U.S. DEPARTMENT OF ENERGY MINERALS MANAGEMENT SERVICE OFFICE OF ENVIRONMENTAL EVALUATION

AND

ARGONNE NATIONAL LABORATORIES

+ + + + +

PUBLIC SCOPING MEETING

ON

GREATER-THAN-CLASS C LOW-LEVEL RADIOACTIVE WASTE ENVIRONMENTAL IMPACT STATEMENT

MONDAY

AUGUST 27, 2007

6:00 P.M.

COMFORT INN & SUITES COLUMBIA GORGE WEST 477 NW PHOENIX DRIVE TROUTDALE, WASHINGTON 97060

www.nealrgross.com

Public Comment Moderator:

Holmes Brown

Present for the Agency:

Christine Gelles, Director Office of Disposal Operations Office of Environmental Management U.S. Department of Energy Cloverleaf Building (EM-12) 1000 Independence Ave., SW Washington, DC 20585 (301) 903-1669

GEORGE DIXON, Senior Technical Advisor GTCC EIS Department of Energy

JOEL KRISTAL Office of Disposal Operations Department of Energy

JAMIE JOYCE, GTCC EIS Document Manager Department of Energy

<u>Public Commenters</u> :	PAGE
Mary Gautreau	36
Ken Niles	39
Natalie Trayer	42
Greg de Bruler	44
Bill Mead	52
Bob Hedlund	58
Cherie Lambert-Holenstein	61
Dr. Joyce Young	63
Keith Harding	66
Gerry Pollet	68
Angela Crowley-Kuch	75
Ruth Curpiz	78
Dr. Catherine Thomasson	79

Public Commenters (Cont'd.):	4 <u>PAGE</u>
Paige Knight	82
Karen Harding	88
Shannon Palermo	90
Liz Gilbert	91
Chuck Johnson	92
Tiago Denczuk	95
Les Davenport	97
Dona Hippert	101
Lloyd K. Marbet	104
Catherine Chudy	109
Louisa Hamachek	111
Rachel Pecore	115
Daniel Swink	116
Terry Hammond	118
Carol Earnert	119
Les Davenport	120
Bob Hedlund	122

(6:41 p.m.)

5

MR. BROWN: Good evening. Welcome to this public scoping meeting on the Proposed Environmental Impact Statement for the disposal of greater-thanclass C low-level radioactive waste. The development of an environmental impact statement for this project by the Department of Energy's Office of Disposal Operations is required by the National Environmental Policy Act.

My name is Holmes Brown. I will serve as the facilitator for this evening's meeting. My role is to ensure that the meeting runs on schedule, and that everybody has an opportunity to speak. I'm not an employee of the Department of Energy nor an advocate for any party or position.

17 At the registration table, you should've 18 received a green participant's packet. If not, please 19 raise your hand, and we can bring one to you. Ιt 2 d contains important information on the presentation and 21 is a convenient place to take notes during the briefing that will follow in a few minutes. 22 23 So -- okay -- we've got one, two -- and 24 we've -- okay -- we've got two more. Anybody else?

Okay. All right. Fine. Good.

25

3

4

5

8

9

There are three purposes for tonight's meeting. First is to provide information on the content of the proposed environmental impact statement, or proposed EIS, and on the National Environmental Policy Act, also known as "NEPA," that governs the process. The second is to answer any questions on the proposed EIS and on NEPA. And third, to receive and record your formal comments on the proposed EIS. The agenda for tonight's meeting reflects these purposes.

We'll begin with a presentation by Ms. Christine Gelles regarding the Proposed Environmental Impact Statement for the disposal of greater-thanclass C waste. Ms. Gelles is the Director of the Office of Disposal Operations, which is the DOE office charged with preparing the EIS.

To answer your questions, project staff will be available throughout the evening at the display of posters in back. They can discuss the proposed EIS, NEPA, the contents of the printed materials in the participant's packet, and also the contents of the DOE presentation.

Following Ms. Gelles's presentation, we will recess briefly so the public can follow up with any questions that may occur as a result of the

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

10

www.nealrgross.com

presentation. Once we reconvene, the court reporter will be available to receive your comments and suggestions regarding the scope of the proposed EIS. All your comments will be transcribed and made part of the permanent record.

We'll begin with a presentation by Ms. Christine Gelles. She will discuss the background of the project and the purpose and basic elements of the proposed EIS.

MS. GELLES: Good evening, ladies and 10 11 gentlemen, and welcome to the greater-than-class C low-level radioactive waste Environmental Impact 12 13 Statement public scoping meeting. I will refer to the document throughout the presentation as the GTCC EIS. 14 My name is Christine Gelles, and I am the Director of 15 the Office of Disposal Operations, which is at the 16 17 Department of Energy Headquarters within the Office of 18 Environmental Management.

My office is the office with the statutory responsibility to develop the environmental impact statement to analyze disposal alternatives for commercial greater-than-class C low-level waste. We have been charged by Congress to do this and to take actions related to preparing this EIS. This NEPA process, which we are now in the public scoping

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

www.nealrgross.com

period, is a very important process. It's one where, without public input, we would not be able to proceed with a document that is comprehensive. And I'm very pleased for that reason to see you all here. This is the largest -- by far the largest attendance that we've had at any of the public scoping meetings to date. I think it's a real testament to your interest and commitment to ensuring that we had a quality document.

This meeting is your opportunity to 10 11 present your comments, your concerns, your issues, your suggestions regarding the scope of the GTCC EIS 12 13 as we have it currently proposed. The poster boards in the back provide you some information. 14 The materials in your folder provide a little bit more 15 detail. And again, we have brought the entire project 16 17 team here so we can answer your questions throughout 18 the evening.

All comments received through this process will be very carefully considered as we work through the process of analyzing and developing a disposal capability for greater-than-class C low-level waste. The National Environmental Policy Act, referred to as "NEPA," requires that an environmental impact statement be prepared for any major federal

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

7

8

9

www.nealrgross.com

activity that has the potential to impact the quality of the environment. The Department has determined that the development of a GTCC disposal capability constitutes a major federal action, and therefore needs to be analyzed throughout an environmental impact statement. We are in the beginning stages of the NEPA process, with the primary focus at this time being the identification of the scope of the GTCC EIS, including proposed disposal alternatives, such as disposal locations and disposal methods.

The comments we receive here tonight will be considered in preparing a draft environmental impact statement. That draft environmental impact statement will then be made available for public comment, and the comments received on that draft document will be carefully considered as we work to prepare a final environmental impact statement.

As I will discuss later in this presentation, and probably repeat several times, before we can make a decision on ultimately the disposal solution for greater-than-class C low-level waste, the alternative or the alternatives to be implemented, DOE must first report to Congress on the alternatives that were considered and await their

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

10

www.nealrgross.com

action before implementing the record of decision or the preferred alternative.

2

5

8

Let me be clear. You can see that we have just started this process, and we have several years of careful analysis ahead of us and work ahead of us before we will be ready for implementation. And again, Congress will have a role in that implementation.

Before I get started with the slide 9 presentation, I thought it would be helpful if I 10 provide you with just a brief description of what 11 greater-than-class C low-level waste is, and we'll get 12 13 into it in a little more detail throughout the slides. GTCC low-level waste is generated from commercial 14 activities, such as the production of electricity from 15 nuclear reactors. It also is produced when 16 17 radioactive sealed sources which are used in common 18 everyday practice, such as the diagnosis of cancer, 19 when they become disused or discarded, they may become greater-than-class C low-level waste. 20 21 The volume of greater-than-class C low-

22 level waste is small compared to the other three 23 classes of commercial low-level waste that is 24 generated throughout the nation and regulated by the 25 Nuclear Regulatory Commission. Those classes are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

(202) 234-4433

classes A, B and C. And again, one of the poster boards in the back provides you with a description of those various classifications. But greater-than-class C low-level waste has a higher concentration of radioactivity, and therefore it requires special disposal considerations.

A copy of the presentation is in the green folders. You can follow along. Hopefully you'll have some room for making some notes or taking down questions that we can take during the recess. It will also be posted on the GTCC EIS website. That web address is on the next to last slide in the presentation, as well.

So let's get into the slides. Can you see this okay, or do I need to turn some lights down in the front? It's okay? Great. Thank you.

17 The publication of the Notice of Intent 18 serves several purposes for the Department of Energy. 19 It was issued on July 23rd, 2007, and then a correction was posted on July 31st to correct a 20 21 printing error that occurred in the inventory table, which is a very important part of the Notice of 22 A copy of both the original notice and the 23 Intent. correction are included in the folder. 24

2

3

The Notice of Intent announced the Department of Energy's intent to prepare an 2 environmental impact statement for disposal of 3 greater-than-class C low-level waste. It also 5 announced our intent to include DOE's greater-thanclass C-like waste streams in the same document. Ιt formally initiated the environmental impact statement process. It requested public comment on the proposed 8 scope of the EIS and announced these public scoping 9 meetings. It provided some summary information on the 10 greater-than-class C low-level waste stream and the 11 DOE greater-than-class C-like waste inventories, which 12 13 together over the life cycle of generation that we're 14 analyzing in this -- that we propose to analyze in this document total just over 5600 cubic meters. 15 I want to put that volume of waste in 16 17 context -- not to minimize it -- because although it 18 is a small volume, again, it has a significant amount 19 of radioactivity. But 5600 cubic meters is less than

of radioactivity. But 5600 cubic meters is less than the transuranic waste that was shipped to Waste Isolation Pilot Plant in Carlsbad, New Mexico this year alone. In fiscal year 2007 alone, we've shipped over 7,000 cubic meters of waste this year alone. Over 50,000 cubic meters of defense transuranic waste

www.nealrgross.com

has been shipped to Carlsbad, New Mexico since it opened back in '99.

The Notice of Intent identifies the purpose and need for action. It identifies the proposed action. And again, we'll go into these elements in some detail, because this is the proposed scope, and this is the very reason why we are here tonight is to invite and take your comment on these elements. It identifies the proposed disposal locations and the methods and the alternatives, the specific designs.

In response to the public comments that we received on the Advance Notice of Intent, which was published in May of 2005, and it identifies that the U.S. Environmental Protection Agency will be participating in this document as a cooperating agency, and the Nuclear Regulatory Commission as a commenting agency.

Purpose and need for action. The reason we are here is because NRC and agreement state licensees have generated, and will continue to generate, greater-than-class C low-level waste for which today there is no permitted disposal capability. Again, I want to be clear, we're talking over the life cycle about a relatively small volume of waste as we

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

13

2

5

8

9

10

propose it today. But some of it does exist today. And until we proceed with this EIS and ultimately select a disposal site, that waste stream has no disposal outlet.

DOE has a statutory responsibility for developing the disposal capability for this waste. 6 And we'll talk about those specific statutory requirements in some detail. We also own and generate 8 certain low-level waste and transuranic waste streams 9 that have characteristics very similar to the 10 11 commercial greater-than-class C waste, but which today we do not believe have a disposal pathway. We refer 12 13 to this as DOE greater-than-class C-like waste. We will discuss the waste inventories and drivers in a 14 little bit more detail in the slides to come. 15

There are three primary legislative 16 17 drivers to developing a disposal capability for GTCC 18 low-level waste and for doing this environmental 19 impact statement. The first and most foundational is 2 d the Low-Level Radioactive Waste Policy Act Amendments 21 of 1985. It is this statute that gave specifically the Department of Energy the responsibility for 22 23 developing the greater-than-class C low-level waste 24 disposal capability. The National Environmental 25 Policy Act -- or "NEPA" -- of 1969 requires federal

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

15

agencies, such as the Department of Energy, to consider the environmental impacts of our proposed action and alternatives to those actions in the decision-making process. It establishes the framework for public input, which is incredibly important to our evaluation.

Then more recently, the Energy Policy Act of 2005 gave us two specific requirements to move us 8 along in this EIS process. It requires the Department 9 to submit a report to estimate the cost and schedule 10 for completing the EIS and reaching a record of 11 decision. We did submit that report in July of 2006. 12 13 That report is available on our DOE Greater-Than-Class C Project webpage. And again, you have that 14 link in the slides. 15

It also requires the Department to submit 16 17 that report on the alternative or alternatives 18 considered through the EIS, including the other types 19 of information that were previously required in a 1987 report to Congress required by the Low-Level Waste 20 21 Policy Act Amendments of '85. And we must await Congress's action before we implement a record of 22 23 That report to Congress will be submitted decision. after the final EIS is issued, and will be in large 24 25 part a summation of the EIS identifying the specific

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

1

2

3

4

actions that might be required by Congress to facilitate implementation of a disposal solution. Again, what this means is that DOE will be unable to take action as a result of this document without the support and involvement of Congress.

So what is greater-than-class C low-level Well, before you can understand greater-than-7 waste? class C low-level waste, we have to talk about what 8 low-level waste is. Unfortunately, the statutory and 9 regulatory definitions are rather complicated, because 10 it defines -- they define low-level waste by what it 11 is not. Low-level waste is not high-level waste. 12 High-level waste is produced from the reprocessing of 13 14 spent nuclear fuel. Low-level waste is not spent 15 nuclear fuel, nor is it byproduct material. It is basically any other waste form that contains 16 17 sufficient concentrations of radioactivity that it 18 meets the classifications of the NRC regulations and 19 requires isolation from the environment or within the environment for permanent disposal. 20

It comes in many forms -- clothing, equipment, tools, discarded household items, things like smoke detectors and exit signs. It also comes in the form of soil, water treatment residues, anything that's become contaminated with radioactive material.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

1

2

3

5

17 It's generated from a wide variety of commercial and government activities, such as production of 2 electricity, medical treatment and research. 3 As most of you probably know, Nuclear 5 Regulatory Commission classifies low-level waste into four classes, A, B, C and greater-than-class C, or GTCC, based on the concentrations of specific shortlived and long-lived radionuclides. Greater-than-8 class C has the highest radionuclide concentration. 9 It requires the most elaborate disposal mechanism of 10 the four classes. A, B and C low-level waste can be 11 disposed of in near-surface disposal facilities. 12 13 Those are commercially available in private industry. One of the three commercial facilities is located in 14 Richland, Washington, the U.S. Ecology facility. 15 The NRC requires that greater-than-class C 16 17 low-level waste be disposed of in a geologic disposal 18 facility, a geologic repository licensed by the NRC, 19 unless alternative methods of disposal are proposed to the NRC and approved by the NRC. It is that exception 20 21 that allows us to consider alternate disposal technologies, as well as geologic repository in this 22 23 EIS. 24 The NRC disposal requirements also require 25 certain stability and protection measures to prevent

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

inadvertent intrusion following disposal. And that applies for not just greater-than-class C, but also class A through C.

Greater-than-class C is low-level waste that exceeds the concentration limits of radionuclides defined by the NRC for class C low-level waste. Again, it's generated by the NRC and agreement state licensees throughout the United States. It can generally be divided into three waste types, and we'll talk about each of these three in some detail.

