

Proposed Tri-Party Agreement Changes for Central Plateau Cleanup Work
and Mixed Low-Level Waste and Transuranic Mixed Waste

Portland Public Meeting
June 23, 2010
Meeting Notes

Ken Niles, Oregon Department of Energy, welcomed the public on behalf of the State of Oregon and noted that this evening's meeting would be less formal with a focus on discussion.

Todd Martin, meeting facilitator, explained that the evening's discussion would be captured in flip chart and meeting notes. These notes would be available to the agencies and everyone else in a few days (2-3 days) to help individuals in the formulation of their questions. He noted written question forms were available, also.

Tri-Party Agreement agency representative were introduced: Matt McCormick (Department of Energy - Richland Operations Office), John Price (Washington State Department of Ecology) and Dennis Faulk (U.S. Environmental Protection Agency).

Todd pointed out that both agencies and the public were dissatisfied with traditional public meetings that neither fostered understanding nor provided opportunity for discussion. Tonight's meeting would not be a traditional public meeting with a series of presentations followed by public question. Rather a few topics selected by some of the key stakeholders would serve as discussion topics. Everyone would have the opportunity to talk.

Todd provided an overview of Hanford noting its role to produce plutonium as part of the Manhattan project. Production reactors along the river and processing facilities on the Central Plateau produced airborne liquid and solid wastes. Liquid waste was discharged to the ground via trenches, cribs, ponds, etc. Most hazardous liquid waste is stored in large underground tanks, some of which have leaked. Solid waste was primarily disposed in burial grounds. One type of solid waste to be discussed tonight is waste containing transuranic contaminants. The formal designation of transuranic (TRU) waste was made in 1970. Hanford wastes that fell into this category after 1970 were stored in accordance with this designation and will be shipped and disposed of in a repository located in New Mexico called Waste Isolation Pilot Plant (WIPP). Hanford produced about 2/3 of its plutonium before 1970 and about 1/3 after 1970. Significant quantities of wastes that meet the TRU designation were disposed in burial grounds prior to the TRU designation. No decision has been made yet, but there is controversy around how to deal with these pre-1970 wastes.

The other topic for the evening's discussion is the strategic approach to clean up the Central Plateau waste sites, facilities, contaminated groundwater.

The evening discussion topics include this strategic approach, deep vadose zone (soil down to the groundwater) contamination and low-level mixed and transuranic mixed waste.

Question: Everyone in the room wants to talk about the water – the groundwater and the River, Is this going to be part of the discussion?

Response: Yes

Matt McCormick (DOE-Richland Operations Office): The proposed changes to the Central Plateau deal with how the work on the Central Plateau is proposed to be organized and includes the waste sites, buildings, burial grounds and groundwater. No cleanup decisions are being made by the changes being proposed. The proposed approach divides the Central Plateau into geographic areas. Cleanup of the Hanford Site consists of three major components: 1) the River Corridor – that area adjacent to the river where we are demolishing facilities, digging up burial grounds and moving waste and cleaning up contaminated groundwater going into the river; 2) tank waste - where 177 underground storage tanks contain approximately 53 million gallons of waste from past nuclear processing operations; this waste will be retrieved and eventually treated (vitrified) in the waste treatment plant (WTP), and 3) the Central Plateau, which we have divided into two areas - Inner and Outer Areas. The proposed change package contains milestones to hold DOE accountable to cleanup for the waste sites, canyon facilities and buildings in the West Area of the Central Plateau Inner Area. All cleanup decisions would be made through the CERCLA process and need to meet the nine CERCLA criteria. The goal of these proposed changes to the TPA is to be protective of the groundwater by addressing contamination in the soils before they reach the groundwater that is moving to the river.

Question: U canyon is missing from the 200 West Area map. Is there a reason?

Response: Yes. The CERCLA decision for cleaning up U canyon was made in 2005. The draft change packages implements the cleanup remedy.

Question: Assume no more waste is going into Hanford until waste treatment plant (WTP) is finished (2022)?

Response: Yes. That is the agreement between Department of Energy (DOE) and State of Washington with a few minor exceptions (e.g., Puget Sound Naval Shipyard)

Question: Is that your written word? Is it in print?

