

State of the Hanford Site
Seattle, Washington
March 29, 2011
Meeting Notes

Agencies Overviews

U.S. Department of Energy-Richland Operations Office (DOE-RL): The message from the DOE Office of Environmental Management is that cleanup is not discretionary, it is an obligation. The Environmental Management cleanup program is one of our nation's largest liabilities. The 2015 Vision guides cleanup and is consistent with regulatory agencies, Tribal Nations and stakeholder values: Clean up the River Corridor; demolish the Plutonium Finishing Plant; clean up the groundwater to stop contaminants from getting to the river and contain and clean up Central Plateau groundwater contaminants. Pursuing this cleanup approach will reduce the active cleanup footprint to less than 75 square miles by 2015.

The Department of Energy Office of River Protection (DOE-ORP): This year is focused on integration at ORP where the tank waste treatment mission is viewed as a single system.

The DOE-ORP has developed a 2016 cleanup vision. It is to:

- deliver on regulatory commitments to the State of Washington and protect the Columbia River;
- complete construction and commission 16 of 18 Waste Treatment Plant facilities (the goal is to begin making glass in the low-activity waste (LAW) facility by 2016); and
- develop and deploy technologies for supplemental treatment, secondary waste, retrievals and waste delivery.

DOE-ORP and its contractors have made great strides in addressing one of its hardest challenges – retrieving tank waste. This summer we plan to use a very promising technology – the mobile arm retrieval system (MARS) – to retrieve waste from the tanks. The MARS is deployed through a newly installed 42' riser providing greater access to the waste. Additionally, we have a “tool box” of more than 10 other retrieval technologies that we are using to accomplish this mission.

Hanford is the largest Environmental Management (EM) liability and DOE is committed to continue to do good cleanup work. Cleanup is not discretionary work; it is critical work. DOE needs your help, your input. We want your feedback.

(The DOE-RL and DOE-ORP presentation is available at www.hanford.gov/files.cfm/DOE_SOS_Vision_FINAL.pdf)

Washington State Department of Ecology (Ecology): We appreciate you spending your valuable time with us tonight. Significant cleanup work has been achieved at Hanford, especially with stimulus funding. The role of the State is as a co-signer of the legal agreement – the Tri-Party Agreement. Ecology is a regulatory agency along with the U.S. Environmental Protection Agency (EPA) to ensure cleanup is done in a manner that meets state law and is protective.

The agencies did not hold State of the Hanford Site (SOS) meetings the last few years. Instead the agencies had meetings on specific issues, such as the Consent Decree, Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS), solid waste burial grounds. During those meetings we heard a number of concerns – protecting the Columbia River is essential; do not import

waste before Hanford is cleaned up; cleanup is taking too long. Today there is a moratorium between the State of Washington and DOE that prevents offsite waste from coming to Hanford before the TC&WM EIS is final. That EIS contains wording that states no waste could be imported into Washington until the Waste Treatment Plant (WTP) becomes operational, which is expected to be 2022. The State is also concerned about the length of time for cleanup. The Consent Decree addresses the need to speed up cleanup. In some cases the technology does not exist or there is not a full understanding of the cleanup needed. I want to close by recognizing Earl Fordham from the Washington State Department of Health, Office of Radiation Protection. That organization has the lead for oversight, monitoring, and investigation related to recent events in Japan.

U.S. Environmental Protection Agency (EPA): The (Hanford Story) video asked for words to describe Hanford. My word is “marathon.” I want to thank those of you who have followed Hanford issues for the past 21 years. We’ve made a lot of cleanup progress, but we have a long way to go – about another 20-25 years. The last two years were amazing. Hanford received a large amount of stimulus money (almost \$2B); thousands of people went back to work. We had hoped to carry that momentum in 2012, but there is a different climate now. Hanford needs an additional \$383M to do all the work planned. If you had to make hard choices, where might you put some of the money? Input from you is very important to EPA.

