

Informal Question and Answer Section (contd); TSP-0001

1 from index cards. As I read your name, please
2 come up here and speak into one of these,
3 either this mike or the standing mike.

4 We have 17 people signed up to
5 comment. I think with 17 people, a five minute
6 limit on the time of comment would be
7 appropriate, out of consideration for everybody
8 that wants to speak tonight.

9 I'm going to invite people with
10 small children or other pressing concerns to
11 speak first, to comment first, before the
12 people who have signed up, in that order.

13 The meeting's going to last as long
14 as required to take all comments.

15 Discussion between commenters and
16 the initial presenters will not be allowed.
17 Just you talking to DOE.

18 Any questions about these ground
19 rules? Anybody with small children or other
20 pressing concerns that need to speak?

21 All right. I'm going to go to you
22 in the order that you have signed up. William
23 Greene.

24 **TSP-0001** DR. WILLIAM GREENE: My name
25 is Bill Greene. And I am a pediatrician in

TSP-0001 (contd)

1

1 Spokane, and I am here to at least have you
2 think about our children and our children's
3 children, and the impact of continued waste
4 shipments and specifically in this case and
5 also generally about continued production of
6 nuclear weapons, which generates the need for
7 all of this consideration about waste.

8 As you can see from my gray hair
9 that I have been around for a while and paid
10 attention to Hanford and the various efforts
11 that they have made and our government's made
12 and public citizens have made to try to have a
13 safe way of getting rid of the waste that was
14 created in the '40s and '50s and '60s.

15 There was a great deal of effort
16 made initially in the discussions made as to
17 how we could make things safe. Vitrification
18 was recognized and finally established as the
19 safe way. That is, you make everything into
20 glass and it lasts for thousands of years. And
21 then you put it into a safe place. And now
22 this process is being deemed too expensive.

23 How do you value the life of
24 children? How do you value the life of the
25 next seven or eight generations?

26

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TSP-0001 (contd)

1 I asked the question of a geology
2 professor, and he thought that the cost, this
3 was prior to the recognition of the large
4 amount of waste that was at Hanford, that it
5 would cost only a few million dollars to clean
6 up Hanford, and therefore the cost of the
7 cleanup really wasn't important for the United
8 States.

9 I listened to the discussions about
10 the large concrete buildings that were being
11 built at Hanford that were going to house
12 various levels of mid-level waste. They never
13 got built for various technical reasons and
14 cost.

15 And now we have another effort
16 perhaps to get nuclear waste out of some states
17 so that the representatives of the citizens
18 will continue to vote for more nuclear weapons,
19 and everything will be stuck in our lap.

20 And I object to the idea of
21 transuranic waste and combined chemical waste,
22 which can also injure children for several
23 generations coming through our community, and
24 not having adequate safety.

25 9-11, you might remember when the

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TSP-0001 (contd)

1 engineers said that the twin towers could take
2 a 747 flying into it without a problem. The
3 757s did plow into them, of course, created a
4 huge problem, even though they were a little
5 larger.

6 I think that the engineers cannot
7 make adequate predictions of what's going to
8 happen.

9 And I think as you look at the
10 community of Spokane, an explosion on I-90
11 downtown would be just beyond belief, in the
12 numbers of thousands of people that would be
13 involved.

3

14 Likewise, if you explode any one of
15 the main bridges across the Columbia River,
16 then you would have contamination of the water
17 immediately, and that would go on for
18 generations.

19 70,000 truck loads I think speaks
20 for itself. I can't imagine how many miles of
21 that goes. I can't imagine the cost involved
22 in that. And I can't imagine the requirements
23 of safety.

4

24 I know that the government in the
25 past has not been very careful about when they

TSP-0001 (contd)

4 | 1 put things on trains and we go watch the white
2 | 2 train go across the United States, because that
3 | 3 was the train that was carrying nuclear
4 | 4 weapons. They painted it white, I'm not sure
5 | 5 why. But it certainly showed up very nicely.