Activated metals. 11 These are primarily generated in nuclear reactors during facility 12 13 decommissioning. They consist of the components of 14 the reactor, such as thermal shields, that have become radioactive through neutron absorption during reactor 15 operations. This photo at the right is a picture of a 16 17 radiation survey being conducted on an activated metal 18 component from the decommissioning of a small research 19 reactor. Currently, there are 104 operating nuclear 2 d reactors in the United States. Eighteen have been 21 decommissioned. Some of those 18 have stored their greater-than-class C low-level waste generated through 22 those decommissioning activities at their 23 24 decommissioned reactor site alongside of the spent

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

10

www.nealrgross.com

nuclear fuel that is awaiting permanent disposal, as well, in another geologic repository.

Sealed sources. This is the second major waste stream within the greater-than-class C inventory. It's typically small, highly radioactive materials that are encapsulated in the closed metal container which provides the shielding from the radioactive material itself. These are used in common applications. They are found widely throughout the United States.

As we were preparing to publish letters of 11 intent, we had a number of inquiries from various 12 13 reporters. They said, you know, what site generates 14 greater-than-class C low-level waste? What state has 15 the most? And the truth is all states generate greater-than-class C low-level waste because sealed 16 17 sources are so widely used throughout the medical 18 industry, and the welling and logging industry, as 19 well.

This picture here is a very small radiography source. There can be sealed sources that come in larger sizes, as well. Not all sealed sources are greater-than-class C. Many are class A, B or C, and can be disposed of in those existing commercial disposal facilities.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

5

7

8

9

We do believe that one of the reasons that Congress included those specific report sections in the Energy Policy Act of 2005 is that there is a widely held concern that disused sealed sources can become a proliferation risk and could potentially fall into the hands of malevolent forces and be used to make dirty bombs. This is one of the reasons why the same statute, the Energy Policy Act, established an interagency task force, of which the Department of Energy was a member, to produce a report to the White House on the safety and security of disused radioactive sources.

Again, just to remind you, that where sealed sources do exist today -- and they do -- and they become disused, they do not have a disposal outlet if they qualify, if they have sufficient concentrations of radioactivity, that they must be managed as greater-than-class C waste.

The third waste stream within the commercial greater-than-class C low-level waste inventory is an "other" category. It basically is anything that is greater-than-class C low-level waste that is not an activated metal, is not a sealed source. It consists of contaminated equipment, debris, trash, the debris generated through the

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

8

9

10

11

12

decommissioning of radioactive facilities, nuclear facilities that are used for research. There are only a few commercial licensees that have generated or are projected to generate this category of greater-thanclass C waste, this "other" type of GTCC. Most commercial greater-than-class C waste is either activated metals or sealed sources.

That brings us to the DOE greater-than-8 class C-like waste. And we acknowledge that this 9 terminology can be confusing. The use of this term 10 does not have the intent or effect of creating a new 11 waste classification for radioactive waste generated 12 13 by Department of Energy activities. DOE greater-thanclass C-like waste is DOE low-level waste or 14 transuranic waste that have characteristics similar to 15 greater-than-class C low-level waste under the NRC 16 17 classifications, and which may not have an identified 18 disposal pathway today. It is owned by DOE. It is 19 generated by DOE activities, even if those activities are conducted at a commercial facility. 20

The waste forms comprising this inventory are similar to the commercial greater-than-class C low-level waste forms -- activated metals, sealed sources, and other waste. The big difference here is that the vast majority of this DOE inventory falls

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

www.nealrgross.com

into that "other" category. Most of it is transuranic waste that may not qualify for disposal at the Waste Isolation Pilot Plant because it was not derived from defense-related production activities.

Here's just a high-level summary of the waste inventories and a comparison of the commercial and the DOE contributors to the inventory. I want to again remind you, the total estimated stored and projected of greater-than-class C, both commercial and DOE, totals only 5600 cubic meters. But again, not to belittle that, that small volume could contain up to a 140 million curies of radioactivity.

DOE greater-than-class C-like waste makes up a little bit more than half of that total projected inventory. But the commercial contributors, the 2600 cubic meters that would come from the commercial, NRC and agreement state licensees, contains the majority of the activity.

We developed these estimates based on data calls and interviews and other sources of information, such as available databases and reports.

And I see there's a question back there, but we're going to do presentation and then questions. If you'll give us that patience, I appreciate it. Thank you.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

10

11

We have a very detailed inventory report that is available on the website page that talks about the methodology for estimating both the commercial waste stream and the DOE greater-than-class C-like waste stream.

6 This is the proposed action of this 7 environmental impact statement, to construct and 8 operate a new facility or facilities, or use an 9 existing facility, for the disposal of greater-than-10 class C low-level waste and the DOE greater-than-11 class C-like waste.

Again, this proposed action stems from a 12 13 legislative requirement that DOE develop a disposal 14 capability for the commercial low-level waste stream. 15 We decided that we would also include DOE's waste streams that are very similar to that commercial waste 16 17 because we have a responsibility for both the 18 commercial and the DOE-generated waste streams, 19 neither of which have a disposal path today. And we 2 d consider this to be a cost-effective solution because 21 there is such a low volume of waste collectively between the two. 22 23 These are the proposed disposal

alternatives. We are extremely interested in what you
 have to say about these alternatives and whether there

2

3

may be other alternatives that should be considered. The alternatives range from no action for current and future greater-than-class C low-level waste. Both the commercial and DOE-generated would be stored at designated locations consistent with ongoing practice.

1

2

3

4

5

7

8

9

10

Disposal in a geologic repository at the Waste Isolation Pilot Plant, which, again, is located in Carlsbad, New Mexico. Both the current and future GTCC low-level waste and DOE GTCC low-level waste would be disposed of at WIPP.

The third analyzes disposal in the
 geologic repository proposed at Yucca Mountain in
 Nevada.

Then the fourth and fifth alternative talk to the alternative disposal configurations, the use of a new enhanced near-surface disposal facility at one of the proposed locations, of which the Hanford site is among them, or disposal in a new intermediate-depth borehole facility. And again, we'll talk about each of these in a little bit more detail.

We do recognize that some of these alternatives could require changes to existing legislation or regulation. However, this alone is not a reason for eliminating an alternative from consideration within this EIS. Our NEPA quidance

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

(202) 234-4433

requires that we evaluate a range of reasonable alternatives, notwithstanding those statutory and regulatory requirements or constraints that may exist today. But in the EIS analysis, we will carefully identify any statutory or regulatory limitations that do apply, and any changes that would be required for implementation.

As I previously mentioned, and will probably say at least two more times, DOE must await Congress' action before implementing whatever the preferred alternative or alternatives are that result from this EIS.

13 These are the three disposal methods we 14 today propose to include in this EIS -- deep geologic 15 repository, which, again, is the disposal methodology that Congress and the NRC assume would be required for 16 17 commercial greater-than-class C low-level waste, and 18 then two alternatives, intermediate-depth borehole and enhanced near-surface. If you have other approaches 19 2 d or ideas you'd like us to consider, tonight is your 21 opportunity to tell us them. You will have other opportunities throughout the scoping process, the 22 scoping period, which ends on September 21st. 23 Deep geologic disposal or geologic 24 repository involves the placement of waste in mine 25

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

cavities deep beneath the earth's surface. It is the configuration employed at the Waste Isolation Pilot Plant in Carlsbad, New Mexico. This is a picture of contact handle transuranic waste, which was originated from defense activities that has been disposed in one of the panels or one of the rooms at WIPP. It's also the methodology proposed at Yucca Mountain. Although it's a different approach to geologic disposal, it is a deep geologic repository that is planned at Yucca Mountain.

Enhanced near-surface involves the 11 placement of waste in engineered trenches or vaults or 12 13 other similar structures within the upper 30 meters of the earth's crust. I'd like to mention again that the 14 NRC regulations state that there may be some instances 15 where greater-than-class C low-level waste would be 16 17 acceptable for near-surface disposal with special 18 processing or design. That is why this disposal 19 methodology is proposed for inclusion in this EIS.

The photo here shows a concrete vault that is used for disposal of higher activity DOE low-level waste. This exists at a DOE site.

I should mention that the photo here and the conceptual drawings on the poster boards in the back of the room are intended to give you a general

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

1

2

3

5

6

7

8

9

10

idea of what this disposal methodology may entail. The specific design will be developed through the EIS, 2 however, and there will be opportunity in the future 3 to comment on those specific designs. These are 5 really conceptual ideas at this point. We are very interested in any comments you might have in just these preliminary ideas. So please let us know if you 7 8 have any enhancements that you would propose. And then the third methodology is 9 intermediate-depth borehole disposal. 10 This is the 11 placement of waste in an augured borehole deeper than the top 30 meters of the earth's crust. 12 It would 13 likely include additional barriers, such as drilling deflectors, enhanced engineered walls, backfill once 14 the waste is emplaced. 15 This methodology has successfully been 16 17 demonstrated in the U.S. and other countries. It is 18 the disposal methodology that the international 19 community is proposing to use for intermediate-level In international waste classification systems, 20 waste.

21 intermediate level waste would be comparable to what we in the U.S. call greater-than-class C low-level 22 23 waste. 24 This photo here shows the installation of

25 a borehole at a DOE site. Again, the poster board

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

www.nealrgross.com

shows a conceptual drawing of what our design might be, but the specific design will be developed through the course of developing the environmental impact statement. Again, any comments you might have on this disposal methodology, please certainly provide them to us.

And these are the proposed disposal To tick off the top few, WIPP as a locations. 8 geologic repository that exists today and is in 9 operation, and the proposed Yucca Mountain repository, 10 again, those are obvious candidate sites because they 11 are geologic repositories, which is the methodology 12 13 that the NRC assumes is required for greater-than-14 class C low-level waste.

All of these other sites were identified 15 through a difficult process, but it is the initial 16 17 reasonable range of alternatives. These sites were 18 selected based on mission compatibility, because these 19 sites have current ongoing waste disposal operations as part of their ongoing mission, and the physical 20 21 characteristics of the site imply that it's appropriate for low-level waste disposal to -- low-22 23 level waste disposal can safely be performed there. 24 The WIPP vicinity would be either land 25 within the land withdrawal that houses the Waste

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

Isolation Pilot Plant today and is already under the jurisdiction of the Department of Energy, or it could be on government property within that general locale. And then to provide for the possible programmatic determination for us of a commercial facility, the Department intends to analyze a generic commercial facility in a human environment, and a generic commercial facility in an arid environment. The reason being, again, that greater-than-class C lowlevel waste is a commercially generated waste stream.

Commercial industry is providing the 11 solution for the other classes of commercial low-level 12 13 waste, and may very much be interested in providing the solution for this class of commercial low-level 14 waste. However, when we asked industry if they were 15 interested back in 2005, soon after publication of the 16 17 Advance Notice of Intent, while a number of companies 18 did come forward and express some interest, none had a 19 specific facility with sufficient design or license developments such that it could be considered. 20 That's 21 why we're using generic possibilities. It is highly likely that future NEPA analysis would be required for 22 23 implementation of those commercial alternatives. 24 DOE -- this is a very important point, and

25 I apologize that -- it -- it's clear to me after the

NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

10

www.nealrgross.com

first four scoping meetings that the intent of this 1 slide is not coming through. So I'm going to just 2 talk about it a little bit. We intend to evaluate 3 each of the GTCC waste types, those subcategories that 5 comprise the commercial streams -- activated metals, sealed sources, and the "other" -- both individually 6 and in combination with each of the disposal 7 alternatives, taking into consideration the rate at 8 which those waste streams will be generated and the 9 specific characteristics and volumes of each of those 10 subtypes of waste. It is possible that the preferred 11 alternative will involve a combination of facilities 12 13 or designs for subsets -- various subsets of the waste 14 streams. Again, the EIS will analyze the statutory 15 and regulatory requirements required for 16 17 implementation of each alternative, and whether any 18 modifications would be required to facilitate

19 implementation.

This is a summary of the greater-thanclass C EIS process -- the Advance Notice of Intent of 2005, the Notice of Intent of July of 2007. Actually, somebody asked me tonight what happened in those two years. What we spent the last two years doing was refining the waste inventory estimates. While there

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

was an initial inventory report back in 1987, a lot has changed in the commercial low-level waste world over the last 20 years. We found that with the extension in nuclear reactor licenses that the rate of generation for much of this greater-than-class C lowlevel waste has been delayed. So for that reason, we had to work closely with industry to refine those inventory estimates. We also worked through the policy considerations of deciding to include the DOEgenerated waste forms, as well.

Publication of the Notice of Intent 11 started the public scoping period. That's where we 12 13 are today. This is the fifth of our public scoping meetings. Following the public scoping period, we 14 will proceed with development of the environmental 15 impact statement based in large part and informed by 16 17 the comments received through the scoping process. 18 That draft EIS will be published for public comments. 19 We'll consider those comments as we move forward and 2 d develop the final EIS. Following publication of that 21 final EIS, we will provide that required report to Congress -- again, required by the Energy Policy Act 22 of 2005 -- and we will await Congress' action before 23 24 implementing a record of decision.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

6

7

8

9

10

www.nealrgross.com

The July 2006 report to Congress, again, that originally estimated the cost and schedule for this EIS is available on our web page. It did assume that we initiated the EIS process last year. We of course took more time to refine those inventory estimates. So we will revise that estimate of the schedule after the public scoping period, so that way we have a better sense of exactly how many alternative sites and exactly how many designs are going to move forward for inclusion in the EIS.

So, finally, a few final words about 11 public participation. The NEPA process provides 12 13 opportunities for public participation. It provides multiple opportunities, because that public input is 14 critical to, again, the development of a document that 15 is viable and can support an ultimate solution. 16 You 17 can participate tonight by providing oral comments or 18 written comments on the scope of the EIS, including 19 the proposed alternatives and the environmental issues 20 you have, any concerns you have about the waste 21 streams. You can also provide written comments after this meeting via fax, via the EIS website, or by mail. 22 23 The public scoping process closes on September 21st. 24 You can stay informed throughout this 25 process by visiting the GTCC EIS website at this

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

2

3

5

8

9

10

address. We have put a lot of work into that web
page. It has a lot of historical information, a lot
of ancillary information. It will be our primary
mechanism for putting any new information out
throughout this process. There is a written comment
form in the folders in your handout material tonight.
If you'd like to provide a written comment tonight,
Holmes will go over the details on exactly how to do
that after this recess.

This is our contact information for the 10 federal employees who are part of our team. Again, 11 I'm Christine. Jamie Joyce in the back of the room by 12 13 the exit sign is the document manager. He is also the 14 team lead for the Greater-Than-Class C Team back at Headquarters, and he's brought with him his team, Joel 15 Kristal back there at the door, and George Dixon's 16 17 over here, one of our precious chairs. We are 18 supported by members of the Argonne National 19 Laboratory and Sandia National Laboratories. I see 2 d Mary and Bruce are in the back, and John Cochran also 21 in the back. We also have the pleasure to be joined by Jeanie Loving from our NEPA Office at Headquarters. 22 23 Thank you, Jeanie, for coming out for this. She has a 24 lot of experience with these sorts of documents, and 25 we do rely upon her expertise. So please find any of

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

6

7

8

9

us during this recess if you have any questions. Again, Jamie will be your primary contact, but you can contact any of us. We very seriously are providing that information, so if you have a question, you can give us a call.