Response: Yes

Question: DOE refuses to make sending offsite waste to Hanford an enforceable commitment. The agreement not to bring offsite waste to Hanford expires when the EIS is finalized; it then becomes voluntary until DOE changes its mind.

Why is this not enforced? Twenty-one interest groups asked DOE not to make Hanford a National Waste dump. DOE formally responded. They refused.

Question: DOE is not trustworthy. They tell us things that are not true. They just say word, but do not mean what they say. Protect the river. DOE wants to make Hanford a waste dump forever. You are going to put more radioactive waste in Richland. We will fight you on this.

Question: The agencies say they want to discuss issues. Why does DOE not want to make an enforceable commitment?

Response: Do not know the reason. The decision was made by the Department of Justice (Ecology and U.S. Department of Justice.)

Question: If you have no say in this decision, why did you come? You are not cleaning up Hanford.

Response: Yes, we are.

Question: I am afraid Hanford will become a National Waste dump. This decision would affect more than Richland and Pasco. It would affect the entire Northwest. It would affect Portland, especially routes I-5 and I-84.

Response: The citizens of the Pacific Northwest have made a difference. Waste is not coming. You have been heard or waste would be coming to Hanford today. Other communities want the waste – it would provide an economic opportunity and create jobs. I am pretty confident Hanford will not become a national waste dump. Banning waste is very complicated. It has interstate commerce impacts. You (citizens) have been heard; you have made a difference. You are being heard now.

Question: The vitrification plant (WTP) is late, expensive and continues to be delayed. It is a huge financial investment. In all likelihood, DOE will not turn it off when done with Hanford waste. We do not know if that facility will be properly used. You want to make Hanford an experiment; you want to send other waste here.

Response: Hanford has 53 million gallons of high-level waste (HLW), which is most of the HLW in the complex. The vit plant will need to run 30-50 years to just treat Hanford HLW; there will be no capability to take care of other waste.

Response: The State of Washington issues the WTP (vitrification plant) permit. That permit/license is specific only for Hanford tank waste. To treat non-Hanford waste would require another permit, which would need to go out for public review and question. The vit plant will need to operate 30+ years to process Hanford waste. It will be worn out. The vit plant contains black cells (areas where no one can enter). In order to convert the vit plant to another use, one would need to prove it would be safe to operate. It is not credible that such a conversion could occur or that Washington State would permit this.

Question: There are so many disjointed Hanford projects. So many projects lessen the cumulative impacts. Why do you ask for feedback on the Central Plateau when you have not finished emptying the tanks? You piecemeal the projects to the public; you never provide us the cumulative impacts.

Response: I know you are frustrated. Hanford is a big project. It is very challenging to follow all the cleanup decisions. The public comes to all these meetings, but it is still very difficult to keep up. We are trying to put together information that you can understand.

Question: When do we get an answer on tank closures? How do those closures relate to this meeting?

Response: They do not relate to this meeting on the draft TPA change packages.

Question: There are two sites with high-level liquid waste – Idaho Falls and Savannah River. No one will allow high-level liquid waste to be shipped on the highways to Hanford.

Question: Hanford is so complicated. Need to follow the rules to keep everything open. We need to get to the real decision makers (elected officials); need to talk to the representatives who make the regulations to ban offsite waste. Contamination at Hanford is so bad. To get more contamination would put it above the limit – cannot add more contamination. The moratorium gives us some time to keep saying “not at Hanford.” Would like to see a way to show how all the pieces fit, e.g., providing information online like CERCLA RODs.