6 | 6 Unlined trenches. When I saw
7 | 7 pictures from the 1940s and 1950s about just
8 | 8 dumping cans, 50 gallon cans of chemicals and
9 | 9 radioactive materials into ditches, I thought
10 | 10 that was just absurd. I was surprised to learn
5 | 11 that this process continues to be going on.

12 | 12 As pointed out, this is not
13 | 13 something that's acceptable with chemicals in
14 | 14 your backyard. It's not accepted by cities.
15 | 15 It's not accepted by states. But it somehow
16 | 16 continues to be accepted by the federal
17 | 17 government.

18 | 18 I think there have been great
6 | 19 efforts made to clean up Hanford. I think
20 | 20 those efforts should continue. I don't think
7 | 21 it's right or reasonable to dump on Hanford
22 | 22 even more waste and contribute to the problem.

23 | 23 MR. DEE WILLIS: Thank you,
24 | 24 Mr. Greene.

25 | 25 Tom Brooks was a question mark. Mr.

29

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TSP-0002

1 Brooks, do you want to speak, wherever you are?

2 Chase Davis. Mr. Davis?

3 Okay. Linda Greene was a maybe..

4 **TSP-0002** MS. LINDA GREENE: Okay. Keep
5 it in the family. I'm not off the cuff,
6 though. I have to read mine. I'm sorry.

7 I was shocked to hear that the
8 Department of Energy was planning on shipping
9 nuclear waste to Hanford, endangering the lives
10 of all the people who live along the
11 transportation route. We have already seen
12 that the DOE cannot be trusted to clean up the
13 Hanford Site in a timely manner and that known
14 leaks are going unattended.

15 If we can't trust DOE to store waste
16 safely, there is no reason to think that it can
17 be trusted to transport the waste safely. I
18 believe the waste that is at Hanford should be
19 handled properly before we allow any further
20 waste to come in and be added to it.

21 My heart felt desire is that this
22 country stop producing nuclear weapons so that
23 we have no waste. No waste would be created in
24 the first place.

25 Since that is not the reality, I

TSP-0002 (contd), TSP-0003

1 believe that nuclear waste should not be
2 transported from the place where it is created.
3 When people finally figure out that they can't
4 get rid of it, perhaps they will stop creating
5 it.

6 MR. DEE WILLIS: Thank you,
7 Ms. Greene.

8 Bright Spirit.

9 **TSP-0003** MS. BRIGHT SPIRIT: Thank you.
10 My name is Bright Spirit. I am the Executive
11 Director of PEACH, which stands for People for
12 Environmental Action and Children's Health here
13 in Spokane.

14 According to current regulatory
15 standards, hundreds of individual toxic
16 contaminants are found at acceptable levels in
17 the body. Yet hundreds of different chemicals
18 together produce a cumulative and interactive
19 effect that can neither be measured nor
20 understood by current science.

21 EPA scientists estimate that the
22 fatty tissue of the U. S. general population
23 contains at least 700 additional contaminants
24 that have not been chemically characterized.
25 It is not clearly understood how radioactive

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TSP-0003 (contd)

1 waste is compounding an already burdened body
2 system.

3 What is understood is that our
4 children's health is in crisis. All you have
5 to do is pick up the daily paper or listen to
6 the news to know that asthma, diabetes,
7 learning disabilities, obesity, cancer, and
8 birth defects are on the rise. Just to name a
9 few.

10 Our local District 81 school system
11 says that 11 cases of autistic children four
12 years ago were in their system and this year
13 they have 75 cases.

14 In 1988 here in Spokane there were
15 four cases of pediatric brain cancer. In the
16 year 2000 there were 13 cases.

17 Real organisms such as human beings
18 are simultaneously exposed to thousands of
19 chemicals that interact in additive,
20 inhibitory, or synergistic ways, so an
21 evaluation of the toxicity of a substance in
22 isolation does not accurately predict the
23 hazard it poses in the context of a myriad of
24 other chemicals. Nor can epidemiology,
25 toxicology and ecology retrospectively link

TSP-0003 (contd)

1 injury to individual substances.

