	Hanford.gov. Hanford.gov.
11	MS. ISAAC: I would like to make an
12	additional comment. When we are using these units of
13	99.9 percent, this is by volume. I would like us to
14	use a different way of talking about it. Instead of
15	by volume, I would like to be talking about this with
16	respect to its toxicity or its radioactivity, heavy
17	metal content, whatever the bad stuff is. I want that
18	to be talked about. What percent of that is being
19	left, not what percent of volume is being left. That
20	is part of the obfuscation of this statement.
21	And the other thing is, you probably don't
22	know this, but the federal government does have a law
23	concerning consent forms. When people participate in
24	research, which I feel we are all doing right now is
25	research, when people participate in research, the



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1	federal government requires that consent forms be
2	written in language that the average person
3	participating would be able to understand. Now, it is
4	very low for medical research, it is seventh grade.
5	But we have to take those consent forms to people,
6	committees, whatever is set up, boards, review boards,
7	to look at those for us and let us know if we have
8	passed that test. I think that you folks should be
9	submitting your materials and the to some board and
10	to let you know if you have passed that test before
11	you come to us. Thank you.
12	MR. PARHAM: We would like to thank you for
13	coming out tonight. That concludes our program. This
14	is No. 8 in the series and thank you very much. You
15	have been a very patient and curious crowd. Thank you
16	very much and see you later.
17	
18	
19	(The meeting concluded at
20	10:00 p.m.)
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22	
23	
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25	



March 8, 2010

78 1 CERTIFICATE 2 3 STATE OF WASHINGTON) 4) ss. 5 COUNTY OF KING) 6 7 I, Holly Buckmater a Certified Court Reporter and an officer of the Court, under my commission as a Notary Public 8 in and for the State of Washington, do hereby certify: 9 That the foregoing deposition transcript of the witness named herein was taken stenographically before me and transcribed under my direction; that the transcript is a 10 full, true and complete transcript of the proceedings, including all questions, objections, motions and exceptions 11 of counsel, make and taken at the time of the foregoing proceedings, to the best of my abilities; 12 13 That I am not a relative, employee, attorney or counsel of any party to this action or relative or employee of any such attorney or counsel, and that I am not financially 14 interested in the said action or the outcome thereof; 15 That the witness, before examination, was by me duly sworn, and the transcript was made available to the witness 16 for reading and signing upon completion of transcription, unless indicated herein the waiving of signature. 17 IN WITNESS WHEREOF, I have hereunto set my hand on this 18 15th day of March, 2010, at Shoreline, Washington. 19 20 21 Holly Euckmaster Notary Public in and for 22 the State of Washington 23 residing in Seattle. 24 My commission expires: 25 November 9, 2010.