For EPA getting off the River is an important cleanup step; it shows tangible progress. Protecting/cleaning up groundwater is a key cleanup component, especially expanding treatment capability. We could stop chromium from getting into the River in the next couple of years. The Plutonium Finishing Plant (PFP) does not need to be done until 2016; however, getting it down and off the books makes sense. The agencies may have to give up some regulatory commitments to get this done. Cleanup work at Hanford is not going to be finished in my career; but hopefully in the next 10-15 years we will be closer to the finish.

Local Perspective

Heart of America Northwest: These meetings are very important, because they hold the agencies accountable to you, the public. I want to thank those of you who attended past Hanford meetings and those of you who have never been to a Hanford public meeting. We need more effective/better public involvement. We need to ensure Hanford does not become a national waste dump. We need to clean up the unlined burial grounds. We are here, because we care about your future. Strontium is seeping into the Columbia River at levels thousands of times the drinking water standard increasing the likelihood of adults dying of cancer. Chromium is entering the river at three times the drinking water standard. This means that the three native tribes could not exercise their treaty rights.

DOE says to trust them to not bring in waste until the Waste Treatment Plant (WTP) is finished, but DOE refuses to withdraw its decision until then. The State agreed to the 2040 date to get high-level waste out of the single-shell tanks. Leaks from the tanks along with other liquid waste dumped into the soils are moving through the soil faster than predicted. Do not think we can wait until 2040. There are forty miles of unlined ditches where DOE dumped waste. In 2012 DOE does not plan to retrieve plutonium from the unlined burial grounds. The new (draft TC&WM EIS) EIS uses Hanford as a national waste dump. The decision was made. The only decision remaining is where to put the waste - in the east or west area. The EIS shows contamination will spread from the Central Plateau in the next 100 years. In addition, there is a proposal to add extremely radioactive waste (Greater Than Class C [GTCC] waste) to Hanford. There will be no Seattle public hearing on the draft GTCC Environment Impact Statement.

The Priorities Exercise does not show dollars. DOE-RL needs to scrub the budget (look at services and contract overheads) before cleanup work is stopped. In 2013 DOE-ORP plans to spend \$1B on WTP construction. Is this the investment to make when serious safety and chemical engineering problems are not resolved? Money is being taken from other work, e.g., unlined trenches. Please speak up and keep on coming.

Public Issues/Dialogue

Comment: I would like a copy of tonight's video.

Answer: DOE-RL, Ecology: Clips of the meeting video will be posted on the web. (Ecology offered to provide a copy of the complete meeting video upon request.)

Comment: Two dates were given for the start up of the Waste Treatment Plant (WTP) – 2016 and 2022. When is the startup of the vitrification plant?

Answer: DOE-ORP: Per the contract and the Consent Decree milestone, 2019 is the date for WTP start. The Consent Decree identifies 70% throughput by 2022. By 2016 the low-activity waste (LAW) facility construction and commissioning will be complete. DOE will look to accelerate start up of the LAW facility at that time.

Comment: The Hanford Reach is beautiful. The Columbia River is synonymous with Washington. Protect it.

Do not accept any more waste. Clean up the 16 single-shell tanks and the 40 miles of unlined trenches. You say all the waste along the river will be cleaned up by 2015. How? I am concerned about the groundwater and soil contamination. The lack of funding will take cleanup away from that area. How can you be off of the river by 2015?

Answer: DOE-RL: Cleanup plans (approved by Ecology and EPA) are to dig up contaminated soil that could affect groundwater or surface use and move that soil to the Central Plateau (i.e., to the Environmental Restoration Disposal Facility). We will remove and treat the solid waste burial grounds near the nine production reactors (100 Area) and in the 300 Area. Regarding groundwater, we plan by 2012 to install new pump-and-treat systems to clean up the 100 Area chromium contamination to meet aquatic standards and prevent it from reaching the river. Our goal is to stop the other groundwater contamination (strontium and uranium) by 2015. We laid out a plan and have a contract in place to remove over 10 million tons of contaminated soil. We plan to remove 2.3 tons of contaminated debris this year and demolish all the excess facilities along the river.