2 The tools available to these
3 sciences can seldom untangle the complex webs
4 of real world cause and effect, and health
5 damage is caused by exposure to complex
6 environmental mixtures which also interact with
7 other causes of disease.

8 We can never fully comprehend
9 environmental injury or take adequate action to
10 prevent more of it by looking through a lens
11 that sees only similar substances acting in
12 isolation.

13 To expose the natural environment or
14 the human species to any more radioactive
15 chemical waste is unacceptable, to this and
16 future generations.

17 Current science supplies mounting
18 evidence that small amounts of toxic exposure
19 during delicate stages of field development can
20 lead to diminished health in a myriad of ways.

21 And what is health? How do we know
22 when the health of a child has been harmed by
23 chemical exposure?

1 | 24 The Environmental Impact Statement
25 adopts a negative definition of health that

TSP-0003 (contd)

1

1 classifies only severe clinical recognized
2 forms of injury as health damaged. This is
3 derived from the current medical perspective
4 that defines health as the absence of diagnosed
5 disease.

6 If disease or damage has not been
7 identified by a qualified physician, then a
8 person is considered healthy.

9 By this definition subtle impacts
10 like reduced functional capacity or increased
11 susceptibility to disease are not a form of
12 health damage. Because they do not reach the
13 clinical severity that defines disease.

14 The Environmental Impact Statement
15 conclusion, and therefore the document itself,
16 does the community injustice because it does
17 not adequately represent the health
18 implications of this community's toxic
19 exposure.

20 The chemical trespass on our bodies
21 and those of our children is criminal and
22 should not be minimized by long winded
23 Environmental Impact Statements that cannot
24 address real world impacts on our families.

25 Shipping, dumping and creating

TSP-0003 (contd), TSP-0004

1 radioactive waste has been a decisive mistake
2 in our 20th century world caught up in
3 industrial development.

4 Today we have the knowledge we
5 lacked and we must act on it.

6 I live a few blocks from the freeway
7 in downtown Spokane, and I want to know what
8 would happen if a T-R-U waste truck explodes or
9 is in an accident and what's going to happen to
10 my family. I nursed my six children for three
11 years each. I feed them organic food. I am
12 responsible.

13 I want responsible ethics and
14 behavior out of our government policies and
15 especially in this case, in regards to Hanford.

16 It's obviously absurd to have
17 unlined trenches. It's absurd to be dumping
18 waste at all.

19 My biggest push is just to say I
20 want to see us stop creating this waste.

21 Thank you.

22 MR. DEE WILLIS: Next, Jeanine
23 Wade.

24 **TSP-0004** MS. JEANINE WADE: First of
25 all, I'd like to just say how grateful I am for

TSP-0004 (contd), TSP-0005

1 the opportunity to be here and to be a part of
2 this process where the citizenry of the United
3 States can freely express our opinions and our
4 rights.

5 I am incredibly incensed at finding
6 out that the Bush Administration's reason for
7 failure to, what's the word, glassify, vitrify
8 this waste is because of economic factors.

1 9 How can they justify spending six
10 billion dollars on war when obviously the
11 priority for the health, safety and well-being
12 of this citizenry of the state of Washington
13 and perhaps all over the United States is
14 placed as a second priority.

15 I would just like to express to the
16 Department of Energy my outrage at this, and
17 would just hope that everybody here, who's here
18 tonight, can come together and that we can do
19 something cooperatively to stop this. This is
20 just an outrage.

21 MR. DEE WILLIS: Sarah
22 Ankenbrand. Did I get that right?

1 23 **TSP-0005** MS. SARAH ANKENBRAND: Hi. I
24 just wanted to say that I am a student at
25 Spokane Falls Community College. I use the

TPS-0005 (contd), TSP-0006

1 freeway ten times in five days. Probably just
 2 going back and forth to school. And I just
 3 want to say that I don't want to get stuck in
 4 traffic next to one these trucks.

5 Just personally, I live about 20
 6 blocks from the freeway in the valley. I don't
 7 want it anywhere near me. I don't want it
 8 anywhere near me if I am going to have a baby.
 9 I don't want it, I just don't want it at all.