- Question: There are a lot of nuclear plants being built in the Northeast. Where does there waste go?
- Response: There is a difference between commercial waste from nuclear power plants and weapons waste; they are dealt with differently.
- Question: Need to get more Oregonians involved in Hanford. Need to write the *Oregonian* and talk about Hanford; let the citizens know what is going on. Need better communication.
- Question: DOE has an agreement with the commercial nuclear power plants. These plants are to keep their waste onsite for 20 years. That time has expired. There is no repository for this waste. There is nowhere to ship it. They are suing the government. Hanford cannot take more liquid waste, but what about solid waste? Secretary Chu in July is going to make a decision where to put this waste. He could decree that it go to Hanford.
- Response: Over the past 20 years there has been concern over the delays in getting Yucca Mountain established. Periodically, individuals in Congress have talked about Hanford fulfilling the role of Yucca Mountain. The creation of a National Repository is NOT DOE's decision. Secretary Chu cannot make this decision. This decision requires congressional action. In mid July a Blue Ribbon Panel established by the President to look at this issue will visit Hanford. The message the panel will hear from Hanford stakeholders is it is not appropriate for Hanford to take and store commercial waste. There is a lot of northwest opposition to using Hanford for this purpose.
- Question: Agree that it is highly unlikely that Hanford would be selected to store spent fuel. However, there is another EIS being prepared on Greater Than Class C (GTCC) waste. This waste form has no home and the amount of GTCC is predicted to grow over time. DOE is proposing to use Hanford to store that waste. A number of environmental interest groups and the State of Oregon do not support the adding of more waste to Hanford. The cumulative impacts from additional waste would be so great that the groundwater would never be cleaned up to drinking water standards. High-level waste is not the threat; GTCC waste is a threat and DOE does have authority over that waste.
- Question: Need to have a discussion/open dialogue with a consortium of elected officials. They are sending canned or nonresponsive letters to us. I would like you, the agency representatives, to invite elected officials for an open dialogue where we can have good communication (not miscommunication). Outreach to these individuals; help the public to feel they are being heard.
- Question: Regarding commercial waste, where is the Trojan waste? Where are the spent fuel rods?
- Response: On Hanford in the commercial low-level radioactive burial ground (Oregon is a member of the Northwest low-level waste compact). The spent fuel rods are in dry casks at Trojan.
- Question: Met with one of Oregon's senators. No citizens discussed Hanford at his town hall meeting. This is an issue for us. People are worn out. It is hard to get our arms around Hanford; it is difficult to understand; it is so disjointed. Why 20 years later are we still

planning to clean up? I know cleanup is being done. We are exhausted. Hanford is too horrific to grasp; too big for many. No one is talking to the elected officials. Need to boil information down to a 12th-grade level. People are not getting involved, because it is too horrendous.

Question: Broad discussion may be beneficial. It would be great to find out from you how to make the process better. How do we get congressional people here? How do we get our community involved?

Response: Public meetings do make a difference. We hear your values that we consider when we make cleanup decisions. We do not have daily access to senators or governors. We prepare the materials that are used by our management who meet with them. Continue to write your letters and go to town hall meetings.

Response: We mail information about meetings to legislative staffers. Sometimes the elected officials or their staff do come to these meetings. Congress is paying attention. Hanford received \$2B in American Recovery and Reinvestment – ARRA-(stimulus) money to put people to work, to get on with cleanup. We have been cleaning up for 20 years and have 40 more years to go. We need to sustain interest in cleanup.

Question: We do not have the power to get elected officials here. You do. They are more likely to accept an invitation from the agencies. I keep getting canned responses to my letters.

In the next 5-7 years there will be permanent cleanup remedies along the river. The Central Plateau is where we need to focus cleanup work. How to address deep soil contamination in the Central Plateau needs to be addressed. There are four operable units (groups of waste sites) where we are treating technetium -99 (Tc-99). In 2008, a final cleanup decision was made and DOE agreed to clean up the groundwater to drinking water standards. We are in the process of building a huge treatment system to guard and clean up the groundwater. In 1993/94 we stopped liquid discharges to cribs and tanks, which were driving the contamination into the groundwater. Most of the pumpable liquids are out of the single-shell tanks.

The deep vadose zone (DVZ) is deep soil (50-200 feet) contamination. There are not many viable technologies for this contamination. We use vapor extraction for the carbon tetrachloride (have removed almost 200,000 lbs from the soil). There are no technologies for Tc-99, which is very mobile, or uranium. The TC&WM EIS identified deep vadose contamination as a terrific problem.