Thank you.

2

3

5

8

9

10

11

12

13

MR. BROWN: We're going to take a brief recess at this point to follow up any questions on the presentation or on the posters. When we reconvene, we will be ready to take your formal comments. So this will be quite brief, but you can ask any of the folks here in the back.

(Recess from 7:16 p.m., until 7:35 p.m.)

MR. BROWN: Let me review just a few 14 15 ground rules for formal comments. Please step up to that microphone when your name is called. 16 Introduce 17 yourself, providing an organizational affiliation 18 where appropriate. If you have a written version of 19 your statement, please provide a copy to the court 2 d reporter when you've completed your statement. Also, 21 please give the court reporter any attachments that you would like to be made part of the formal record. 22 They will be labelled and entered. 23

Again, I explained that we have a number of people here. But I think that given the turnout

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

and the interest, that I would like to say that folks will have five minutes to speak. Again, if you don't take the full five minutes, I'm sure those who follow will appreciate it.

I was told last time that when we were on kind of a short supply that when I told people they had a minute left, that that was somewhat aggravating. So I have here a number four. So if you all will -when you get to the four-minute mark, I'll just hold this up, letting you know that you've got a minute left to gracefully conclude your remarks.

12 Again, let me remind you that your 13 comments, whether spoken, written, e-mailed, or whatever, all count the same. The folks who are going 14 to be writing the draft environmental impact statement 15 are not going to weight a spoken comment any more than 16 17 one that's submitted at a later date in another form. 18 So I'm hoping the five minutes will give you adequate 19 time. And again, I apologize for being so short the There was a bridge closing at 20 last time we were here. 21 10 o'clock at night that rather curtailed our time. So that's by way of ground rules. 22 Ms. 23 Gelles will be serving as a hearing officer for the Department of Energy during the formal comment period. 24

So let me begin by calling on Mary Gautreau from --

NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

1

2

3

5

6

8

9

10

11

25

I	36
1	yes, the court reporter has begun and will be taking
2	all this down. So, Mary Gautreau from Senator Wyden's
3	office will start things off. She will be followed by
4	Ken Niles from the State of Oregon.
5	(Pause.)
6	There are some chairs available here in
7	front. So if people get tired of standing up, please
8	come forward.
9	MS. GAUTREAU: Thank you. My name's Mary
10	Gautreau. I'm from Senator Ron Wyden's office.
11	Christine, I want to welcome you to Portland. Thank
12	you for yours. The senator, of course, could not be
13	here, but asked that I would read a statement, and
14	will give you this one.
15	The Hanford Nuclear Reservation is already
16	one of the most polluted places on the planet. It
17	currently stores more high-level nuclear waste than
18	any other site in the United States, and it is not
19	safely managing all of the nuclear waste that it
20	already has on-site today. And now the Department of
21	Energy proposes to use Hanford as a national nuclear
22	waste dump.
23	The bottom line is the Energy Department
24	should not be adding more waste to Hanford when it
25	isn't safely handling the waste that it already has

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

(202) 234-4433

on-site. The Energy Department -- (applause) -- and its contractor have a long history of mismanagement and failures to protect public health and safety at Hanford over the past 20 years. A report by the contractor responsible for the Hanford Tank Farms, which stores 53 million gallons of highly radioactive and toxic waste, indicates that removal of all of these wastes just from the aging and leaking singleshell tanks would not be completed until the year 2032. Hanford is decades away from dealing with the waste that it already has on-site.

Just last month, Hanford had a spill of 12 13 high-level nuclear waste while retrieving it from the 14 single-shell tanks that endangered workers at the site. I have requested that the Defense Nuclear 15 Facility Safety Board, an independent DOE safety 16 17 oversight agency, investigate this spill, as well as 18 the entire single-shell retrieval program. Given the 19 long history of mismanagement of waste cleanup at Hanford, the Energy Department's proposal to bring 20 21 more waste to Hanford is essentially a proposal to turn Hanford and the Northwest into a national 22 sacrifice zone. 23

The waste under discussion today is the most radioactive in the low-level category. As many

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

6

7

8

9

10

11

of you know, I have long been concerned about DOE's history of unkept promises to clean up Hanford. It's time to address the current problems, and not add additional risk and dangers by adding huge volumes of additional nuclear waste to Hanford.

What is amazing to me is DOE has now been trying to clean up the nuclear waste environmental contamination half as long as the site was actually in operation, more than 20 years, with no end in sight. Instead, we're miles away from meeting those cleanup goals.

In March of this year, U.S. EPA issued a fine of more than a million dollars for the failure of DOE's contractor to properly manage the existing lowlevel waste disposal facility. How can this Department be seriously considering sending more of the same waste to Hanford?

18 In March of 2006, I requested the 19 Inspector General conduct an investigation into the safety of the waste vitrification plant after a former 20 21 employee of Bechtel raised concerns about the former employee's use of unproven and flawed control systems. 22 23 In response to my request, the Inspector General issued a report that said -- and I quote, "The control 24 25 system does not meet the stringent procedures, plans,

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

10

39 specifications for work practices associated with 1 nuclear quality standards." 2 My point here is a simple one: DOE has 3 not fulfilled the obligation to clean up Hanford. Ιt 4 5 is not clear when it will. But now DOE is proposing to bring more waste to Hanford. Hanford should have less nuclear waste, not more, and it should be cleaned up, not dumped upon. 8 So today I'm putting myself on record as 9 being fiercely opposed to DOE's plans to dump more 10 waste at Hanford. I will do everything within my 11 power to keep it from happening. 12 13 Thank you. Senator Ron Wyden. 14 (Applause.) 15 MR. BROWN: Okay. Ken Niles is next, and Natalie Trayer will follow. 16 17 MR. NILES: Good evening. I'm Ken Niles. 18 I'm the Assistant Director for the Oregon Department 19 of Energy. I'm providing comments on behalf of the 2 d State of Oregon. 21 I want to first of all thank the U.S. Department of Energy for conducting a scoping meeting 22 in Western Oregon. Oregon and Oregonians have a long-23 24 standing interest in Hanford. We appreciate this

opportunity to provide our comments directly to you. And thank all of you for coming out one more time.

My agency will provide what I expect will be fairly lengthy written comments to the Department prior to your deadline that will outline the analysis that we expect to see in the environmental impact statement.

Since Hanford cleanup began in 1989, the 8 9 federal government has so far spent more than \$25 billion taxpayer dollars to try and clean up the 10 extensive entry that occurred at Hanford during more 11 than 40 years of plutonium production. There is not 12 13 sufficient time for me to thoroughly explain the many cleanup challenges that still remain at Hanford now 18 14 15 years into cleanup. The recent spill of high-level waste at the S-Tank Farm is just the latest example of 16 17 many examples over the years that demonstrate that DOE 18 still is unable to manage the waste that they 19 currently have at the Hanford site.

The State of Oregon opposes the idea of bringing greater-than-class C waste to Hanford for disposal. Hanford's groundwater and soil are already widely contaminated, and a great deal of money and effort is being expended to try and clean up these contaminants. Adding more waste to the subsurface,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

especially waste that is highly radioactive and very long-lived, is contradictory to the cleanup effort that has come at such a premium price and that we all support.

I acknowledge that our position is seen by some as just another NIMBY. But there's a difference between saying "not in my back yard" and what we're saying, which is "no more in my back yard" --(applause) -- especially given that our back yard is so horribly polluted already and poses a very real long-term threat to the Columbia River. 11

In preliminary comments we submitted two 12 13 years ago, the Oregon Department of Energy commended 14 DOE for beginning the process of determining a 15 disposal path for greater-than-class C waste. Some of this waste does exist. More will be generated. 16 There 17 does need to be a disposal path identified.

18 However, we also strongly encouraged DOE 19 to not consider near-surface disposal and to exclude 2 d from consideration any site still undergoing active 21 cleanup. Both of these recommendations were ignored. The assumption, as Christine has mentioned, for many 22 23 years has been that greater-than-class C waste would 24 be disposed of in geologic disposal. We see no reason 25 to change that.

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

6

8

9

Thank you.

(Applause.)

2

3

4

5

6

8

9

10

11

MR. BROWN: Okay. Natalie is next. Is she here? She will be followed by Harvey Thorstead.

MS. TRAYER: Hello. My name is Natalie Trayer, and I'm the Field Organizer for Heart of America Northwest. My first question is this: There were hundreds of folks who came out to the solid waste EIS meetings who weren't notified about this meeting. Everyone who has commented and was at those meetings should've received notice of this one.

Secondly, it's apparent to me that the 12 13 U.S. Department of Energy doesn't believe the old 14 adage that less is more. As if we didn't have enough 15 nuclear waste to take care of already, DOE, which runs the Hanford Nuclear Reservation and the nation's 16 17 nuclear weapons complex, wants to check a different 18 kind of extremely radioactive waste at Hanford for 19 burial. They refer to this waste as greater-than-2 d class C, as you've heard, and are proposing to dump 21 this toxic waste in shallow landfills and relatively shallow boreholes above groundwater that's flowing 22 23 directly next to the Columbia River.

There are a myriad of reasons why bringing more radioactive waste to Hanford is a bad idea. But

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

first and foremost, we obviously can't take care of what we already have. DOE is incapable of safely 2 managing the waste that currently exists at the site. 3 In case you didn't hear, and has been mentioned in comments before me, nearly 50 to 100 gallons of toxic 5 waste erupted from a water line on July 27th. The cause of this leak is attributed mainly to an engineering blunder and lack of oversight. 8 On top of that, over one million gallons 9 of radioactive waste has already leaked from tanks at 10 Hanford, and that contamination, this will be 11 spreading toward the Columbia River. 12 13 A vast amount of money and effort is being 14 exhausted to try and clean up this site. To put it 15 simply, adding more waste is incongruous with cleanup. For the safety of our communities, our families and 16 17 future generations, we ask you to join us in saying no 18 to this preposterous proposal to the import of more 19 waste at Hanford. Thank you. 20 21 (Applause.) MR. BROWN: Harvey Thorstead, are you 22 here? 23 24 (No response.) MR. BROWN: Okay. I'll get back to him. 25

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

www.nealrgross.com

(Pause for next speaker to set up.)

MR. DE BRULER: My name's Greg de Bruler, and I'm representing Columbia River Keeper. I've been doing this for -- well, for them for 18 years, and working on behalf of the river for a little over 20 years now.

Hey, Hanford, the river, hey, our favorite place here. Everybody remembers Hanford. If you 8 9 don't remember Hanford, it's all about the river. The 10 river flows this way. It comes all the way around, 11 goes down there, goes out to the sea. Remember in 1962 it was the most radioactive river in the free 12 13 world. This is where they're proposing to dump this stuff. Travel time from here is seven years. Well, 14 depending on who you talk to, it could be here from 10 15 years to 100 years. Travel time this way, if the 16 17 waste goes this way, it's 15 miles, it could be, eh, 18 not this stuff, but 20 years to 500 years, depending 19 on who you talk to.

Bottom line, what you put in the ground makes a big difference. Columbia River -- there's the N-reactor. Just think of all the waste sites. Nine nuclear reactors, waste everywhere, most contaminated site in North America. Look what happens when you dump the stuff in the ground. This is what they've

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

45

you might not know what it is. Bottom line, it's hazardous, toxic waste that's eventually going to hit the aquifer, that's eventually going to flow into the Columbia River -- not here in my lifetime, but what about the future?

They say this is safe disposal. They use 8 9 the word "safe." That's not what we're here for. And the whole idea, this whole preposterous idea, is that 10 it's disposal. What happened to the first part, which 11 is remove, treat, and then dispose? "Treat" left. 12 13 That went away. The "treat" is they're going to dump it in your back yard, and the "treat" is they're going 14 to continue dumping it in your back yard. So they not 15 only create more waste here that's going to migrate, 16 17 but it's going to flow into the Columbia River 18 sometime, not in our future, but in somebody else's 19 future. That is -- it's just absolutely ludicrous. Ι told Gerry this is like being standing here in 1980-20 21 something that somebody proposed this.

They say deep geologic storage, that's what they've always planned for this. Now the reason why they don't want to do that is because that the science at Yucca Mountain was so bad, they realized

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

6

7

So this is really a disposal EIS. It's 5 not a remove, treat and dispose, like you're required under the law by the EIS. That's what you're going to 6 have, and you're going to have more of that all over 7 8 the Hanford site. They're supposed to release it as being clean. Supposedly they're supposed to release 9 it and give it back to the Native Americans and back 10 11 to the public to use. It's never going to happen. 12 Twenty years the Department of Energy -- 18 years --13 has been cleaning up the mess. We have a delay in the vit. plant until 2019. Does anybody in this room in 14 their right mind trust the Department of Energy's ever 15 going to start the vit. plant? 16

17 MULTIPLE SIMULTANEOUS SPEAKERS FROM THE 18 AUDIENCE: No.

19 MR. DE BRULER: So if you don't believe that the vit. plant's going to be started in 2019, we 20 21 have 18 years of them telling us what they're going to do, but they haven't gotten to what they were supposed 22 23 to be doing. And now they're coming here and they want to do surface disposal? Whoa. Wait. 24 No. Stop. 25 That's why we're at a truck stop, actually, so all the

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

1

2

3

www.nealrgross.com

truckers could come in here and talk about hauling hazardous materials and what it does to them and their lives.

According to the nation -- or the BEIR-7 panel, National Academy of Science, they went out and did an analysis of all the health stuff in the world. They wanted to find out, okay, everybody says low doses, no big deal. High doses, low doses, what is all this stuff? Bottom line, they went around the world, checked up all the studies, and they came up with one answer. There is no safe level of radiation, period.

13 Now, none of the EISs that have ever done 14 and that will ever be done by the Department of Energy 15 will accept that fact. They'll tell you in even their current baseline risk assessment for the Hanford 16 17 breach that there is an acceptable dose. There is no 18 acceptable dose. And they only look at cancer. They 19 don't look at the diseases that are caused that don't have anything to do with cancer. 20

So we have a trust responsibility, the federal government does. The federal government has a trust responsibility that says they must protect the most maximally exposed individuals. This EIS better do that, because I'll tell you what, the other EISs

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

1

2

3

5

8

9

10

11

don't. They somewhat kind of get to it, but they
don't.

Native Americans have a God-given right here, like we all do, but they've got a little special provision that says if they don't do it right and clean up Hanford, they're going to come back and file suits against you, and they will -- we, the taxpayers, will be paying for billions and billions of dollars of lost resources in damage. A hundred and eighty square miles of groundwater at Hanford has to be cleaned up. Take 90 -- not near in my lifetime.

The EPA has nine criteria. The nine 12 13 criteria basically state, remove, treat and dispose. And when you finally get down to the bottom part is if 14 15 you can't do with remove and treat, then you might find some waiver to do something different. Well, 16 17 their idea right now is to, if you listen to 'em 18 closely, is to short-track the process. This is a 19 focused move, a disposal EIS, that wants you to take a journey down the road to where we don't have to put it 2 d 21 deep in the ground, but what we're going to do is we're going to put it on the surface -- mhh -- ten 22 23 feet under the ground.