10 That's just pretty much all I wanted
 11 to say. I'm outraged by the whole thing.

12 MR. DEE WILLIS: Jane
 13 Cunningham.

14 **TSP-0006** MS. JANE CUNNINGHAM: Public
 15 participation does work, someone has said. But
 16 does the DOE pay attention to the citizens'
 17 will and the citizens' input?

18 I am not very optimistic about that.
 19 I feel that the EIS does not adequately
 20 consider proper facilities, buildings, and
 21 being in place. The liners for the ditches,
 22 they are not ready, and they have already
 23 started, have been transferring in the
 24 transuranic waste.

3| 25 I object to the waste being brought

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TSP-0006 (contd)

3

1 to Hanford when the accumulated waste is not
2 yet analyzed, and this is not done in the EIS.

4

3 When the affects of mixtures of
4 different chemicals are not known, are not
5 analyzed, or taken into account. When affects
6 on children. Possibly adults are studied. But
7 the affects of various chemicals on children
8 are not thoroughly considered.

9 Or affects on the fish in the
10 Columbia River, and the effects of dying fish
11 will have on the Tribes and all the people
12 along the banks down to the ocean.

5

13 So far the waste in Hanford has
14 traveled to the Columbia River. We know that.
15 We know that at the present time, the
16 facilities are not in place to monitor that or
17 to keep the various wastes from going through
18 the groundwater to the river.

19 The effects of this for thousands,
20 maybe millions of years are not known, and are
21 absolutely a danger.

6

22 And to end up, I think that the EIS
23 does not consider transportation. The present
24 waste that's there, the length of time, and as
25 far as I can remember, they have never met the

TSP-0006 (contd), TSP-0007

7 | 1 | timelines for cleanup that they have made in
 2 | the past.

3 | MR. DEE WILLIS: Julian
 4 | Powers.

5 | **TSP-0007** MR. JULIAN POWERS: Yes. I
 6 | appreciate the opportunity to give input.

7 | I'd like to echo what Dr. Greene
 8 | said about why do we need to keep creating this
 9 | hazardous waste that will be radioactive and be
 10 | dangerous for tens of thousands of years.
 11 | Don't we have enough nuclear weapons right now
 12 | to destroy the rest of the world, maybe 15
 13 | times over? I think the DOE is -- I don't
 14 | understand it. I think it is over-kill in an
 15 | obscene way.

16 | The Record of Decision. I think
 17 | that it should have an input that recognizes
 18 | the vulnerability of children, and I think
 19 | there should be a table that very simply lists
 20 | what are every chemical, every chemical that is
 1 | 21 | involved in all of the kinds of waste. Don't
 22 | ignore some. Just because they are awkward.
 23 | Every chemical. Every radioactive, every bad
 24 | material. And list what are the generally
 25 | accepted limits.

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TSP-0007 (contd)

1 | 1 And then give information as to how
2 | 2 the DOE is going to protect the children of
3 | 3 America from these hazardous things.

4 | What's more important? As far as
5 | 5 Spokane is concerned, it's been discussed by
2 | 6 | several different people, I think it is pretty
7 | 7 ridiculous to put populations at risk if there
8 | 8 is an alternative. I don't know what the
9 | 9 alternatives are.

10 | Frankly, I applaud the State of
11 | 11 Oregon, I wish we had the same sort of a policy
12 | 12 that would make it basically impossible to
13 | 13 bring in the waste.

14 | The river. I have been told that
15 | 15 the prediction has been that the contamination
3 | 16 | coming from Hanford into the river, by now it
17 | 17 would be going down, and I was told, surprise,
18 | 18 surprise, the contamination into the river is
19 | 19 going up.

20 | I think it is clear that the DOE at
21 | 21 Hanford has done an inadequate, an incompetent
4 | 22 | job in doing the job that they were charged to
23 | 23 do. For all I know, the hundreds of millions
24 | 24 of dollars have not been enough. All I know is
25 | 25 they are not doing what they said they were

TSP-0007 (contd)

1 going to do.