The agencies have heard the stakeholders' concerns. This draft change package proposes to treat the 40 separate areas on the Central Plateau that have DVZ contamination as one unit. The 2015 date has been moved out to give more time to come up with a remedy. Hanford is being proposed to be the DOE national research center for DVZ. Hanford is getting the attention; getting the money to address this issue.

Question: Tanks are leaking. Said you pumped all liquids out of the single-shell tanks. How much of the liquid will you get out of the double-shell tanks? The greatest contamination is the last contamination. Need to do something about the many millions of gallons of contamination in deep soils.

Response: Lot of movement forward. Central Plateau is going from being dealt with as one big operable unit to several separate units. Deep soil contamination is going to feed the groundwater. DVZ is important. If you can solve the DVZ problem, you can solve the groundwater problem. Today there are no identified workable technologies, but there are a number of possible technologies that could be applied. DVZ is identified as 15-250'. Most of the contamination is in the upper surface although there are some places where contamination has made it into the groundwater. Would make a difference if could get to the upper level contamination. Some of the nastiest stuff is under the tanks.

Question: Could you use ARRA funds to go after shallow contamination? Those funds were used to expand the Environmental Restoration Disposal Facility.

Response: Those sites where contamination has impacted the groundwater are too deep to dig (100-200 feet). The groundwater program has made monumental strides over the last 20 years. Bringing together brilliant minds and enough money might fix the problem. I am hopeful in what the next ten years will bring.

Question: In the Central Plateau how long will it take for contamination to impact the Columbia River?

Response: West Area – long time (100-200 years)
East Area – 5-10-20 years depending on the geology

Question: Has contamination permeated the groundwater?

Response: Yes.

Question: Is it in the Columbia River?

Response: Some of it.

Question: Can you keep more from getting into the River?

Response: That is our goal. Chromium is a major groundwater contaminant. DOE is providing huge resources with the goal of stopping the flow of this contaminant in the next two years. It is a lofty goal, but we are going to get pretty close.

Question: Where are contaminants entering the groundwater?

Response: Tc-99 (T tank farms); carbon tet (200 West; using vapor extraction and pump-and treat); uranium plume (BX/BY tank farms – 200 East); chromium (along the river from past reactor operations)

Question: How much does lack of funds influence this cleanup? It is expensive but worthwhile.

Response: ARRA funds have enabled us to make great progress in addressing chromium contamination.

Question: What if had enough money? Unlimited money?

Response: There is a report due out next year on how long it would take to cleanup Hanford given there were no funding constraints.

Question: There have been many years of bumbling cleanup. There is a trust factor. Do what you say. In the past, Hanford cleanup was a joke.

Question: Does Gable Mountain Pond still exist?

Response: Yes. It dried up but contains residual contamination. This draft change package proposes to dig up and move the contamination.

Question: A lot of money was wasted on the deactivation and decommissioning of the Fast Flux Test Facility. What is its status?

Response: Deactivated, defueled, sodium drained. Cost approximately \$3M/year to maintain. The TC&WM Final EIS will identify the final end state and when it will be torn down.

Question: What about the sodium? piping?

Response: The sodium is stored. Some of it went to Idaho for treatment. The liquid sodium will be used as chemical feed in the WTP. The piping is still part of the facility (will be a D&D challenge).

Question: DVZ contamination seems disjointed. Decisions made on the shallow contamination, but what about the deep. What about the use of caps?

Response: All DVZ contamination (shallow and deep) will be in one operable unit and dealt with comprehensively. There are plans to put temporary caps on the worst tanks to prevent contamination from going deeper.

Question: There are no plans to permanently cap and forget about it?

Response: There is a final Record of Decision to cap U plant after it is taken down. There are going to be some caps on the Hanford site. Capping will be one alternative evaluated in the CERCLA decision process.

Question: What are EPA and DOE's views on capping? DOE's baseline shows caps are proposed to be placed over 40 miles of unlined trenches. EPA and Ecology resist capping. We should have a discussion on the different agency views.

Response: There will be some permanent caps. The decision to cap a site will not be based on money, but it being the right technology. There will need to be a compelling reason to cap. It is not a default remedy.

Question: You mean you are going to cap, because you do not know what else to do.