What does it really mean? Hanford has what they call post- -- or pre-70 TRU waste,

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

4

5

7

8

9

10

11

www.nealrgross.com

transuranic waste. It's so hot that you wouldn't want 1 to pick it up. You wouldn't want to handle it. 2 The Department of Energy has been lucky in Savannah River 3 and Oak Ridge where they've been able to leave this 4 5 stuff in the ground. Anybody been to Savannah River or Oak Ridge? They have coffins that they put above 7 ground, because when the groundwater gets too wet, it 8 flows up and it moves the coffins out of the ground. 9 Oh, well, wait a second here. We've got Oak Ridge and 10 Savannah River as a proposed site. And they want to 11 do near-surface disposal? Am I missing something Because I know that the process that they're 12 here? 13 steering us on is their disposal.

We have to change the process. We have to 14 say to them, no, you can't do this. And by the way, 15 you aren't going to stop 'em, because they're going to 16 17 do the EIS. This is the minimum assessment modules 18 determined by the CRCIA Team, Columbia River 19 Comprehensive Impact Assessment Team, which I was the chair at the last time when we finally closed out. 20 21 The Department of Energy came back and said, when we do an assessment of impact, we will use these, all of 22 23 these things, in every one of our analyses for every EIS ever done. That commit was done in 1997 and 1998. 24 25 It's 2007, folks, and they haven't done it.

> COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

NEAL R. GROSS

So I'm telling these people that you need to read CRCIA, the requirements documents. It's 120 pages long. Read through it, and if you cross all your T's and dot all your I's, then I might be happy somewhat with your EIS. I don't think you'll do it.

2

3

5

7

8

9

10

11

Look at this. Disposal sites -- a big river, a big river, lots of rain, lots of rain, lots of rain. Stuff floats to the surface. They have a wayside at Oak Ridge -- anyway, I've got a whole bunch of reports. You can read that stuff if you want. I analyzed all those sites.

Idaho, that's a good one. Let's dump it over in Idaho so it flows back into the Columbia River anyways. Oh, but let's dump it at Hanford, because it's going to hit the river anyways. Okay, Yucca Mountain, they're kind of dry, so maybe we can put it over there.

18 But the big thing is this: That's what 19 they're going to do. They're going to put this stuff Somebody told me there were terrorists 20 on the road. 21 in the United States. That's what somebody told me. Somebody told me that terrorists could attack and 22 23 create dirty bombs. This is the perfect dirty bomb. It's a perfect dirty bomb. And they want to ship this 24 25 stuff all over the United States. Why don't they

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

(202) 234-4433

treat it? Why don't they do separation? Why don't they figure out compaction? What about the new technologies that basically can stabilize some of this stuff so it's not radioactive? There are technologies out there. But believe you me, this EIS won't consider those.

This is what it's about: Protect the Columbia River. Protect the future. Stop U.S. DOE dead in their tracks. We have to stop the process.

And my suggestion tonight is this: 10 It's time for the people of the United States and the 11 Northwest to seriously consider a new process. 12 The Department of Energy in the last 18 years has 13 consistently shown us time and time and time 14 again that it has failed to manage the cleanup of the 15 Hanford site, beyond recognition. There is so much 16 17 documentation that anybody in Congress who would be 18 listening to this should say, Oh, my God, we've spent 19 \$25 billion, and we've gotten nowhere. There's nobody in their right mind that would put up with it anymore. 20 21 It's time to create a cleanup commission

and move forward with a change for Hanford and the site. And I want the analysis not only done for Hanford as far as the CRCIA requirements. I want it done for every site in the nation, because as far as

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

1

2

3

4

5

8

9

I'm concerned, this isn't a battle just about Hanford. This is a battle for the protection of our water 2 resources in this whole country. And you can't do it 3 at Savannah River because you might have their hands 5 tied in Savannah River because it's a "yes" society down there. And you might have 'em tied in Oak Ridge because they're fully into this production mode. But the bottom line, the people that aren't being paid are 8 getting contaminated and dying because of their 9 exposure at Hanford, at Rocky Flats, at Oak Ridge, at 10 Savannah River, and it's time that we change the 11 12 process. 13 So thank you for this opportunity to speak, and I hope you enjoyed my slide show. 14 15 (Applause.) MR. BROWN: Okay. Bill Mead. And Bob 16 17 Hedlund will follow Bill. 18 MR. MEAD: My name is Bill Mead, and I am 19 the Director of Public Safety and Resources Agency. 20 (Pause to adjust the microphone.) 21 MR. MEAD: My name is Bill Mead, and I'm the Director of Public Safety and Resources Agency in 22 Portland, Oregon. I'm retired from federal law 23 24 enforcement, and my first nuclear training class was in 1977. 25

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

I am against bringing new waste to Hanford, regardless of their source or composition. Hanford is already grossly contaminated, and must be cleaned up before additional waste is imported.

In 1984, for each pound of plutonium-239 that was produced at Hanford, we paid \$276,000. We also generated 4,138,000 gallons of high-level liquid radioactive and chemical waste for each of the 2200 pounds of plutonium that we produced that year. That added 9 billion gallons of high-level liquid waste that we needed to safely contain for 225 generations.

In the late 1980s, the Department finally admitted that it had released 195 billion gallons of similar waste into Hanford soils during the previous 40 years of operations. That waste was just one of several dozen waste streams at Hanford.

In 1987, I was called to testify before a congressional subcommittee. Now, even though the topic was about converting WPPSS-1 reactor to a production reactor, the discussion rapidly expanded to include waste issues at Hanford. During that hearing, Hanford's manager bragged about the amount of waste that had been reclaimed in 1986.

During my testimony, I reported that even though the Department had worked on that project for

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

8

9

10

11

an entire year, the total for that year was less than had been produced during a single day of plutonium production, and that we were creating that waste for more than 42 years at that time. Again, this was only for a single waste stream of the dozens at Hanford.

Now, according to the Department's own published data, in 1984, Hanford produced a total of 1,376,000 curies of radiation. Of this, 1,000 curies were of TRUs were buried on-site, and another 10,000 pounds were dumped there. I'm not sure why they referred to that as "dumped." Again, this is only one 11 of the 40 years of Hanford's history. The current 12 13 proposal is for 140 million curies.

TRUs are extremely long-lived 14 radionuclides and must be isolated essentially for 15 eternity. Some of the wastes in the Department's 16 17 proposal would include additional TRUs.

18 In 1998, I toured the Department's Mound 19 site in Ohio, which had ended its weapons production function and was being cleaned up. At that time, the 20 21 two managers I interviewed about their cleanup experience were concerned that a total of 2.3 curies 22 23 of radiation that still existed in the grease pits of their elevators might delay returning the site to the 24 25 city. Even so, before that tour, I had to view a

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

8

9

10

video and pass a radiologic health test. And then I had to participate in a follow-up survey several months later. I've toured Hanford several times over the past couple decades, and I've never been monitored during that time.

A single particle of plutonium is only 4/10ths of one micron in diameter. As a comparison, a normal backpacking filter filters down to one micron. So in other words, you could get two of these things side-by-side going through a filter.

Dr. John Gofman states that the inhalation of that amount will inevitably cause cancer, and the risk to smokers increased by a ratio of 20-to-1. We just saw a picture up here of a plutonium particle in the lung tissue. That was what that little star was.

Typical reactor grade plutonium-239 oxide is eight to ten times more toxic than normal plutonium-239. Plutonium is so lethal in its exposure that in Japan the acceptable amount is 460,000 times smaller than for uranium-238.

21 MR. BROWN: You're at five minutes now. 22 MR. MEAD: I'm on my last page. 23 The type of plutonium at Hanford is 24 sometimes referred to as "dry plutonium" because it 25 travels for longer distances than does normal

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

2

3

5

7

8

9

plutonium. We ended production there 20 years ago, but it's still grossly contaminated. As an example, nearly 40 years after Hanford's plutonium nuked Nagasaki, the soil one kilometer away from where the bomb exploded showed 5500 picocuries per square meter. None of us would want to live in that type of contamination. But at Hanford, the same time, the soil readings one mile from Purex's discharge stack showed 6600 picocuries. Hanford's soil was 20 percent more contaminated at distances 1.6 times farther away than Nagasaki.

Okay. To summarize, the Department's history of not being honest with the public, regardless of their statements, the Department will have already focused on a preferred option. It will run multiple projects simultaneously to achieve their desired goals.

In 1987, it wanted to modify an abandoned reactor, even though its own peer review committee strongly recommended against that project due to safety concerns. The Department's continued attempts to restart the FFTF reactor are legendary, even though the Department knew the reactor was not needed, was not cost-effective, and would be hazardous.

NEAL R. GROSS

56

2

3

5

8

9

10

The Department has been trying to remediate some wastes that were created at Hanford in the 1940s and 1950s. But it has never completed a cleanup project on time or within the projected budget. In fact, even after working on these issues for decades, the Department still cannot manage the wastes that already exist on-site.

The Department is responsible for the 8 actions of its contractors, and in this regard, it has 9 been criminally negligent. They recently had yet 10 11 another spill out there because the workers used the wrong type of hose to drain a waste tank. The hose 12 13 failed, but the workers did not notice it for several 14 hours, and then delayed in making the required notifications of the accident. 15

It is time for the Department to prove it 16 17 is competent and able to clean up what is already at 18 Hanford. I object to Hanford's inclusion as a 19 potential site for wastes that were not created at 2 d Hanford, and I ask the Department to strike Hanford 21 from the list of candidates for this repository. 22 Thank you. 23 (Applause.) MR. BROWN: Bob Hedlund is next. 24

Particularly if you have printed comments, if you can

25

2

3

I	58
1	summarize them and try to stay within the five-minute
2	limit. My number four doesn't seem to be quite as
3	compelling viewing as people's own comments. So
4	anyway, glance over here every now and then.
5	Okay. Bob Hedlund is is Harvey
6	Thorstead back?
7	UNIDENTIFIED MALE SPEAKER: No, he left.
8	MR. BROWN: Oh, he did. Okay. And then
9	Cherie Lambert-Holenstein will follow Bob. Bob,
10	please.
11	MR. HEDLUND: Yeah, my name is Bob
12	Hedlund.
13	To begin with, I don't think we ought to
14	put anything else up at Hanford until we go ahead and,
15	like Greg says, clean what we have up there already
16	clean it up. But, you know, I've been involved in the
17	nuclear industry. I started down at Trojan in the
18	late '60s, early '70s, when we were excavating stuff.
19	I worked for Catalytic Hoffman, (unintelligible) and
20	Becker, you know, all the different companies
21	worked with Bechtel and those people. You know, the
22	majority of workers are, you know, hardworking people,
23	just like everybody in this room. They deserve a fair
24	break.

But, you know, in 1980, when the mountain blew up, I was down there. I was in the spent fuel area. There was radioactive asbestos all over the place. Also, we had a leak in the basement with radioactive water and some other stuff. I worked in some of the hottest spots of the plant. My pick went off the scale four days in a row there and stuff.

When I left Trojan down there, I was sick. 8 9 I coughed up blood for years. My stomach bled. My hair fell out. All my teeth fell out, and we had to 10 replace every cavity in there. You know, I've had two 11 cancer operations on my left leq. The bones hurt. 12 13 You know, a year ago or six months ago or something, I 14 quit breathing. I breathed so hard I sucked my whole chest in. My sternum's stickin' out. 15

I don't know if that was from the Trojan 16 17 down there, the nuclear waste, or I don't know if it 18 was from the five superfund sites I dug through down 19 on Front Avenue that they knew about and didn't tell us about. You know, we lost a couple of kids, four of 20 21 my friends that were on the job. You know, you bring that crap home on your clothes, and it gets in the 22 23 atmosphere.

You know, it's shock and awe crap over in Baghdad, hell, what did they do? They went in there

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

and bombed it. Right after that, they had a big storm. You know what happened? Five and a half weeks that depleted uranium came over and sat over the United States. It rained down. Every time it rained, it came down on us.

You know, we got more diabetes from the Second World War tests. There's maps that show where the wind went and stuff. You know, I told 'em -- I filmed every meetings for the last eight years. I told 'em eight years ago, you know, we needed to quit producing this nuclear junk and start cleaning it up. We're all going to be dead.

One in 50 Indian kids up around Hanford are dying of leukemia. Out of the 28 families at the perimeter of Hanford, all 28 of 'em had cancer. The kids are born with no eyes, no brains, you know. Out of 200 calves one year, they destroyed 80 of 'em because they had extra legs or heads and that.

You know, in '57, I was working over there in an area where they were dumping the stuff on us on purpose just to test -- that was GE -- to see what effects it had on the people. You know, I was working behind a bailer when I was in grade school, you know, breathing that junk all day long. It's a wonder I made it this long. The only reason I did is because I

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

1

2

3

5

7

8

9

10

11

went with alternative medicine. The regular doctor, all they do is cover it up. You know, you get sick, hell, I paid my own doctor bills. Hanford didn't pay Trojan didn't pay 'em. You know, the state 'em. didn't pay any of my bills.

Well, anyway, you get the point. I want the damn thing stopped. We don't need the 70,000 to 7 100,000 trucks running in the United States carrying 8 this stuff. We've got 38 canisters sitting down there 9 at Trojan we don't know what to do with. A friend of 10 mine decommissioned that down there. Where we ran 11 into the radiated water in the basement where I was 12 13 working up to my knees, they had to destroy four foot 14 of concrete. It went down through there, you know, alpha, beta and gamma radiation. You don't want to 15 get the junk in your lungs, I'll tell you, you're 16 17 going to have a hard time breathing. 18

That's all I got to say.

(Applause.)

MR. BROWN: Randall Streets will follow 20 21 Cherie. MS. LAMBERT-HOLENSTEIN: Good evening. 22 My name is Cherie Lambert-Holenstein, and I thank all of 23 24 you for coming, and in respect to you, I will be very

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

brief.

1

2

3

5

19

On or about the presentation of slide number 16, you read the word "defense." I do not see that word on this slide. The history of Hanford is toxic, and toxic has been the use of euphemisms. The word "defense" should be replaced with "war, invasion, occupation." It has little to do with defense. I would suggest in the future you have better word usage.

You use the public tonight by inviting
public questions, and you did not plan to record that.
That is manipulation of the public, purely and simply,
and I suggest that it was used so that you would
lessen public testimony.

The issue tonight is -- let's see -what's the -- greater-than-class C level radioactive waste. The acronym is GTCC LLW. Why is the word "radioactive" left out of the acronym?