Comment: The first 16 (out of 149) single-shell tanks are due to be emptied by 2014. You have a long marathon to run. You are not close to being done in the River Corridor by 2015. A lot of progress was made, but some groundwater remediation will just start in 2015 and in some places may take ten years to get cleaned up. DOE says that contaminated soils were cleaned up, but the risk assessment shows otherwise. Unless additional soil cleanup is done, the cancer risk rate from these soils will be almost 100%. We hope the agencies will come back out to discuss these risks.

Answer: DOE-RL: The River Corridor Baseline Risk Assessment does identify risks to tribal nations from arsenic. We are working with the tribes to better understand the risks and drivers from this non-Hanford contaminant.

Comment: You discussed buildings being demolished along the river. Recently, in one building you discovered a massive spill under that building that had a high (lethal) level of radiation. What progress have you made on cleaning it up?

Answer: DOE-RL: Records showed there could have been a leak in the hot cell of Building 324 and there was. We characterized the soils under the facility and found high levels of contamination. We are continuing to characterize the soils to determine the extent of the contamination. Boreholes were drilled to provide additional information on the volume and rad constituents, which is mostly cesium. When characterization work is done, the contractor will put together an approach to remove the soil and building. What is known at this time is that the contamination does not appear to go down more than 5 feet; it has not migrated from and remains confined under the facility; no groundwater contamination was found. Planning is being done so as not to expose workers or the environment during cleanup. The contractor's plan is due to DOE this summer and the goal is to begin remediation this fall.

Comment: Will the contamination be sent to the Central Plateau?

Answer: DOE-RL: Yes

Comment: There were concerns last year (and certainly this year) about catastrophic events, such as an eruption at Mt. Rainier or Mt. St. Helens, or an earthquake. Do you have emergency plans, especially for Mt. Rainier?

Answer: DOE-RL: Yes. We have an Emergency Preparedness Program. DOE rules, regulations and orders require DOE to examine the hazards and consequences of those hazards. DOE has mitigation plans, predetermined actions and/or controls in place to address hazards, e.g., being able to contain a release so that contamination would not spread. Each year DOE conducts a (graded) major exercise and three small exercises to test these plans.

Comment: Are the surrounding communities involved? What is a farmer going to do? There could be agricultural impacts.

Answer: DOE-RL: Counties and cities are involved in the plans and procedures should contamination be spread outside the Hanford site. There are identified evacuation routes and shelters.

Comment: I am a Native American from Spokane. There appears to be an information gap regarding the risk assessment and my people. Do you plan to derive risks by testing indigenous foods?

Answer: DOE-RL: Based on some of the findings in the River Corridor Baseline Risk Assessment (RCBRA), DOE is working with the tribal nations on sampling.

Comment: Do you know contamination levels of indigenous foods, e.g., roots, berries?

Answer: DOE-RL: Yes, sampling was done as part of the RCBRA. Ongoing sampling continues in cooperation with Ecology and EPA. We've looked at all plant material and animals to identify the potential for uptake from the soil in plants. We have offered to work with the tribes and are respectful of their privacy and sensitivities on these issues.

Comment: How can I get more information on this topic? Who do I contact on behalf of my people?

Answer: DOE-RL: Nick Ceto and Jill Conrad (DOE-RL Tribal Liaison) are resources. Information is available on www.hanford.gov/ (The individual provided DOE their contact information for follow up.)

Comment: Can people still sign up for the public tour?

Answer: DOE-RL: Yes, however, the tours fill up very quickly. Please keep checking the tour website, because there are cancellations. We are doing what we can to increase the number of B-Reactor (National Historic Landmark) tours.

Comment: Will a public museum be built at Hanford?

Answer: DOE-RL: The Columbia River Exhibition of History, Science & Technology (CREHST) is a museum and science center in Richland, WA. It houses a large amount of historical information on the Manhattan Project, World War II and the Cold War.