Response: The Inner Area will be the final Hanford Site footprint. The goal is to make it as small as practical. Decisions were made to dispose of waste on the Central Plateau and be protective of the environment. For example, that area has the Environmental Restoration Disposal Facility, U.S. Ecology, commercial low-level waste burial ground, U canyon, submarine trench).

Question: There are 43 miles of unlined burial grounds. Radioactive waste was dumped there, like plutonium (transuranic waste after 1970). DOE's commitment is to remediate the waste stored after 1970; however, the schedule to retrieve that waste was relaxed from 2012-2014 due to budget. All of that waste was to be retrieved by 2018. What is the schedule for retrieving that waste?

Response: What is going to happen to the waste in unlined trenches put there before 1970? It is a massive amount estimated to be the equivalent of 170 nuclear weapons. The Hanford Advisory Board has stated that TPA milestones are needed for that waste.

Response: How to address the transuranic waste before 1970 is one of the Central Plateau decision to be made. We are still in the investigative stage; no remedy has been proposed.

Response: The Atomic Energy Commission put the waste in the burial grounds. There were 50 burial grounds along the Columbia River. The decision was made to dig up and remove that waste. There are 22 burial grounds in the Central Plateau. DOE had some information about those burial grounds; however, it owes the regulatory agencies a revised study plan by December 2011. The agencies are planning to have a one-day public workshop on those 22 burial grounds later this fall.

Regarding the 43 miles of burial grounds, the rules changed while DOE of was disposing of the waste (waste before, waste after 1970). In 1976 the decision was made that chemical waste could not be disposed of into the ground (that waste is regulated by the State of Washington). In early 2000 Ecology and DOE reached agreement on digging up and treating hazardous waste (waste with chemicals). There has been good progress made on mixed low-level waste. There is a good story on the progress made with retrieving and treating the retrievably stored waste. What remains is a small amount of the really nasty stuff. There is more work to be done on the transuranic and transuranic mixed waste in storage.

The Washington State Department of Ecology (Ecology) only has authority over hazardous (chemical) waste. The original TPA milestone was to build a facility by 2012 to treat the remote-handled waste. Ecology's goal is to get all of this waste, not just the hazardous waste, off the Hanford Site. In this draft change package Ecology's compromise was to have an enforceable date (2035) by which all of this waste will be off the Hanford site and not hold DOE to the 2012 date to build a facility. Ecology and the State think this is a good deal. Waste retrieval is occurring now.

Question: Why is New Mexico the right place to send this waste?

Response: The waste is placed in salt caverns. Where there is salt there is not water. This area will be stable for a long time.

Question: Is Hanford sending radioactive waste to New Mexico?

Response: Yes

Question: Is that waste being shipped through Portland? Do people on the transportation route aware of this Hanford waste being shipped through their community?

Response: Transuranic waste follows a prescribed route. Oregon focuses its training of emergency responders in eastern Oregon where approximately 85% of the shipments occur. We provide the opportunity for the public to be informed although not all may be.

Question: What about the risk on those travel routes? Is it acceptable? Could people get sick?

Response: Radioactive materials are all different; all are hazardous. Waste being shipped from Hanford is contact-handled waste that has little penetrating force. This waste can be shipped without lead shielding. This waste provides no external exposure. Remote-handled waste does contain penetrating radiation and would required shielded shipping containers. Federal regulations require that radiation readings be taken at the source (shipping container), one meter away and two meters away. Levels diminish with distance. There is an example of 80 people dying from exposure. That number is based on an unrealistic exposure scenario. It is based on the highest exposure levels and constant exposure for a year.

Question: Does anything travel by rail?

Response: The Navy ships irradiated spent fuel in heavy shielded containers. Occasionally radioactive material is transported but not radioactive waste.

Question: Would the risk change if there were an accident or terrorist attack?

Response: Yes. Radioactive shipping containers are designed to withstand severe accidents. Never say never; however, in the past 60 years there have been accidents with no release. Few shipments go through the Portland metro area. Shipments do go through smaller

towns. Most of the transportation of these materials occurs in the Northeast and South not the Northwest.

Question: The remaining waste is nasty. Is there any consideration to stabilizing and keeping it on site until it loses some radiation and is safer to transport?