18 It's greater-than-class C level 19 radioactive waste, and in parentheses it's GTCC LLW. 2 d And all throughout here it's GTCC LLW, where 21 "radioactive" is omitted. My message here is very That's eight words. Do not bring more waste 22 simple. 23 to Hanford. And thank you all for coming. Thank you very much again. 24 (Applause.) 25

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

8

I	63
1	MR. BROWN: Okay. Randall Streets.
2	(No response.)
3	MR. BROWN: Dr. Joyce Young. And Keith
4	Harding will follow Dr. Young.
5	DR. YOUNG: My comments have to take a
6	little bit of a health not a disease perspective,
7	but a health perspective. I'm Dr. Joyce Young, a
8	naturopathic physician with a specialty in
9	environmental medicine, from Portland, Oregon. I'm in
10	private practice.
11	I came here ten years ago with virtually
12	no knowledge of Hanford and its health effects. I've
13	been totally appalled about the lack of health effects
14	information/epidemiology that has been done on the
15	present radioactive leaking waste. How much is really
16	going into the air? Nobody seems to really talk about
17	it that it's going into the ground, it's going into
18	the water. What's going into the air?
19	The down-winders, quote/unquote, of
20	Hanford are usually considered to be the folks east of
21	Hanford. The reality of the situation, according to
22	the National Weather Service in Portland, is that the
23	Columbia River Gorge drains all the air from eastern
24	Washington and eastern Oregon into the Willamette
25	River Valley, i.e., air moves like water, downstream.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

(202) 234-4433

This means that the people of Portland, Oregon and Vancouver, Washington are the true down-2 winders. We're talking millions of people in the 3 Willamette River Valley. There are no air 5 epidemiological studies on the present-day leakage on down-winders and health of down-winders, especially in conjunction with the 9500 pesticides registered for use in Oregon, and the roughly ton of mercury --8 that's 2,000 pounds -- from the eastern Oregon cement 9 plant, and the several hundred pounds of mercury --10 airborne mercury from the coal-fired power plant, and 11 the save nerve gas -- guote/unguote, safe -- nerve gas 12 13 burning at the Umatilla (ph) Nerve Gas Depot. 14 All of this health surveillance 15 incompetence needs to be taken into account with the 16 grim reaper health statistics of the Oregon and 17 Washington Pacific Northwest -- what I call the 18 paradox. If the Pacific Northwest is such a great 19 place to live, then what are Oregon and Washington 2 d compared to all the rest of the country, all the rest 21 of the U.S.? One, Oregon is number two in autism. 22 23 Number two, Oregon is number two in breast 24 cancer, and Washington is number one.

www.nealrgross.com

Three, Oregon and Washington are considered to have the highest amount of multiple sclerosis in the U.S.

Number four, Oregon and Washington have just joined the stroke belt of the Southeast United States. They're number six and nine in the country in stroke mortality. That's stroke death.

Five, Oregon is 24 percent above the 8 national average in malignant melanoma skin cancer, 9 even though Oregon is known for its cloud cover. 10 The Oregonian says, to quote the front page of the paper, 11 "The dark side of the sun," Dr. Oleq Johanssen of the 12 13 Carolinska (ph) Institute of Sweden says in a 2006 14 paper entitled "Malignant Melanoma Skin Cancer - it's 15 not the sun!" It's chemicals and radiation, some kind of a combination. 16

How much has this geologically unstable northwest toxic stew at Hanford contributing to these grim Pacific Northwest health statistics? It's anybody's guess, because it's a mixture. All the people of Oregon and Washington need to have some answers before more high-level radioactive waste is added to this toxic soup.

Thanks.

(Applause.)

24

25

2

3

5

MR. BROWN: Keith Harding, and then Gerry Pollet.

MR. HARDING: Hi. I'm Keith Harding from the upper Hood River Valley, oh, about 50 miles upriver from here, and an hour or so downriver from Hanford. I have two beautiful young adult kids who are in the room here. They've been attending these meetings for the last 18 years in Hood River and Portland.

In this day and age, when we are programmed daily by the mass media, working for who knows who, to believe that there's a terrorist behind every bush in the country -- (laughter) -- terrorism and transportation of this waste material is one of my concerns, and then stockpiling yet more of this stuff in this gorgeous bioregion here.

17 I started into college very soon after 18 NEPA 1969 was instituted. Coming from an 19 instinctually ecological perspective from birth 2 d really, in a Republic family even, New Hampshire, I 21 was very glad that NEPA came into existence. In college, we had great hopes for it. Then working for 22 23 20 years in government, I saw the ups and downs of 24 NEPA. And my sense of it now is that it has been

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

4

5

8

9

67

extremely corrupted by the political mission that is fed down to the agencies to work with it.

It seems to me the environment -- the human environment that we live in is that agency people very quickly get coopted by that political mission and working towards retirement. The public sees a very different final product through NEPA than what goes on back in the agency offices and whatnot. We get sanitized information, a lot of doublespeak and whatnot. In my background of forestry, a clear-cut is now called a regeneration cut. Well, it's a darn lie. Or killing citizens is called collateral damage in a war.

So it seems to me one big challenge that we have in these agencies is for them to earn the public trust. Many much more specific speakers before me spoke specifically to Hanford and the whole nuclear realm, to this issue of earning the public trust. The track record with DOE and other agencies is not good.

I have talked with retired friends that have worked in the industry, and they tell me that a lot of things that are running up and down the roads all the time really create a much more imminent threat than these things that are intended to transport on

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

1

2

4

5

7

8

9

10

11

12

1	68
1	the road. The obvious thing is, why add to it, the
2	dangers on the road? Yeah, there's plenty.
3	Let's see. In the end, it will be
4	ecologists, not the bookkeepers of industry, who give
5	the final accounting of humanity on this planet. And
6	I do have a suggestion of a place to check out for
7	storing this material. It's on a ranch in Texas. I
8	heard (applause) I heard that the owner of that
9	ranch recently bought some 600,000 acres in Paraguay.
10	What the heck is that about?
11	I'll quit so that more can get up here.
12	Thanks a lot.
13	(Applause.)
14	MR. BROWN: Okay. Gerry Pollet, and it's
15	Angela Crowley, and I have a hyphenated name, and I
16	can't make out the last, but you know who you are, so
17	you'll be next. Gerry.
18	MR. POLLET: I'm Gerry Pollet with Heart
19	of America Northwest. Folks, thank you very much for
20	coming out here tonight. Together we can stop this
21	insane proposal. We've done it before; we'll do it
22	again. But it takes you coming out to do it, even
23	when the Energy Department doesn't want you to be
24	here, especially when the Energy Department doesn't
25	want you to be here. And they don't.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

(202) 234-4433

We're going to go through a few numbers and a few letters in alphabet soup. First, let's stop 2 and say Einstein asked people to remember what the 3 definition of insanity is. Right? Insanity, for 5 those of you who don't know the quote from Einstein, insanity is doing the same thing over and over again 6 and expecting a different result. So, what do you 7 call it if you dug a borehole above the groundwater 8 that flows into the Columbia River, and inserted 9 highly radioactive waste into the bottom of the 10 11 borehole? And if you don't expect the borehole to leak and contaminate the river, then you're insane, 12 13 because we've done it before, and our problem is that the Energy Department is fighting us tooth and nail 14 trying to evade cleaning it up. 15 We've dug boreholes at Hanford -- not 16 17 we -- the weapon-makers -- and said, trust us. And 18 we'd be insane if we did. 19 Two hundred people were mailed notice of this hearing tonight by the Energy Department 20 21 nationwide for all their hearings. Took a little teeth-pulling tonight to get to how large their 22 23 mailing list was. I think that is more than dismal. 24 It is shameful. Come on, I think we know that 25 thousands of people commented on the Hanford solid

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

I	70
1	waste disposal environmental impact statement. We had
2	hundreds of people attend those hearings in Portland.
3	Oh, in Portland. The Energy Department didn't want to
4	hold the hearing in Portland either tonight, did they?
5	Let's insist that they hold the hearing on
6	the draft EIS in Portland and one in Hood River.
7	(Applause.)
8	Please make sure the applause is noted in
9	the record.
10	MR. BROWN: It's also not deducted from
11	your time.
12	MR. POLLET: Thank you.
13	Three thousand people commented. Every
14	one of those people were commenting on a closely
15	related proposal to bury low-level and mixed waste at
16	Hanford, including some of the same very same
17	wastes that the Energy Department is attempting to
18	rename and put in here as greater-than-class C-like.
19	It's highly radioactive plutonium waste. They called
20	it then remote handled transuranic. That was a
21	mouthful. Didn't think that they would come up with a
22	worse name to try to dissuade the public from
23	commenting, but they did, calling it greater-than-
24	class C-like. But it's the same highly radioactive
25	plutonium wastes that they wanted to bring to Hanford.

NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

Two court decisions said you can't without studying the full impacts and the impacts of all the other 2 similar wastes that you want to bring to Hanford. 3 Instead what we have is a continued effort 5 to rename and piecemeal. "Ten" -- write down ten ---- "up to ten potential latent cancer fatalities during routine transport." That bureaucratese for the 8 number of people who will die during routine, accident-free, terrorist-attack-free, trucking of the 9 wastes proposed in the last go-round to Hanford under 10 the solid waste EIS, including some of these wastes. 11 Now write down "50." Fifty is the number 12 13 of fatal cancers that those same wastes would actually 14 kill when you include children and use the National 15 Academy of Science's latest dose conversion numbers. 16 Yes, believe it or not, your federal government 17 decided in studying the risks of trucking highly 18 radioactive waste to Hanford to leave out our 19 children. Like I said, it's adult latent cancer 20 fatalities they measured. I guess they don't give a 21 damn. You have to ask the individuals who are in 22

23

24

charge of the document, what were you thinking when

you made that decision, when you decided to write that

NEAL R. GROSS

and leave out the study of children? And did you think you could get away with it?

1

2

We insist that this document include the 3 risks to children for not only trucking the waste, but 4 5 for drinking the water and breathing the air in 10 years, 50 years, and 100 and 1,000 years, and include 6 the risks as the National Academy of Sciences, paid 7 for with your tax dollars, including from the Energy 8 Department, ironically, said in the biological effects 9 of ionizing radiation -- I'm saying this just for the 10 11 record -- report number seven issued in June 2005 -use the latest National Academy data on what is the 12 13 effect of a dose on a child and an adult instead of trying to use 20-year-old data to say that you have 14 fewer cancers. Because when we include children and 15 the new data, it's 50 people die of cancer from 16 17 routine transport of this waste to Hanford.

18 But what happens if at the intersection of 19 I-205 and 84, the Energy Department's truck with mixed radioactive waste, including plutonium, had an 20 21 accident, a predictable accident with fire, or a terrorist attacked it at that location? The Energy 22 23 Department didn't study this. So we hired independent nuclear physicists to run the Nuclear Regulatory 24 25 Commission's own models studying what would happen

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

(202) 234-4433

72

with a single truckload. So write down "340" -- 340
square miles of Portland would be contaminated,
requiring evacuation and unprecedented effort to try
to clean it up to make it liveable again -- 340 square
miles. It's never been done.

2

3

4

5

7

8

Write down "1,400." That's the number of cancer fatalities from that predictable attack and running their own computer model -- 1,400.

Now let's think about -- the Energy 9 Department said we've got 5,600 cubic meters of this 10 waste to send to Hanford possibly. Are we really 11 looking at anywhere else? Well, it's illegal to send 12 13 it to WIPP. And the State of New Mexico's not about 14 to roll over and make it legal. And Congress isn't 15 about to. And Yucca Mountain's never going to open. So we're looking at all of a sudden near-surface 16 17 disposal, which is insanity. Tried it. Done that. 18 Been there. Done it. They buried greater-than-class C-like waste in the soil at Hanford. 19 It's contaminating the groundwater today. 20

And look at the other sites. Idaho has a legal agreement that the Energy Department is suing to void, but it's sticking. And it says you have to remove all similar wastes from the soil in Idaho. They're not going to ship it there. We have to win a

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS

(202) 234-4433

legal battle to get the same thing into the Hanford cleanup agreement. And we have to uphold the mission of 297 passed by Washington voters to try to keep any of this waste that has chemicals in it out.

Five thousand six hundred cubic meters is just the tip of the iceberg. In fact, as the State of Nevada wrote several years ago, the Department of Energy has 2.6 million cubic feet of similar wastes in existence today which it is looking for a place to send, calling it "special case waste," "denotes DOE waste having characteristics similar to those of greater-than-class C waste that generally lack firm disposal plans."

14 So they're looking for a place, and 15 they're trying to piecemeal it. And we insist that 16 you put it all into one impact study, including all 17 the wastes already at Hanford and everything else you 18 want to send there in one study, and show us how many 19 people you want to kill, and how much contamination 2 d you're going to put into the groundwater and flow into 21 the Columbia River. It's not going to take hundreds of years. 22

How much cesium-137 is going to be in it from your GNEP proposal to truck high-level waste to Hanford for reprocessing? The answer given tonight

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

6

8

9

10

11

12

13

was either disingenuous or a deliberate attempt to evade the law. The law says all related proposals 2 have to be disclosed to the public and their potential 3 impacts considered in one environmental impact 5 Don't give us, Oh, we don't know which statement. facilities we'll use for GNEP. You've chosen 6 facilities, you're doing an EIS, and you're piecemealing it. You have to put it all into one 8 document, have one round of public hearings, and tell 9 the public at one time, when you want to ship all that 10 high-level waste to Hanford, plus the greater-than-11 class C-like waste, and all the remote handled 12 13 transuranic plutonium waste, where's it going to go, and what are the impacts, and how many people die? 14 Thank you. 15 (Applause.) 16 17 MR. BROWN: Okay. Angela is next. 18 MS. CROWLEY-KUCH: It's Crowley-Kuch. 19 MR. BROWN: Kuch? Okay. Thanks. And Ruth Curpiz will follow you. 20 Thanks. 21 MS. CROWLEY-KUCH: I'm Angela Crowley-I'm the Executive Director of the Oregon 22 Kuch. 23 Chapter of Physicians for Social Responsibility. 24 One of the problems I see with this 25 environmental impact statement is one of the problems

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

that represents our whole nuclear energy and nuclear weapons industry. We're not looking far enough ahead into the future. Not only are we not looking at the waste that will be generated with GNEP program, which, as we heard earlier, is the majority of the waste coming from the DOE weapons facilities, but we're also only looking out until 2062. That's as far as the projections for this disposal are going. I might not even have grandchildren by that time.

Are we really looking far enough into the future when we're talking about radioactive waste that will be around for millions of years? The EIS should incorporate all current plans for new weapons and new power plants, all the new waste that could possibly be classified should be included, all types and all amounts.

17 Secondly, there's one alternative that was 18 not included, and it needs to be included in the EIS. 19 That's called the hardened on-site storage, or HOSS. 20 When you have hardened on-site storage, there's no 21 need for transportation. It stays at the site. We don't want to put anyone at risk from transporting 22 23 nuclear waste. We don't want to put Oregonians at 24 risk, Washingtonians, people in New Mexico. There's

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

no need for any of us to be at risk from transportation.

1

2

5

6

8

9

10

11

So in the EIS there needs to be an assessment of HOSS. They need to be resistant to attacks, including explosive and planes, and those are not usually included in the risk assessments. Thev also need to look at specific sites for these studies, not an arid site, and a humid site. All these sites are different. The water tables are different. The rivers are different. We need a specific study for every individual site looking at all possible scenarios, types of waste and amounts of waste. 12

13 There are a few other things that I'd like 14 to see included. The first is there needs to be 15 funding for the Washington Department of Ecology to monitor this waste independently to see the levels and 16 17 check if anything is leaking. There also needs to be 18 funding for the Oregon Department of Energy to review 19 and comment on any transportation issues should the HOSS alternative not be chosen. 20

21 Speaking of transportation, all routes and methods need a projected cost. And in addition to 22 23 that, we need to have the estimates of the public health costs, which are not always included, in 24 25 addition to accident projections.