Comment: Several years ago there was a lawsuit from "downwinders." Was it resolved or not?

Answer: DOE-RL: There was litigation from individuals who were exposed. That litigation is in the courts and is ongoing. It is under the jurisdiction of the Department of Justice. For more information, I suggest you Google "downwinders."

Comment: What about the upwinders and the downstreamers? If a toxic plume reaches the Columbia River, it has the potential to impact Seattle. It has not taken very long for the effects of the Fukushima reactor to spread and reach our shores. We can be impacted from both directions.

What are the costs associated with the fuel used to move that record amount of contaminated soil? What about the use of bioremediation? Do you have a bioremediation budget? Have you thought about using plants to collect toxins rather than remove the soil or the use of mushrooms to create a healthier soil?

Answer: DOE-RL: Given the high cost of fossil fuels, DOE is proposing to install a natural gas pipeline to operate the WTP. Natural gas produces less greenhouse gases and is cheaper. DOE plans to conduct an environmental impact statement on the installment of a pipeline that will include a public dialogue.

Comment: Would it cross the Columbia River?

Answer: DOE-RL: Yes, underneath the River.

Regarding the use of bioremediation, yes, we have field-tested bioremediation approaches. Nutrients were added to the soil to activate natural bugs that converted chrome 6 (which is harmful to fish) into chrome 3 (which is not harmful). DOE also tested the use of coyote willows along the river shore to

uptake strontium from the groundwater. The willows were cut down and moved to the Central Plateau. We plan on doing more bioremediation work.

Comment: Lot of cleanup work seems to get done by the seat of your pants. Are there any programs at the University (of Washington) that provide support in the areas of technology/management?

Answer: DOE-RL: We get a lot of help from academia through Department of Energy Technology Development dollars. We've worked with the Colorado School of Mines, Washington State University, and Vanderbilt University.

Comment: Can we get politicians to attend these meetings?

Answer: DOE-RL: That is a great idea. They've been invited in the past. I go to Washington, D.C. often to meet and discuss Hanford cleanup.

Answer: Ecology: Hanford gets a lot of visibility and support with Washington elected officials. The challenge is to get out the importance of Hanford cleanup to other states so that their elected officials support our cleanup efforts.

Comment: You are doing a lot of work at Hanford. Where does the electricity come from – the Columbia Generating Plant, Bonneville Power Association; it could come from hydroelectric or from the Energy Northwest facility? I am very concerned about several years of secretive talks to use mixed oxide (MOX) fuel in the Columbia Generating Plant. Fukushima Plant 3 used MOX fuel, which is causing this extreme crisis. Why is this so secret?

Answer: DOE-RL: I do not know of any secret talks with DOE. There is an existing contract with the Tennessee Valley Authority to use irradiated fuel in their reactors. The Savannah River Site (Aiken, South Carolina) is constructing a Mixed Oxide Fuel Fabrication Facility.

I know of no decision to use MOX fuel in the State of Washington.

Comment: There was an article on this in the Sunday paper.

Answer: DOE-RL: I did not see that article.

Comment: I am shocked at your response. The Tri-City Herald ran two articles; there was an article in the Seattle Times. There were ongoing discussions over the past two years between DOE, Energy Northwest and Pacific Northwest National Laboratory. This information came to light through emails obtained from a Freedom of Information Act (FOIA) request. The concern is that there are secret plans for MOX fuel to be fabricated in Hanford's 300 Area. We are suing through the Public Records Act for these records to be released.

I am shocked. I thought the 300 Area was being cleaned up. You are keeping contaminated buildings so the Lab could contract with Energy Northwest to fabricate mixed oxide fuel.

Answer: DOE-RL: I manage the Hanford cleanup. A separate DOE office manages Pacific Northwest National Laboratory. The Laboratory is not part of the Hanford site; however, it does have a couple of

research facilities in the 300 Area. I will pass along your concerns to the Acting Pacific Northwest Site Office Manager.