4 | 2 The credibility of the DOE at
3 | Hanford has to be really, really low. And I
4 | think the revised, and I hope there is another
5 | revision that makes more sense this time, EIS,
6 | does indeed look down a few years ahead
7 | relative to the contamination in the river,
5 | 8 what would the impact be? What would the
9 | impact be on people who might, for example,
10 | make the mistake and drink out of the river,
11 | make a mistake and eat a fish that is in the
12 | river, just in case there still are some fish
13 | there.

14 | Clearly, I haven't read the thing,
6 | 15 the EIS is obviously not adequate, and I don't
16 | see how you can paper that over and say it is.

17 | I would like to see the DOE policy
18 | people eat the fish and drink the water from
19 | the river. I think it would be interesting to
20 | see just how fast they would back pedal. Maybe
21 | they would quit their jobs.

22 | In total, the DOE has missed so many
23 | of their milestones, they have ended up with so
24 | much leakage into the river, they almost had
25 | the fire get to the really bad materials, in

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TSP-0007 (contd), TSP-0008

1 the fire last year.

2 I think there needs to be a house
3 cleaning. I don't see why any contractor at
4 Hanford that I have heard of really deserved an
5 extra bonus, and apparently all of them get it.

6 In total, DOE, you get an F.

7 MR. DEE WILLIS: Mary Mackay
8 was a maybe. No. She is going to do it.

9 **TSP-0008** MS. MARY MACKAY: I have two
10 issues. One has been addressed several times,
11 and that's the vitrification and the fact that
12 the DOE is proposing to essentially abandon
13 that type of treatment.

14 As Dr. Greene pointed out,
15 vitrification is the longest term way of
16 keeping this material out of the environment.
17 And it needs to be pursued. And I know it's
18 the most costly method of taking care of this
19 material. But it needs to be done.

20 In terms of transportation, you have
21 already addressed the problems going through
22 the middle of the city, and handling. I don't
23 know what the EIS actually says about local
24 HAZ-MAT groups handling these materials, if
25 there is an accident, what the provision is for

TSP-0008 (contd), TSP-0009

2

1 handling accidents.

2 My major concern for an accident,
3 especially coming through the Idaho and Spokane
4 area and I-90, is the aquifer, which is our
5 sole source of drinking water. And there are
6 some areas of the aquifer where it is quite
7 close to the surface. So it wouldn't take that
8 long for materials to get into that drinking
9 water. In other areas it might take years.

10 So, those are my two main concerns.

11 Thank you.

12 MR. DEE WILLIS: Thank you.

13 John Osborn.

14 **TSP-0009** DR. JOHN OSBORN: Great.

15 Thank you. My name is John Osborn. I'm a
16 physician in Spokane, and I'm the Conservation
17 Chair for the Northern Rockies Chapter of the
18 Sierra Club, which is Idaho and Eastern
19 Washington.

20 This is kind of interesting, kind of
21 a day for Hanford. Actually one of my patients
22 today brought in, new to my clinic, brought in
23 a thick file of documents which included
24 documents relating to his thyroid disease.

25 So I think that the issue of Hanford

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TSP-0009 (contd)

1 and the radioactive impact on people's health
2 is of, you know, paramount concern to the
3 region, and I think that's being reflected here
4 tonight.

5 It is I think helpful to perhaps
6 provide some historic context for Hanford. So
7 perhaps the best way to do it is to go back and
8 talk a little bit about Lewis & Clark, because
9 we are beginning the celebration of the Lewis
10 and Clark bicentennial.

11 On August 12th of 1805 Lewis & Clark
12 actually made it to what they described as the
13 furthest most fountain of the Missouri River at
14 Lemhigh Pass, and Captain Lewis spoke about
15 drinking the water of the river, which was the
16 Columbia.

17 And in that moment of stepping into
18 the watershed, Lewis & Clark and the expedition
19 walked into a river ecosystem the size of
20 France that was a river of life. 16 million
21 wild salmon swam up the Columbia River each
22 year, died, and in the process, spawning,
23 renewed the cycle of life.