Response: No. Half life takes 30 years. It would take about 300 years to reach that state.

Question: The agencies have identified 2035 as the date to get all this waste offsite. The New Mexico permit for WIPP states this facility has to close by 2030. There is a big disconnect between the 2030 and 2035 dates. How did this happen? New Mexico is not going to extend that permit.

Originally waste mixed with chemicals) was to be out of the ground by 2018. DOE was to build a facility to treat this waste by 2012. What is being proposed is not build a facility. The waste in the ground that will be retrieved is mixed with volatile chemicals that off gas, there are powerful solvents, some of these chemical self concentrate and explode (like what happened in the Plutonium Reclamation Facility), some of these chemical s can ignite when they come in contact with air (the barrels these waste are stored in are not in good shape).

The State is required to treat in 90 days waste pulled out of the ground that will not be shipped offsite in a year. Why are you not requiring treatment of this waste that could explode (go boom), leak or vaporize into the air?

Response: The State has legal authority to make DOE treat waste 90 days after being pulled from the ground. The State made a very conscious decision. It thought it was a bad idea to test waste and find out that the waste was not hazardous thus the State would have no legal authority over it. The State thought it was a bad idea to expose workers to test the waste. The State's goal is to get the waste out of Hanford, out of Washington. We are getting something for giving something up.

Question; Will WIPP accept this waste if not know what is in it?

Response: WIPP has an exemption. Do not need to treat for hazardous component.

Question: But you do need to test.

Response: Yes. We need to certify and measure some of the important attributes (Pu, heavy metals) for safe disposal.

Question: Hearing a big disconnect. Still have to test. Where is the State's authority to store something that can explode? Where is its authority to waive storing material that will not be shipped in one year? This is a serious hazard. Has the Plutonium Reclamation Facility incident been forgotten?

Response: Regarding the 2030 vs. 2035 dates. The anticipated closure date for WIPP is based on the New Mexico Land Withdrawal Act, which places a limit on the volume of waste that can be stored. The permit is based on a time commitment. The permit expires in 2010 and will be renewed every ten years. The agencies based the 2035 date on the closure date in the WIPP closure plan which is different than the WIPP permit.

The agencies have received questions on changing the 2035 date in the draft TPA change package to 2030. DOE is currently in discussions with Ecology, WIPP, and DOE-

HQ to see if we can shorten the 2035 date to 2030 to administratively align to the WIPP permit date.

Question: Why is the State of Washington not talking to the State of New Mexico? Why are you ignoring the RCRA permit dates?

Response: We have talked to New Mexico and continue to discuss this issue with them. We will consider this date change when the agencies finalize these draft changes.

Question: Why did the agencies not select the 2030 date originally?

Response: There are a lot of activities that need to occur before we can get this waste into a form that can be shipped to WIPP. For example, there is highly radioactive equipment that will need to be size reduced; lead shipping containers will be required; there will be a limit on the number of shipping containers permitted per shipment. The date was based on these assumptions. DOE is relooking at those assumptions to see if the 2030 date could be achieved.

Question: Does this include the pre-70 waste?

Response: No.

Question: What if WIPP fills up faster and is full by 2020? Where would the Hanford waste go?

Response: Hanford waste is part of the WIPP waste volume (there is committed space). WIPP is nowhere near to meeting its capacity.

Question: I want to thank the people dedicated to cleaning up the waste. However, it never should have happened. It should have been stopped sooner. Death rates for cancer are higher for those living downwind and down river. We are messing with something outside our survival. We are listening to insanity. Technology is running amuck trying to clean up with technology. Stop doing anymore nuclear activity.

Question: Groundwater/vadose zone. The original proposal was to cap areas and not treat some sections even if they could contaminate the groundwater, because it was too expensive. Are you going to treat everything now? Are there plumes that will not be treated?

Response: There are a number of things embedded in this draft change package. The decisions will be made when the agencies go through the regulatory process. The agencies are committed to cleanup. There are a number of ways to clean up.

Question: In previous discussions there was no commitment to clean up. It was too difficult, too expensive. Contaminants would be left to migrate.