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

I	78
1	Finally, as has been mentioned many times
2	before, we need a specific definition for what this
3	other miscellaneous DOE GTCC-like waste is. It's not
4	appropriate to have an environmental impact statement
5	when we don't know exactly what we're talking about.
6	So I'd ask that all these things be included. And
7	please look far into the future. We'll be dealing
8	with this waste for a long time. And if I have
9	grandchildren, I don't want them to be sitting at
10	these meetings like I have for the past four years.
11	Thank you.
12	(Applause.)
13	MR. BROWN: Ruth Curpiz.
14	(Pause.)
15	And following Ruth will be Catherine
16	Thomasson.
17	MS. CURPIZ: Hello. When I came tonight,
18	I signed up to speak, but I was going to say something
19	else. But I don't know that I had an epiphany, but
20	somehow I'm reminded of shock and awe and going into
21	Iraq. Nothing was ever prepared correctly. The same
22	thing, I think, is happening in regard to the
23	Trojan or to the Hanford. I was opposed to Trojan,
24	and then opposed to Hanford.

NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

www.nealrgross.com

I	79
1	We're being massaged with a lot of
2	statistics that I think but but I don't believe
3	anything. I think this is a bunch of working over our
4	minds to make us think that something is being done.
5	But I don't think they know what the hell is that
6	they're doing. And I think that we just have to
7	stop not certainly not transport this stuff.
8	But we need to absolutely do a better job of getting
9	the word out to people and planning and maybe changing
10	who's doing when.
11	MR. BROWN: Thank you.
12	(Applause.)
13	Okay. Paige Knight will follow Catherine.
14	DR. THOMASSON: Hello. My name is Dr.
15	Catherine Thomasson. I'm the President of Physicians
16	for Social Responsibility nationally.
17	I'm concerned about the whole United
18	States, and of course the whole earth, with these
19	wastes that are going on internationally. I think
20	it's very important, of course, to know exactly what
21	the waste is, listing type and sites by state, by
22	radioactivity amount, and volume, to better assess and
23	plan for the site issues that are variable from site
24	to site, and the transportation risks involved in
25	each.

NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

I feel that it's very important to have a very clear and defined listing of the waste streams, and for the DOE activities that create this waste, so we know where the waste is going to be coming from in the future. It's also very important to accurately characterize the new sources of this waste, as was stated before in terms of its future projection.

I think it would be fabulous if the EIS 9 included a possibility that there wasn't going to be any more generation of nuclear waste, either in any 10 nuclear power plant or any additional nuclear weapon, 11 and that -- (applause) -- the savings from that would 12 13 help fund adequate -- to me, storage is identical to 14 disposal -- so adequate containment of this waste.

Obviously, as I mentioned with my 15 question, I haven't been able to find -- and I'm sorry 16 17 that you guys don't know any other country that is 18 doing any better job than we are in terms of storing, 19 which is equal to disposing, of this waste. It's 20 very, very important to realize that the only current 21 option that we have, which is the no-action option, is to store it on-site. Well, every site is not going to 22 23 be able to store it on-site. So there is going to be some transportation risks involved with that action. 24 25 But it needs to be in a manner that can be continually

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

8

monitored, and the monitoring plans obviously need to go out for centuries.

We need to have it hardened. We need to have it safe from a variety of attacks that haven't been assessed or even paid for up until this point, and aren't in the budget to be paid for. But obviously some of the sites are going to need to be combined, and my recommendation is for an eval- -further evaluation and development of the no-action option, because storage and monitoring is essential.

If you were to go beyond the storage in 11 hardened facilities on-site in a variety of sites 12 13 around the country, and go to near-surface level or intermediate level, it would have to be absolutely 14 crystal clear what kind of monitoring is going to be 15 There isn't any adequate research done on this. done. 16 17 And it's pretty amazing that no research has been 18 done, since this was legislated over 20 years ago, to 19 tell us what kind of waste storage, which is, again, identical to disposal, that we could potentially have. 20 21 So, obviously, we need to work through this EIS, through any other process we possibly can, 22 23 to demand new geologic deep storage that is safe from groundwater and safe from geologic activity. 24 Yucca

Mountain isn't happening, and we need another site.

NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

25

1

2

3

4

5

8

9

10

We need another site because it's legislated. We need another site because that is the best way potentially to dispose, really to store.

The last thing I'd like to say is that I think it is worth looking at the other technologies in terms of how to decrease the volume of these high radioactive sources and encourage the places that are creating them that there are alternative technologies developed so that we're not continuing to create this kind of mess.

I thank you for your time. I know that 11 there's a lot of scientific information in this room 12 13 and expertise, and I know that you all are doing your 14 job, and I want to thank you so much for being here. 15 I truly do -- I mean, for us to be knowledgeable about this is very, very difficult. I work on many 16 17 different issues, obviously. But to hear question-18 and-answer is really helpful for us, because we don't 19 always know what questions we should be asking. So thank you very much. 20

(Applause.)

22 MR. BROWN: Paige Knight. Karen Harding 23 will be next.

MS. KNIGHT: Speaking. I'm Paige Knight, the President of Hanford Watch in Portland. We've

2

3

5

7

8

9

10

21

www.nealrgross.com

been around for 14 or 15 years now. And I think I've been doing Hanford almost as long as I've been in my current teaching job, a long time.

Therein lies for me one of the most important things, as I really am concerned about the children and future generations. I'm leaving my students and my own children and perhaps grandchildren with a terrible legacy. That's one of the reasons I've worked on this as much as I do.

I'm going to address a couple of words first, and then just go through my points. And I'll try not to be too repetitious of things that people have said, although I think it's important that you hear people working on the same themes.

15 We call this waste "orphaned," which I 16 find quite fascinating. Also, at Hanford, we talk 17 about cribs where waste goes. I mean, we have all 18 these baby analogies. You know, it really bothers me. I think it's a real commentary over the many years on 19 2 d how we look at each other, and look at our children, 21 and look at the world. So I look at "orphaned" and say, you know, all waste should stay at its home if at 22 23 all possible. You know, every orphan should stay at 24 its own home. We don't want orphans. So just a

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

1

2

3

5

6

7

8

little bit of humor there, but there's also some seriousness in that comment.

The other thing that I want to comment on in sort of that vein is, it was mentioned tonight, and it's mentioned in the literature, that the volume of this greater-than-class C radioactive waste is small compared to all the other waste at Hanford. "Small" is relative. We're talking curies, and we're talking about adding to waste to waste to waste, and we have no good solutions, and some terrible problems at a place like Hanford. And we're not the only ones in the complex that are on that wonderful list that has problems.

This is just one of DOE's proposals to 14 15 bring waste to Hanford from all over the complex and country. We're right now waiting for another 16 17 environmental impact statement to come out that was a 18 redo of the solid waste impact statement that Gerry 19 and others have mentioned that hundreds and hundreds 2 d of people showed up to speak out about several years 21 ago. That EIS is looking at bringing waste in from everywhere. It went back to the drawing board because 22 23 the logic of it and the data in it was so incredibly 24 flawed. We cannot afford to have flawed logic in any 25 of these documents -- and in the thinking. This is

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

1

2

3

4

5

6

7

8

9

10

11

12

13

www.nealrgross.com

all about critical thinking. And I think we have a real chasm or a real black hole in our country of people who are really critically thinking through these issues.

2

3

8

9

10

11

Hanford has no treatment yet. Let's think about this. We have no treatment capability right now for the 54 million gallons, plus other waste, all of which will leak into the Columbia River and the groundwater. That also has been mentioned. The Columbia River is our lifeblood. It is the lifeblood of our area. We cannot continue to kill our rivers.

We also need -- and I mentioned this in my question earlier -- a comprehensive document that must include the synergistic or cumulative impacts of the waste from all these EISs. That's been mentioned a few times, so I won't belabor that one. But we need to include all current documents, which Gerry says is the law, into this document.

The other thing, in this little handout where each site is described, I want to say your description of waste management activities at Hanford -- and now this is a quote from this little article -- "include treatment and disposal of lowlevel waste on-site and processing of transuranic waste which is being stored at WIPP." We don't have

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

treatment. We don't have this kind of activity going on on-site. It is projected, but again, it's been 2 mentioned, if we're lucky, we're going to have a 3 treatment plant by 2019. And there's a really good 5 chance we won't have it by then. So these projections are -- you know, they're based on pending things, and Yucca Mountain is one of those pending things that's been in process for over 20 years. It is millions, if 8 not billions, of dollars by now in cost overruns, and 9 10 we are nowhere, because it's not a great geological 11 repository. It happens to be, from my studies, a great earthquake-prone area. I'm not too excited 12 13 about waste being stored there. So the logic of picking Hanford -- and 14 maybe some of the other sites, too, but my knowledge 15

is about Hanford -- as a disposal site for this 16 17 greater-than-class C radioactive waste is being 18 predicated upon solutions and processes that are still a dream at Hanford. We haven't met our dream yet, and 19 20 our dream is cleanup.

21 DOE -- let me see -- Hanford is also currently not being safely managed. That's been 22 23 mentioned time and time again. There's truth galore on that one, and I think Ron Wyden's representative 24 25 tonight covered that pretty well.

1

6

Finally, DOE needs to give a true projection of all the wastes over time, since it looks like there will be a steady stream. Catherine just mentioned this in her thing. I don't see this kind of waste ending unless we start looking at policies where we don't create this kind of waste anymore or we create it minimally.

So we've got some real policy-type issues 8 and rethinking to do in this country about this. 9 Other countries are no further ahead in this. 10 Absolutely they're not. So we're in a real tight 11 place here. And if you are really concerned about 12 13 your children and your grandchildren, you will send 14 some comments in by e-mail, or, you know, the little handout here. The more, the better. They have to 15 address them. 16

17 I just think it's amazing that all of 18 these people here have turned out tonight. I love 19 that you have come and given your time again. I also really appreciate that the meeting was held here. 20 And 21 I would request that meetings do be held in Portland and Hood River for the draft EIS that comes out on 22 23 this, because I'm sure one will -- who knows when -and that many, many more people are contacted, and you 24 25 get that list through the tank waste closure and

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

management EIS. I mean, there's a huge list there --1 3,000 people -- and those people are interested in 2 They know that no solutions have come. 3 this. Thev know that there's no -- you know, that there's, I 5 guess I would say, a big tomorrow with no answers. So thank you very much. MR. BROWN: Thank you. (Applause.) 8 MS. HARDING: My name is Karen Harding. 9 Ι would appreciate being able to speak from the Hood 10 River area. We had to plan a day, because we don't 11 like to waste gas, just driving in to a meeting. 12 And 13 so our whole day was Portland errands. And we had 14 quite a few discussions in the car, my 21-year-old and 15 my 18-year-old, who have been coming for at least 15, 16 years. Why do we have to do this again? It's 16 17 like, it doesn't do any good, they don't listen. And it's like, yes, yes. 18 I have over the years released the thought 19 that it does any good. But I guess my answer for now 2 d 21 is that if you just come and listen to the combined wisdom of people who are truly grappling from their 22 various disciplines, you have a tribal consciousness 23 and answer, at least a wisdom of thinking, and you can 24 25 compare it to the agencies who are trying, hopefully,

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

89 to do the best they can, but are not looking necessarily at the larger picture. And I'm very glad you're here, and thank you for doing that all these years.

Thank you for all the people who speak out with the facts and figures. I don't have all those at my command. I do child care, and so, obviously, children are the issue. We need to be considering many generations farther into the future than this EIS appears to be looking at.

So I am opposed to making Hanford a national sacrifice zone. I would like all the facts and figures put into this EIS that represent the numbers of deaths that are potential, the amount of money that's potential. It needs to be a much larger scope, because the problem's a much larger scope.

I would rather not have it trucked all over the country. If there's a way to solidify it on-site, I would be ecstatic about that. And we need to be putting that money into that.

I definitely agree that we need a congressional mandate to have an outside commission be in charge of this. It's not been working, as we are well aware, to have the people who are generating it

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

being paid to clean it up. It doesn't seem to be working.

Thank you.

(Applause.)

1

2

5

6

MR. BROWN: And Liz Gilbert will follow Shannon.

MS. PALERMO: Hello. My name is Shannon I came here with some friends from Portland 8 Palermo. 9 because my roommate, Lizzy, told me that this was going on, and it really concerned me. We drove here 10 to urge the Department of Energy to take the Hanford 11 location off its list of potential sites for the 12 13 disposal of radioactive waste. I also want to say 14 thank you so much to all the people that came here 15 today, and also do all of the work, because it's hard work going up against the Department of Energy and all 16 17 the powers that be. And you don't get paid for it 18 necessarily. I just am really, really thankful for 19 the physicians, for everybody that's come and spoke 20 today.

Our concerns are as follows. The delicate habitat of the Columbia River is an important part of many ecosystems. The possibility of Energy sending even more nuclear waste to Hanford will compromise the river. To consider disposing of even more waste in

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

www.nealrgross.com

such a sensitive area seems short-sighted, given the proximity of such a lovely river. The river's ability to spread any leak contamination concerns us. Public opinion continues to show that we want to clean up Hanford and not increase the risk for further pollution. In the case of leaked nuclear waste, which, as mentioned, has already happened, and therefore I do not feel confident in putting more into the ground. Radiation would directly affect our community. Communities feel the effects of radiation in many ways, including an increase in birth defects, cancer, infertility, and other tragic medical conditions. Finally, we are sick and tired of not feeling safe to swim and recreate in the Columbia River when it's right there tempting us every summer. Thank you. MR. BROWN: Thank you. (Applause.) MR. BROWN: Chuck Johnson will follow. MS. GILBERT: I'm Liz Gilbert. I'm here because I read an article in The Oregonian I really haven't been active about this before. Ι really felt driven to come here tonight and do what I

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

can.

2

3

5

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

www.nealrgross.com

We're talking a lot about children. I personally will never have children because my ultimate motherly instinct tells me to not bear a child into an apocalyptic world. I guess what I'm saying is that I don't necessarily believe that we will all survive. You know, it may be five years before we're wiped out completely. But what will live on are animals and plants and soils and rivers that deserve respect and need honoring. I am so sad, and I want to ask you

I am so sad, and I want to ask you personally to reach deep inside of your human self and ask yourself if it feels right to do this. Because it's wrong. And I know that something needs to be done with it, but please don't put it here next to the Columbia River. This is our home. We'll do whatever we can to protect it, and we will not allow it.

(Applause.)

18 MR. BROWN: Okay. Chuck Johnson, and then19 Tiago Denczuk will follow you.

MR. JOHNSON: Thank you. I'm Chuck Johnson. I'm a Board Member of Columbia Riverkeeper. Just for the record, I actually haven't checked this out with Columbia Riverkeeper yet, but I personally favor the option number one, the no option. Although, actually, I do think that the suggestion by the

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

8

9

17

representative of Physicians for Social Responsibility for hardened on-site storage is probably a more responsible way of dealing with it.