Answer: Ecology: The State has not been informed that Energy Northwest plans to do any work of that type. If there would be hazardous waste, they would need a permit. Energy Northwest knows the permitting process.

Comment: How many of you (in the audience) know about the Hanford Advisory Board (Board). The Board was created by the Tri-Party Agreement agencies. It is made up of 26-28 organizations. You should be aware of the Board, because it represents a lot of interests.

I want to thank Gerry (Pollet), Todd (Martin), Dennis (Faulk) and Tom (Carpenter) for spending several years of their lives trying to clean up the Hanford site. Several Seattle constituencies are here. Heart of America Northwest is “a” not “the” Seattle perspective.

It all comes down to a basic question of trust. Can you trust DOE? Ecology? Me? Gerry? Dennis? Trust runs the continuum from all to none. Rarely is there absolute trust or absolute distrust. I, personally, am somewhere in between. I don't want to trust too much or too little. How does one keep their eyes/ears open to take in the different perspectives? There is no right answer about Hanford. There are many different ways to look at Hanford. There is no right or wrong way. There are only realistic choices. We need to remember that the DOE representatives from DOE-RL and DOE-ORP (field offices) fight with DOE-HQs to get money for Hanford cleanup. They are our friends. You can beat them up here...but they are working for us. I've been around since 1996. I've seen a culture change. I've gone from distrust to liking their values. That said, I will continue to ask questions and keep my eyes open.

DOE, you need to do better to increase your credibility:

- 1) You need to invest more in public participation. You need us with you. Do more than just enough.
- 2) Clean up the River Corridor and Central Plateau. Do not tell me it is clean when you are just cleaning up the first 10-15 feet. Your message has changed; you listened.
- 3) B Reactor is one of the most amazing things. It represents a lot of things, including the responsibility to future generations to clean things up. Preserve it as a national museum.
- 4) Send no more waste to Washington. Do not ruin your credibility. Do not roll over on it.
- 5) Building 324 contamination is an example of trust. The contamination is terrible, but no one was hurt. Does one not trust DOE or argue that DOE should be trusted more, because they found it, had a plan and it worked. The fact that they found this contamination is good news.

What is the best sales message needed to get the money for Hanford, for ORP? What can we do to support that?

Answer: DOE-RL: We are frequently in Washington, D.C. talking about Hanford cleanup progress and challenges with elected officials and their staffers. The best sales message is value to the taxpayer. We need to get work done under cost and on schedule. There is support for Hanford site cleanup. There is alignment with Washington and Oregon. Even though we have some differences, we are all invested in cleaning up Hanford.

We can do better at public involvement. We know there is a lack of trust. We have regulations to hold DOE accountable to do quality cleanup, meet our milestones on schedule and we have general support from you, the stakeholders, tribal nations and the regulatory agencies.

Answer: EPA: It is not all or nothing. There are tangible environmental cleanup results at Hanford. We are showing good use of tax dollars. The 2012 DOE-RL budget is about \$400M short. That said the DOE cleanup program did very well (compared to other federal agencies) given the current budget climate. When compared to other DOE cleanup sites, Hanford received almost 1/3 of the \$6.6B cleanup budget. My disappointment with the 2012 budget is that so much cleanup momentum was created over the last couple of years. You have the power; you have the ear of your congressional delegates. As DOE stated cleanup is not discretionary; cleanup is a commitment, an obligation owed to the citizens of Washington.

Comment: I want to thank everyone for this discussion. The conversation was very useful. Need to look at how we make these forums more conversational, more collaborative; provide different perspectives.

Answer: DOE-RL: I, also, like the conversation. I enjoyed the conversation I had with the University of Washington students last fall. We need to do more before decision documents are issued. DOE would like to have more roundtable conversations that foster a back-and-forth dialogue of perspectives early in the decision process similar to the ones we had on the solid waste burial grounds. I am looking forward to future conversations.

Comment: I would suggest posting power point presentations before the meetings. That would enable meeting participants to be better prepared to engage in these types of discussions.