Response: There have been a number of public meetings. The feedback from those meetings was to focus on the deep vadose zone. This draft change package has a focus on it. The agencies have heard you. Today, we do not have the right technology. We need to invest in technology. There is a commitment to identify and test technologies to treat groundwater. We are building with ARRA funds the largest groundwater pump-and-treat treatment plant on the Central Plateau. Pump-and-treat is our safety valve for the indefinite future. Our goal is to be protective of human health and the environment. Protecting the River is our #1 priority

Question: Why did the public need to tell you to focus on the deep vadose zone?

Question: TC&WM EIS proposed capping tanks. Now the agencies talk about other work. This is a disjointed, non-comprehensive approach and hard to convey to the public.

Question: This meeting format was an experiment. I thought it went pretty well.

Would like feedback on the meeting format.

Question: Would like a response summary issue matrix. Need answers to questions raised. Would like another meeting to go over our questions.

Question: Liked this meeting. It was really nice.

Question; Information on trucks not hurting or harming us may be true. But no one can tell us the cumulative effects.

Response: A lot of trucks do not have penetrating radiation. Those that do, have different doses.

Question: What about a school bus sitting near one of those trucks in a traffic jam? Will those children be harmed?

Response: No

Would you like the agencies to use this format again? Majority said "yes".

Question: Can the question period be extended?

Response: It was extended once. There are no plans to extend again.

Question: Can the public review the changes before adopted?

Response: No

Question: Suggest use KUBO, public service announcements for future meetings to bring out more people.

Question: If there were more people, might not have had this discussion.

Question: Work with universities to get out information about public meetings.

Flipcharts

- We assume there is no more waste going to Hanford? With a few exceptions, that is true. Although some of the ban on waste importation are not enforceable.
- Latest cleanup approach is not what matters, new waste is what matters.
- Northwest needs to be heard on off-site waste.
- WTP is behind schedule and over budget but is an investment and federal government will want to keep it running.
- WTP won't be able to run without permit. Also probably won't be credible.
- Piecemeal approach doesn't work. NEPA requires an overall approach.
- To deal with big issues, need to talk to congressional representatives.
- Hanford is already at carrying capacity for waste.
- Comprehensive overview is needed.
- Where does the waste go from the nukes in the east?
- Need more people involved.
- Worries about commercial waste coming to Hanford.
- Should be a consortium of representatives that public can have dialogue with. This could solve some of the misunderstandings.
- The Trojan waste is in US Ecology.
- Senator Merkely is concerned about Hanford but it doesn't come up in town halls. Burnout factor. Need to get information boiled down to people can get involved.

- How can citizens make the agencies jobs easier?
- What percentage of contamination is 15-50 feet? More in upper part. If we can reduce the problem by attacking upper part. Are there places where you can dig up and do some good? 100-250 feet is the biggest worry.
- Rate of mobility to Columbia River? Slow in 200W but quicker in 200E.
- How long if no money constraints? Report will be issued in 2011.
- Trust factor is low and hopefully we can re-build trust by getting cleanup successes.
- Decisions about capping could impact ability to access deep vadose zone.
- Will there be caps? EPA decisions will be made during the process but DOE has a baseline that includes caps.
- Are there dangers with shipping through Oregon to New Mexico? Will people get sick?
- Any consideration of keeping TRU longer for decay?
- 2035 removing RH-TRU and 2030 WIPP closure. This is a disconnect. Why not change milestone to 2030? What happens if WIPP is full by 2025?
- 2018 out of ground instead of 2010 treatment facility. These wastes have VOC's, solvents, self-concentrating wastes, etc.
- Maybe the Hanford legacy shouldn't have happened? Thinking we can control this technology is insane. Stop more nuclear activity.
- Does lack of characterization data make disposal or transportation more difficult?
- Can the State waive shipping requirements? That's how the PFP explosion occurred.
- Why no discussion with New Mexico in regards to RCRA permit for WIPP.
- Confusion between TPA and EIS.
- Should have answers to questions that were raised during this session.
- Good format.
- Should extend comment period and should be able to look at this again.
- Ads should be included in KBOO and the Oregonian. Also, ads should be placed at universities.