24 And it was a river ecosystem in
25 which humans lived in dynamic equilibrium with

TSP-0009 (contd)

1 the river and the land.

2 In 200 years a great deal has
3 happened, and the river ecosystem, the river
4 has been profoundly impacted. And perhaps
5 there is no more localized area of impact than
6 Hanford.

7 And so as the nation really
8 celebrates the great river of the west as part
9 of the Lewis & Clark Bicentennial, historic
10 decisions, such as those which are being
11 proposed at Hanford, to accept this much
12 additional nuclear waste, needs to be set in
13 the larger historic context of the river.

14 That said, part of this presentation
15 is necessarily focused on NEPA and the need to
16 bring additional issues of concern to the
17 record.

18 So I wanted to just raise three
19 issues, several of which have been touched upon
20 already. Cumulative risk, the Columbia River,
21 and transportation risks.

22 Regarding cumulative risk, it is I
23 think intuitive as well as legally necessary
24 for there to be a complete inventory of nuclear
25 waste and waste generally at the Hanford Site

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TSP-0009 (contd)

1

1 in order to assess what additional impacts
2 there would be when additional wastes are being
3 added to the existing wastes.

4 I think that it is in the interest
5 of full disclosure that this information needs
6 to be included in the Final EIS.

2

7 Regarding the Columbia River, there
8 needs to be adequate baseline monitoring of
9 groundwater contamination. And currently there
10 is not adequate baseline monitoring. More than
11 just NEPA.

12 In my own clinic, when I am taking
13 care of people, having baseline monitoring data
14 is essential. If you are a diabetic, I need to
15 know what those numbers look like before I
16 adjust insulin doses or oral medications. It
17 is necessary for managing disease.

18 And when we are dealing with chronic
19 disease, like what's been inflicted at the
20 Hanford Site, it's necessary to have the
21 baseline monitoring. And that doesn't -- while
22 there is some, it's not comprehensive, and
23 needs to be before we move forward with a
24 decision of the magnitude being considered
25 here.

TSP-0009 (contd)

3

1 Transportation risks. I have done a
2 considerable amount of work on the aquifer
3 issue here. What was previously stated is
4 correct. The Spokane aquifer is one of the
5 world's unique aquifers. It is also the sole
6 source drinking water for 400,000 people. It
7 was the second such sole source designation in
8 the country when it was designated in 1978.

9 In many places the aquifer is quite
10 shallow. It's not far underground. So that if
11 there were an accident on I-90, it could
12 immediately threaten the aquifer. Cleaning up
13 groundwater is extraordinarily difficult.

4

14 Another aspect of the transportation
15 issue that needs to be considered is that there
16 are two tertiary care centers that service the
17 Inland Northwest just above the interstate;
18 Sacred Heart Medical Center and Deaconess
19 Medical Center. So if there were an accident
20 on I-90, you know, you would potentially have a
21 huge impact. Not only directly on the city,
22 but the ability of the city to respond.

23 So, I think that that needs to be
24 further developed in the Final EIS.

25 I'd like to close my comments on an

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TSP-0009 (contd), TSP-0010

1 ethical issue. Recently the Bishops, the
2 Catholic Bishops of this region issued their
3 pastoral letter on the Columbia River, and in
4 it they strongly encouraged that we look at the
5 river in terms of the ethical framework, in
6 terms of the ethics of water and the ethics of
7 the river; that it is a hugely important river
8 for many people, that the issues are
9 contentious, and that the appropriate way to
10 move forward with problem solving on many of
11 these issues is with an ethical framework.

12 So, I would encourage that DOE
13 recognize that the issues here are not only
14 legal, medical and chemical and biologic and
15 radioactive, but they are also very much
16 ethical issues, and they will impact our
17 communities and impact the river for a very
18 long time to come.

19 Thank you.

20 MR. DEE WILLIS: Thank you.

21 Theresa Potts.

22 **TSP-0010** MS. THERESA POTTS: My
23 objections to dumping more waste on Hanford are
24 these. The wastes there should be cleaned up
25 first. Adding more waste just complicates

5

1