Answer: DOE-RL: We try to get the information out early, but sometimes we are making last minutes changes to materials to reflect what DOE has heard.

Comment: I want you to know that Congressman McDermott is very concerned and involved in the Hanford cleanup process. He is very committed and wants to hear from you.

Comment: What is the health hazard to visitors at Hanford now?

Answer: DOE-RL: There is none. Visitors do not have access into areas where they could be exposed to radiation or chemical hazards. The only hazard might be that of tripping.

Comment: When you talk about deep soil contamination, how deep is deep?

Answer: EPA: The River Corridor has a 60-90' soil column. In the River Corridor 100 Area, the typical contamination depth is 20-25'. At one site we've dug down to 85' to remove the chromium contamination; but typically we do not go down below 30-35'. In the Central Plateau the soil column thickens to 200-300'. In that area, carbon tetrachloride can be found at a depth of 60' to groundwater.

Comment: There needs to be independent evaluation and public access to groundwater models. Much of the future risk is with the groundwater. We do not know how the models work; there needs to be more openness on modeling.

Comment: In the 1990s, there was a lot of concern on how far tank waste migrated into the soil (approximately one million gallons leaked out that could have contained as much as a million curies). The public was told it did not migrate far. The theory was tested and actual data show that it migrated down 185'. Some of the waste was found in the groundwater. We still do not know how much is in the soil, how fast it is moving, if it will affect the Columbia River or when.

Answer: DOE-ORP: The Tank Closure and Waste Management EIS includes some data related to those questions.

Comment: I am a student at Seattle University working on a proposal with Heart of America Northwest on groundwater contamination. Is it true that you plan to cap the trenches and U.S Ecology?

Answer: DOE-RL: DOE is working with Ecology and EPA. The agencies have made no decisions on the Central Plateau (not for the past practice or CERCLA sites). We are currently discussing on how to characterize the burial grounds. A decision was made to put a cap on the Environmental Restoration Disposal Facility (ERDF). A decision was also made on final disposition of the submarine burial ground. During the next couple of years we will be characterizing the burial grounds to determine the extent and breadth of contamination. There is a TPA milestone to come up with a proposal in 2015.

Comment: The cost of cleanup of the U.S. Ecology trenches based on Heart of America Northwest and Ecology emails is \$890M (based on the amount of transuranic waste). That sounds like a very high estimate and those costs could only be justified if there was a lot of illegal dumping.

Answer: Ecology: U.S. Ecology is a commercial low-level waste facility. It is not under DOE. It is licensed by the Washington State Department of Health (DoH) and the Washington State Department of Ecology who investigate it under the Model Toxic Control Act looking at the chemical side.

The EIS recommended a cover. (The 2004 document looked at different scenarios.) We considered an interim cover, but pulled that proposal until a comprehensive chemical inventory could be developed. The dollar amount was an estimate based on DOE costs to remediate retrievably-stored waste (based on amount of waste risk factors to workers).

Comment: Regarding defunding of the Yucca Mountain Repository, what are the impacts to Hanford for long-term national storage?

Answer: DOE-ORP: The President established a Blue Ribbon Commission to look at disposing of DOE and commercial high-level wastes. Their report on a long-term repository is due July 2011. The DOE-ORP current baseline plan shows we have the capability to store 4000 canisters of high-level waste from the Waste Treatment Plant. The plan also shows the ability to modularize the storage area if we need to store canisters longer.

Answer: Ecology: Regarding Yucca Mountain, the State filed litigation against DOE for their decision to pull the national geological repository application. Congress made the decision to establish a repository; DOE does not have the authority to pull the application. This material should not stay in Washington. It is too dangerous. This decision needs to be scientifically based. A deep geologic repository is required.

Comment: At what point will offsite radioactive waste impact Hanford? Will offsite waste be sent to Hanford for treatment? Or will you export technologies developed at Hanford?