I do think, obviously, these wastes need 5 to be protected and kept close to where they were generated to reduce the transportation costs and risks. I don't think that we're served well by a shell game of moving wastes around the country. 8 These wastes -- I asked earlier in the question period about 9 where these wastes were coming from, and specifically 10 whether they were coming from the West Valley 11 Reprocessing Facility that's been shut down for many 12 13 It's highly contaminated. And the answer was years. that the current projected waste primarily comes from 14 that site. I just question as to whether or not it 15 makes a lot of sense to take waste from one highly 16 17 contaminated site and move it to another highly 18 contaminated site.

19 I've been to West Valley, and I feel bad for the people who live in that area. 20 They've got a 21 creek going through the West Valley site. There are people who are downstream of that creek who want to 22 23 have that waste moved. I can be sympathetic to that. There is an Indian tribe, the Seneca Band of Iroquois 24 25 Nation, that live in that area and have part of their

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

1

2

3

www.nealrgross.com

reservation that are downstream of that creek. But I wouldn't want to put my waste in their land, and I don't think they would really want to send their waste to us either.

Particularly I think it's -- we really 5 are -- I don't really think we're ever going to 6 psychologically get a grip on what to do with this 7 8 waste properly, as long as we're still hellbent on 9 generating more of it. I really think that's the 10 key -- (applause) -- because as long as there's this 11 financial imperative to create more waste, and this 12 political imperative to create more waste, then 13 whatever solution is come up with is going to be the most -- the easiest but certainly not the best 14 solution to what to do with it ultimately. 15

So I think we need to have a national 16 17 consensus. And I think we're actually -- the funny 18 thing is, this administration is crumbling in so many ways right now. This global nuclear energy project is 19 2 d going to flop and fall on its face -- thank God. When 21 it does, maybe we can finally have some sanity in our energy policy and make a decision to end this nuclear 22 craziness. There's some other things that cost a lot 23 less money -- conserve energy, build wind 24 25 generators -- although they can be fatal, too, as we

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

1

2

3

www.nealrgross.com

saw today. That's -- you know, nothing's completely risk-free, but nothing compared to the hazards of long-lived radionuclides.

So when we get to that point, then I think we can have a rational discussion about what to do 5 with this stuff, and a scientific decision that isn't based on expediency, and the least cost, quickest option. We will figure out what to do with it at that 8 point. But until then, I favor option one, and I 9 favor option one as my default position on just about 10 any generation of radioactive material. Keep it where 11 it's generated, and put the heat on the people in that 12 13 place to stop generating it and figure out some other 14 way of doing -- generating energy or doing whatever 15 other activity it is that we think we want to do with radioactive materials. 16 17 Thank you very much. 18 (Applause.)

MR. BROWN: Okay. I think Les Davenportwill be next.

MR. DENCZUK: My name is Tiago. I came from Portland. I'm (unintelligible). I -- actually, I just would like to just bring forth some feelings that many people here express, and we agree -arguments -- I would just like -- are just going to

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

2

3

reenforce my personal feelings about the same issues. I think the argument's represented pretty well, so I'm not going to extend myself on that.

1

2

3

5

7

8

9

10

Mainly I feel really outraged to have to be here today telling the Department of Energy that this proposal is preposterous, is offensive. There's a group of people here that obviously have been working on caring of communities in many different levels and preserving in spiritual level, ecological, medical. Having to come here to just say, get out here, don't come with more trash to our back yard, is 11 taking all this energy that's being focused on fixing 12 13 a problem that started decades ago, and have not been 14 fixed.

I think that the feeling of DOE not being 15 trustworthy is like no one can trust any project that 16 17 comes from this agency that already prove itself 18 incompetent and has no evasament (sic/ph) on really 19 cleaning our sides, on really fixing the error that committed in the past, and has a lot of evasaments 20 21 (sic/ph) in cheap demonstrations like PowerPoint presentations or PR movements. But when it comes to 22 23 actually planning on coming up with real solutions, there's nothing. And then coming to ask to dump even 24 25 more trash on a broken trash can that is already

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

97 leaking and destroying our environment is just so offensive. 2 We're not stupid. I say no. We're not going to just accept that. Yeah, get out of here. 4 5 (Applause.) MR. BROWN: Okay. Dona Hippert will follow you. It's Wes, is it? 7 MR. DAVENPORT: Les Davenport. 8 MR. BROWN: Les. Okay. 9 MR. DAVENPORT: I'm a consultant to 10 Washington Closure Hanford as their Criticality Safety 11 Engineer, even though I live in Battleground, 12 13 Washington, just about 15 miles north of here. I have 14 been the -- I have led the Nuclear Criticality Safety 15 Programs since 1985 at Pacific Northwest National Laboratory, Bechtel Hanford, Incorporated, and 16 17 Bechtel's successor, the Washington Closure Hanford. 18 My conclusion is that we really shouldn't 19 add the greater-than-class C waste to sites that are 2 d currently under going cleanup or where the water table 21 is high. That would eliminate four sites that I can think of, including Savannah River, Oak Ridge, where 22 the water table is high, Hanford, where undergoing 23 cleanup, and hopefully will be nearly through with 24 most of the cleanup except the vitrification project 25

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

before -- in fact, quite a bit before -- the last of the greater-than-class C waste is generated.

However, these wastes have to go They don't have a disposal path for many somewhere. 5 of them at the current time. But my personal preference is the geologic repository. That will remain true throughout the period when they're generated. However, that means that we have problems 8 with our national Congress, because they're the ones 9 that have put limits on WIPP, the Waste Isolation 10 Project -- Pilot Project in New Mexico, and also Yucca 11 Mountain, if it ever gets started. Neither one is 12 13 large enough to take care of all the wastes that have been generated and are designated for those two sites. 14

We have a national problem. We have a political problem. If you can do anything with your congresspeople, please consider that.

18 Also, it was Congress -- yes, our national 19 Congress -- that shot down the Basalt Waste Isolation Project that was at Hanford, and the basalt disposal 20 21 at Deaf Smith, Texas. They wanted to spend all the money on Yucca Mountain so they could hurry up the 22 23 project. Didn't seem to work, did it? 24 We all accept some risks in our life. 25 When we understand them, that's okay. Some people

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

1

2

www.nealrgross.com

smoke cigarettes. I don't. Most people drive cars. There are a lot of other things that are risky, including just living. But radiation is one of the unknowns in our life for many people. It's because of this unknown quantity, and not being able to see it, that makes many people very hesitant to accept radiation risks.

However, we are in a radioactive 8 9 environment. It's natural. Potassium-40 is in our bodies and everywhere throughout the earth. You've 10 heard about radiation from radon in your basements. 11 that comes out of the earth. Don't forget life-saving 12 13 medical radioactivity. It's necessary. There is radiation from nuclear power and isotope production, 14 but that's less than is emitted by our coal-fired 15 electric generating plants. 16

We're also in a chemically filled environment. They don't ever decay. They don't go away. But because radioactive material, which is relatively unknown, decays, we can talk about that and be scared.

Kind of in summary of what's going on at Hanford, it is being successfully cleaned up in many ways. And I'm not including the vit. plant and the tank waste. They're going to be a long, long, long-

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

6

term problem. There are five reactors that have been cocooned. N-Reactor's in process. B-Reactor may become a museum. We'll have to wait until people decide on that one.

Only spent nuclear fuel has been moved away from the Columbia River. It's put into dry storage in the central plateau. All liquid waste disposal to the ground was stopped quite a number of years ago, and some low-level waste, contrary to the comments earlier, has been sent to a contractor near Hanford, at Richland, and is put into a more stable 11 form, and then returned for storage at the Central 12 13 Waste Complex at Hanford until it can be properly 14 disposed.

15 Many solid waste sites have been cleaned up to their ROD requirements. That's a record of 16 17 decision, which is the final decision by the 18 regulators and the public as to what happens. That includes the hundred-F (ph) sites -- hundred-F reactor 19 of solid burial grounds are pretty much all taken care 20 21 of down to the requirements.

Hundreds of buildings have been removed 22 and debris has been shipped to ERDF. 23 That's the Environmental Restoration Disposal Facility in Two 24 25 West Area, where it goes into a lined below-ground

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

6

7

8

9

10

facility that meets CERCLA requirements. Hundreds of buildings have been removed, and that includes almost the entire north half of the 300 Area. If you've been out there recently, there's hardly a building there, two that I can think of. One's a power plant -- never had any radioactivity in it. Well, the coal, but that's something else again. They're down to the floor slabs, and now they're starting cleanup of the underground waste.

The last thing that I want to mention is that transuranic waste is being successfully shipped from Hanford to the Waste Isolation Pilot Project in New Mexico. Success is happening at Hanford. Don't say no.

(Applause.)

1

2

3

5

6

8

9

15

16

MR. BROWN: Thank you.

Dona Hippert, and Lloyd K. from Don't Waste Oregon.

MS. HIPPERT: Thanks to the Department of Energy for holding these hearings, and to everybody for coming out and speaking at them. My name is Dona Hippert. That's D-o-n-a, with one "N" for the benefit of whomever is given the lovely task of transcribing these testimonies of ours.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

I'll likely be submitting detailed written comments on behalf of the Northwest Environmental Defense Center and Oregon Toxics Alliance. We'll give you a copy of these written comments attached to that.

2

3

5

6

8

9

These are two groups of which I'm a board member, and both of whom are very concerned about the current situation at Hanford, and with any scenario that will increase and compound the problem that exists there now.

But tonight I speak to you on the subject 10 11 of trust and obligation. I'm astounded that there's even consideration of the idea of bringing more waste 12 13 of any kind to Hanford Reservation. I shouldn't be by now, but I still am. Considering all the problems and 14 15 mishaps that have happened at Hanford in the process of cleaning up the waste that's already there, for 16 17 instance, the waste leak last month, it's simply 18 incomprehensible that the Department of Energy would 19 want to bring in more waste.

The most frightening example -- oh, when one looks beyond Hanford, the situation gets even worse. The safety record of the DOE gets even worse. The most frightening example is found in the DOE Inspector General's own report that came out in March of this year describing the inability to locate at

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

least 14 computers that held highly sensitive and classified information. Six other computers were missing, but they weren't sure what the information was that was on those. And the state of DOE recordkeeping was so abysmal that the Inspector General's Office had to resort to, in their words, extraordinary means to locate an additional 125 computers.

9 Now, in conjunction with this process, we 10 have the soon-to-be infamous slide 19 where they're 11 showing a Hanford situation as an example of something 12 that's already working, and it's actually something 13 that's not working at Hanford.

If parents were to exhibit the same sort 14 of neglect and incompetence that the DOE has exhibited 15 at Hanford and in its other operations, the state 16 17 would long ago have stepped in and removed their 18 children. And now the DOE is talking about adopting 19 more children, and ones that are difficult to manage 20 at that. And when I wrote these comments, I wasn't 21 aware of the term "orphaned waste," but it seems to fit in and dovetail quite nicely with this. 22 This analogy of incompetent parenting is 23

not as far-fetched as it may seem in that our resources, including our lands, waters and airsheds

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

1

2

3

5

6

7

8

are a public trust, and we the people are the beneficiaries of that trust. Although DOE may not be the agency in charge of directly managing these resources, DOE is charged with protecting the trust of the public health and safety. As public servants, DOE officials at the very least have the obligation not to act in a manner that damages our resources and violates that public trust. In the case of Hanford, where DOE actions

In the case of Hanford, where DOE actions are already contaminating the Columbia River and the groundwater in the Hanford vicinity, the DOE should do nothing that by any chance would compound that contamination. Please do not bring this GTCC waste or any other waste to Hanford.

15 Thank you all very much for your16 attendance.

(Applause.)

2

3

5

7

8

17

MR. BROWN: Okay. How's that spelled? Ifyou can spell that for the court reporter. Thanks.

20 MR. MARBET: My name is Lloyd K. Marbet, 21 M-a-r-b-e-t. I am here representing a group called 22 Don't Waste Oregon, which many of you know has been in 23 existence for some time addressing various problems of 24 the nuclear fuel cycle, as well as the Executive 25 Director of the Oregon Conservancy Foundation.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

I appreciate the opportunity to provide testimony. I must say it's an honor to hear the testimony that's been given thus far by all of you. I too very much appreciate the fact that we seem to retain ourselves as a community of concern, willing to come time and time again to try and provide some wisdom in this process.

I also appreciate the fact that you've changed the way in which you're holding these meetings. I talked to you about that at the last meeting, and I very much recognize that you've done that, and I want to give you that recognition.

MR. BROWN: Sure. Thanks.

MR. MARBET: This is the second public 14 15 scoping meeting on a proposed EIS involving Hanford. It seems now that they're happening about every six 16 17 months. I'm worried about what's going to come up in 18 February. It seems to me that if you're going to do 19 this scoping process -- and there seems to be now 2 d redundant -- or to some degree a redundant analysis of 21 specific locations, then the efforts definitely should have communication between them, and the results be 22 23 combined, because I'm very worried that we're not seeing the bigger picture here. There's -- I think a 24 25 lot of people have spoken to that.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

9

10

11

12

I would also like to ask that Congress and the U.S. Department of Energy stop presenting us a 2 fait accompli, which goes, some waste already 3 produced, more waste coming. Chuck spoke to this 5 eloquently, and I can't really say it better. I think we have reached a point in time in which we have to disengage ourselves from this technology and create the world that we've all been striving for. Going in 8 this direction in which we allow ourselves to 9 constantly be presented this "more is coming" 10 11 justification is wrong and needs to be stopped. If you proceed with this scoping process, 12 13 then I ask that it include the following: First, an examination of the need for 14 15 further waste production, exploring all alternatives which obviate that need. I'd like to see that kind of 16 17 analysis put forward. 18 Secondly, the EIS should provide an 19 analysis of new stabilization technologies. We want 2 d to be clear that we're in the present when we're 21 examining what's available out there and how they impact the justification for this proposal. 22 Third, Hanford and other existing USDOE 23 24 locations are being considered because of their past 25 disposal operations. They're being considered a part

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

of this review process. All of these sites should be analyzed based on a comparison of the problems and successes of their respective operations. I think we need to look back and see where we've come from, and that should be a part of that scoping process. Again, evaluating how the success of various disposal operations have been can greatly impact what you're going to find in the future.

Furthermore, I'm concerned with the 9 distinction that's being made between disposal 10 methods; more specifically, geologic versus surface 11 disposal. And I might add here, by the way, that I 12 13 don't think we would have this comparison happening to us if there wasn't this underlying justification that 14 we're going to have more nuclear waste produced, 15 because I think this is the formula for cutting 16 17 corners in the future. Apparently, these wastes fall 18 under different regulations, government versus 19 commercial waste. Yet, safe surface disposal is being considered without specifically identifying the 20 21 underlying justification for using this disposal method at all. It seems to me that we need to know 22 23 where that's coming from.

The EIS should reveal this justification with measurable criteria. And in doing so, it should

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

(202) 234-4433

2

3

5

7

consider what the impacts are between geologic and surface disposal if there is a breach of containment, which is the obvious thing that you're trying to prevent. The EIS should also examine the impact of terrorist activities between all disposal methods, which I've not heard much, and I think that definitely should be examined.