Answer: DOE-ORP: A lot of technology development dollars are being invested in the Waste Treatment Plant knowing that we have decades of work to do. DOE is exploring a lot of technologies like the next level (generation) of melters. Melters will need to be changed out every 5-7 years. France already is using a next generation melter that increases throughput and decreases canister footprint. DOE-ORP is working on treating Hanford waste; we are not looking at or evaluating bringing in more waste to Hanford to treat.

DOE-ORP is importing a lot of technologies from other DOE sites, e.g., Savannah River. We are exploring alternative pretreatment technologies and relooking at steam reforming.

Comment: I am a self-identified downwinder. Washington is a small state located in the far West in a big country. There are many votes on the other side of the Mississippi. Our elected officials are good. We need to get out the word to the other states; we need to work together. The nuclear industry has an ugly history; the nuclear industry is very powerful.

Comment: I am a Seattle University student. We did a survey on trust of public officials and the government. Survey results showed that people trusted Washington's government more than DOE; Heart of America Northwest more than DOE. There is not enough information about what is going on. The citizen groups are giving more information than you are; they are more trusted. Your stuff (information) is above our heads. It might help DOE's credibility if public materials were more beneficial. It's the way you react to us. You think we are attacking you; we know you are doing more. People do not feel they are being heard or their questions are being answered.

Answer: DOE-RL: I would like to see your survey to see what we could learn from it. I know we can and are trying to better communicate Hanford's challenges. We will look for ways to simplify our materials. Trust comes from DOE meeting its commitments. Cleanup is not secret. DOE is trying to be more open with its data. We continue to learn.

Comment: I have concerns about airborne particulates when you take down buildings (e.g., 324 Building). Do you watch the winds? Contaminated soils could end up in the river and create potential hot spots.

Answer: DOE-RL: Yes. We have plans on what to do to contain the spread of contaminated materials. We must meet requirements established for those activities. We have air monitors set around demolition sites. Prior to demolition we spray fixatives on these structures; during demolition several controls are put in place to contain any spread of contaminants.

Answer: DOE-ORP: The tanks in the tank farms are underground; but, we have controls in place for wind. We restrict or stop work when there is the potential for the spread of contamination.

Answer: EPA: DOE does a good job controlling airborne contamination. They use a lot of water to keep down the dust, but they need to be careful so as not to use too much water that would drive down contamination. It is finding the right balance.

Answer: Washington Department of Health: The Department of Health monitors real time for radiation and takes onsite field samples during building demolitions.

Comment: Have you considered remedies that could freeze contaminants in the soil?

Answer: DOE-RL: Yes, we did look at chemically perma-frosting the soil, but did not use it.

Comment: Spokane is dependent on the aquifer. This is a great roundtable discussion, but where is the Spokane discussion. Why were we left out of the State of the Site meetings? Can you schedule a meeting in Spokane?

Answer: Ecology: Thank you for your feedback. The agencies do come to Spokane on occasion. We came to Spokane on the TC&WM EIS.

Comment: You need to reach out to Spokane.

Comment: This whole meeting feels different than other meetings. People should try to get along and listen to each other. Regarding the Solid Waste Burial Grounds, remove-treat-dispose is what the public wants. I fear hearing there is a capping option. Financially this is the right way to go. Earth is our mother. We live here. You cannot cap it; you cannot leave this mess.

Comment: The (draft) TC&WMEIS and the Consent Decree – what is the disposition? What is going on? I did not hear anything about my comments.

Answer: DOE-ORP: DOE received over 5000 comments on the draft TC&WM EIS. We are in the process of reviewing those comments and are working with the regulatory agencies to prepare responses. We are also looking at new information. We plan to come out with a final EIS at the end of this year.

Comment: I am a Hanford Advisory Board member – the youngest member. We need many generations to be involved. We create and issue advice on things like the burial grounds; remove-treat-dispose vs. capping; value of the land. We will post this advice on the Hanford Challenge face book page. Through our displays we are trying to make Hanford more of a fun topic.