The EIS should examine the impact of the disposal of new waste on existing cleanup operations. There's so many people that have eloquently spoken to this this evening, and obviously I stand with them in pointing out the obvious, which is that we should not put anything more at Hanford until we clean up what we've already done.

Finally, transportation of waste between 15 all sites should be examined with the risk involved 16 17 for each location. I testified at the last scoping 18 public meeting, and I concluded with what I'm going to paraphrase for this meeting in that testimony. 19 We 2 d have lost faith in the U.S. Department of Energy's 21 ability to find wisdom in the scoping process. But we have not lost faith in the hearts and minds of those 22 23 who are no longer willing to put up with the faustian bargain you present us. I again suggest that you 24 25 carefully consider the idea of siting more nuclear

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

2

3

5

waste installations in the Pacific Northwest. Out here, we are not willing to settle for anything less than full accountability. We are only interested in building a world that is based on peace and justice, sweeping nothing under the rug, cleaning up, and putting a stop to these kinds of proposals.

Thank you.

(Applause.)

2

3

5

6

8

MS. CHUDY: My name is Catherine Chudy, 9 and I live in Washington and I work in Oregon. 10 I'm also the daughter of Stanley Chudy, who worked as a 11 rigging foreman for Union Carbide, a site for the 12 13 Manhattan Project as it developed the atomic 14 capability that destroyed Hiroshima and Nagasaki. 15 There were 50 acres involved in the Manhattan Project in Tanawanda, New York. It was a secret, bolted, 16 17 locked place. When the war ended, they unlocked and 18 unbolted that place, and my dad walked those grounds 19 for more than 30 years. He didn't understand the Someone earlier said that if we understand the 20 risks. 21 risks, then we can proceed.

Years after he retired, they condemned the building his office was in. That was the infirmary for the Manhattan Project. They carted away tons of contaminated soil -- I don't know where -- and they

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

erected barriers and hoops for those workers if they could prove direct damage in the form of cancer. My dad is a survivor. He has unexplained neuropathy and legs he can barely stand on at 89 years old. But as his daughter, I struggle to understand and know a lot more than he did about such risks.

Hanford on this list is a bad idea, beyond 8 assumptions, beyond mission compatibility, and beyond 9 reasonable alternatives. When will they ever learn? When will the Department of Energy recognize that the 10 11 only compatible mission, the only reasonable alternative, is to clean up, and not enhance, the 12 13 dreadful toxicity at Hanford. This is Alice through the looking glass, and the Mad Hatter is twisting the 14 language on us once again. There are no imaginable 15 physical alternatives -- no imaginable physical 16 17 characteristics or mission compatibility that begins 18 to justify Hanford being on this unfortunate list.

My friend David Hupp (ph) asked that I convey his comment on the transportation risk implicit in this process. He reminds us that a few years ago children collected hot cars. Well, creating hot trucks is a childish solution to a serious problem. We should be beyond such childish solutions. But I fear that, as always with the Department of Energy,

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

1

2

3

5

I	111
1	viable answers to serious problems are still blowing
2	in the wind.
3	I am a mental health therapist, and I see
4	insanity every day. I appreciate being one of the
5	voices speaking out tonight against this insanity.
6	Thank you.
7	(Applause.)
8	MR. BROWN: Louisa Hamachek is next. She
9	will be followed by Rachel Pecore.
10	MS. HAMACHEK: I'm Louisa Hamachek of the
11	Wild Eugenians for a Safe Columbia River.
12	We of WESCR say no to the DOE proposal to
13	this current consideration for considering Hanford as
14	a site for the low-level solid nuclear waste to be
15	added to the already existing waste at Hanford. We
16	want no more waste to be brought to Hanford with any
17	level of radioactivity. We want no trucks of
18	radioactive materials passing through our town of
19	Eugene on I-5. We'll track them from Livermore Labs
20	and the San Diego Navy Base and other sites that might
21	use I-5 to make their way to Hanford. And we'll try
22	to prevent them from endangering our Valley of the
23	Willamette.
24	We in Eugene, who are stewards of the
25	upper Willamette Valley, which is a tributary of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

Columbia River, do not want to risk spillage and radioactive harm to the inhabitants and their habitats, harm to innocent children, citizens and animals. We trust that our federal government is working to protect us, and we hope for that. We say no to the proposed transport of radioactive waste to Hanford through our area. We of WESCR recognize ourselves as part of the biological category of animals, and as humans are subject to the damaging effects of radiation, cancer and mutations or birth defects, that all animals are. The plant's genetic material is also changed by ionizing radiation. It leads to a diminishment of the health of our entire region, and that's not fair.

We of WESCR want the entire Columbia River watershed basin to be free of damaging toxic chemicals and radiation, and insist that the Department of Energy immediately prevent any further leaks of toxics and radioactive liquids into the Columbia.

We want to have monthly reports of the levels of radiation in the river from Hanford to be on a website available to everyone, not to have blocked websites from the Department of Energy that have information not available to us, that lists a category

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

6

7

8

9

10

11

12

13

of information, and we can't find any information under that category. That's not fair.

We want to have the Department of Energy removed from the responsibility of cleaning up 4 5 Hanford, and to have that responsibility transferred to a triad of the State of Washington, the State of 6 Oregon and the Federal Environmental Protection 7 Agency, and to have the Department of Energy foot the 8 bill, pay for it. You made the mess, and you have to 9 pay for it. But you're not showing any resolve to 10 actually keep us safe. So we as citizens ask for a 11 different federal agency to take over. We want the 12 13 Department of Energy -- let's see -- to have this 14 transaction -- the transfer of responsibility to be commenced by 2008. By the end of 2008, we want the 15 EPA to be given the task and to work with Washington 16 17 and Oregon.

18 Furthermore, according to the book The 19 Atomic Farm Girl by Terry Hein (ph), in the fall of 2 d 1946, General Electric took over the administration of 21 the Hanford Reservation. They built and ran five new plutonium production reactors, two chemical 22 23 reprocessing plants, and 81 underground waste storage tanks. These produced the nuclear liquid -- the 24 25 liquid nuclear waste that we are concerned about right

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

> > WASHINGTON, D.C. 20005-3701

(202) 234-4433

1

2

now. The Cold War bomb production and pollution began in 1949 when the Russians tested their own atomic bomb, and the frenzy at Hanford began with a desperateness to produce bombs, which led to dumping of the liquids into the nearby available dirt, which is now going out into the river. And that's not fair. There might've been a desperation, but we presently are having to deal with the mess.

We at WESCR hold General Electric 9 responsible for the present remaining nuclear waste 10 leaking into the Columbia River at this time. They 11 profited enough, and we call for an international 12 13 boycott of all General Electric products until the 14 radioactive and toxic leaks into the Columbia River has been abated and verified by that triad of the 15 States of Washington and Oregon and the federal EPA, 16 as well as the United Nations, because that river does 17 18 not stop in Portland. It keeps going on out to the 19 ocean, and the salmon -- perhaps some of those wild 2 d Alaska salmon, they spawned at the Hanford breach 21 possibly where the radioactive liquids are bubbling right up in the base of the river where they're 22 23 spawning, and this is an international abuse, and it 24 should be brought to the United Nations, and they

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

8

115 should verify, as well, that Hanford has stopped leaking. 2 Thank you. (Applause.) MR. BROWN: Okay. Rachel Pecore. Daniel Swink will be next. MS. PECORE: Hi. My name's Rachel Pecore, R-a-c-h-e-l, P-e-c-o-r-e. I work as a water quality 8 scientist for Columbia Riverkeeper. 9 On that back panel there explaining 10 greater-than-class C waste, I'm going to quote, "Most 11 hazardous of low-level radioactivity waste/dangerous 12 13 to inadvertent intruders beyond 500 years. Must be 14 disposed in geologic repository unless alternative 15 method proposed by DOE and NRC." The mandate is clear; the study must include how all waste will be 16 17 protected from inadvertent intruders beyond 500 years, 18 at the least. 19 Please consider all worst-case scenarios, 20 including earthquakes at 9.0, rising sea levels, other 21 climate change predictions, volcanic eruptions, not to mention what's already been -- well, I will mention 22 what's already been mentioned -- hazards to children, 23 24 health hazards and the risks of transporting these 25 things on our roads.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

There's a lot I don't understand about Hanford, and appreciate coming to these hearings to 2 learn more. I appreciate everyone who's here. 3 I learn from all of you. Hanford's an extremely complex However, I don't understand how radioactive 5 site. waste could possibly be transported or disposed of or stored before the vitrification plant is finished. 7 Finish the vit. plant, and then come talk to us. 8 Thank you. 9 (Applause.) 10 11 MR. BROWN: Okay. Daniel Swink. My name's Daniel Swink. 12 MR. SWINK: Hi. 13 I'm a resident of Vancouver, Washington, and also a 14 volunteer for Columbia Riverkeepers for water quality monitoring of the Columbia River. 15 I think most of my concerns have been 16 17 well-expressed tonight. But one of the things that's 18 foremost on my mind has already been indicated is that 19 I don't see how the Department of Energy can even 2 d consider bringing more waste in when you already have 21 plumes of toxic radioactive waste seeping towards the river, and has already been discoveries of 22 radioactivity that's already reached the river, even 23 24 though most media does not -- has not brought that forward. 25

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

This river basin serves an area the size of France. That alone has so many repercussions just 2 from the river standpoint alone, not to mention the airway and the transportations of vehicles and all the other considerations that people have mentioned. So as the one woman that mentioned before me has indicated, this has repercussions that go international because the river does flow into the We're only just beginning to study the ocean. It's one of our most recent contributing impacts. pollution sources into the river. If it wasn't for a lot of volunteers that are out there right now that 12 are trying to gather data on what this all means as 14 the full extent of impact, there wouldn't be hardly anything going down about this. 15

I just want to make it clear that I'm 16 17 definitely opposed to bringing more waste in until we 18 take responsibility for cleaning up what's already 19 there. It's already been proven that we have a long 2 d ways to go, and it's been a slow road getting there. 21 We need to get this waste contained that's already there before we even consider bringing in an ounce 22 23 more. 24 Thank you.

(Applause.)

3

5

8

9

10

11

13

MR. BROWN: That concludes the list of folks who had signed up to speak. So let me ask if there's anybody who has not spoken yet. I've got a couple volunteers of folks that have already said. But let me first ask if there's anybody who hasn't said anything up to this point who would like to speak at this point.

8 Okay. We have one person in back. If 9 you'll identify yourself for the court reporter, and 10 if there's an organizational affiliation, you can say 11 that, too. Thanks.

12 MR. HAMMOND: Hi. My name is Terry 13 Hammond. I was born in Portland. So if I have a 14 right to fight for anyplace on earth, I guess this is 15 it.

I just want to take the national government as a model for my response anyway, and that is that we will resist your bringing weapons of mass destruction to threaten us, and we will hold your leaders personally responsible. We will use whatever means are necessary to stop you. As been said, all options are on the table.

(Applause.)

MR. BROWN: Thank you.

NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

23

24

2

3

Is there anyone else who hasn't spoken yet who'd like to add something? I think you wanted to Oh, I'm sorry. Wait. We do -- sure. add something.

MS. EARNERT: My name is Carol Earnert. I'm the Women's International League for Peace and Freedom, nationally, internationally and locally. Ι wasn't planning to speak, and I'll speak very briefly. But I second virtually everything that's been said by those in the audience tonight. I think you're great. I think you're critical thinkers. I think you really care about human beings and our future. I really feel 12 for the young women who were sitting in the front, because a lot of our kids have got the same feeling that this is an apocalyptic time and a very dangerous 14 time. 15

So I just want to say that I think the DOE 16 17 should consider as an alternative looking at what 18 Henry Kissinger had said, and George Schultz, and Sam 19 Nunn; it's time to start talking about evolution of nuclear weapons. And a lot of other people are saying 20 21 it's time to look for something besides nuclear power. We've made a mistake in following this, and we've got 22 23 to recognize it. And we've all got to work together with each other in love and caring and truthfulness, 24 25 and caring for those who've made the mistake, and

> **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

5

7

8

9

10

11

13

those who have been shouting out against it. We've got to turn around.

We've got treaties already that we can support. We have other nations begging us to come back to sanity. Let's help our government turn around and start being a little civilized instead of acting like the world's barbarians and butchers.

(Applause.)

2

5

8

9

10

MR. DAVENPORT: Again, I'm Les Davenport. I'm a subcontractor to Washington Closure Hanford.

Two points that I missed during my 11 presentation. Semi-permanent storage on-site of some 12 13 waste is not practical. That includes medical waste, 14 the unneeded radioactive sources out in the commercial 15 world and some other places, and reactor internals from permanently closed reactors. Hardening these 16 17 sites just is not cost-effective. It is too 18 expensive. If you look at the cost of hardening the 19 104 reactors that we have currently, it's a tremendous 2 d expense. Even at Hanford, guarding the plutonium that 21 remains there in the two-thirty-four-five facility is around two million dollars a year, if I remember 22 correctly. That's a lot of money for security that 23 24 doesn't go into cleanup.

Secondly, you have to realize that 20 percent of our electricity in the United States comes from nuclear power. If you're so anxious to close 104 nuclear reactors, what do you plan to provide your electricity?

UNIDENTIFIED FEMALE SPEAKER: Solar.

MR. DAVENPORT: Good. Solar is excellent. So is wind power. But if you consider the amount that 8 9 they contribute, the cost of developing such facilities, and getting them in place, that's a lot of 10 money. It is being done. It needs to be done. 11 But there is one other thing about solar and wind power. 12 13 They are not continuous. When the sun doesn't shine, 14 when the wind doesn't blow, it does not make electricity. You need base load plants. 15

MR. BROWN: Can I interrupt for just a 16 17 moment? We're 45 minutes overtime. If we start 18 debating U.S. energy policy, we're going to be here a 19 long time. People can submit comments through 2 d September 21st. So if you have something to add 21 that's relevant to this issue, and if you're considerate of our very patient audience, if you've 22 23 got just one thing to add -- all right. 24 MR. DAVENPORT: Thank you. 25 MR. BROWN: You're welcome.

> NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

2

3

4

1	122
1	MR. HEDLUND: For those of you don't know,
2	we have Operation Topoff from October 15th to the
3	24th. This is a mock nuclear attack or dirty bomb in
4	Portland. We're the only ones who's going to have
5	this. It's a national thing and involves the National
6	Guard, involves all the agencies. It's part of
7	Homeland Security deal. I just hope it's not another
8	false flag 9/11.
9	MR. BROWN: Thanks very much.
10	(Applause.)
11	MR. BROWN: Okay. This concludes our
12	meeting. I'd like to thank everybody who made
13	comments. Again, I'll remind you that you may submit
14	comments in a variety of forms through the 21st.
15	Again, thanks for turning out and remaining here and
16	listening to everybody. We are adjourned.
17	(Meeting adjourned at 9:48 p.m.)
18	
19	
20	
21	
22	
23	
24	
25	

NEAL R. GROSS