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PUBLIC SCOPING MEETING

November 16, 1994

TAPE 1 - SIDE A

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NV: Good evening. My name is Linda Page and I'm working as a facilitator for this series of meetings. I work with Triangle Associates in Seattle, Washington. I hope all of you got the agenda for tonight's meeting and know the general direction which we going with this series of presentations and then comments from you. We want to spend some time hearing from the two programs ER Refocussing and the disposal facility and then take comments from those of you that feel you need to leave and don't want to stay until the formal comment period that comes a little bit later. When that's finished we'll go to a panel that will be a more informal question and answer session so that any of you that don't really want to make a formal comment but do have some questions or some comments or some discussion that you would like to have with the panelists can do that and then we'll come back again on the record to a formal panel or formal comment period. There's a lot of handouts in the back of the room including an evaluation form which the staff would really like you to fill out. So please do that before you leave and with that I would like to ask the panelists to introduce themselves. We'll start with Doug.

DS: Good evening, I'm Doug Sherwood. I'm the Hanford Project Manager for the Environmental Protection Agency and the lead negotiator for the ER Refocussing negotiations.

MT: I'm Mike Thompson. I'm a Hydrologist for the Department of Energy here at Richland and I served as the lead negotiator for the Department of Energy for ER renegotiations.

RS: Good evening. My name's Roger Stanley. I'm with the Washington Department of Ecology and I'm its' Hanford Project Manager and I serve for lead negotiator for the state.

OR: My name's Owen Robertson and I'm with the Department of



Energy and I'm the ERDF Project Manager for the Department of Energy.

PE: I'm Pam Ennis. I'm with the US Environmental Protection Agency. I'm the Project Manager for the Environmental Restoration Disposal Facility or ERDF.

NH: I'm Norm Heppner. I'm with the Washington State Department of Ecology. I've been working with both Owen and Pam on the disposal facility.

LP: There are a lot of seats. This is sort of movie theater seating where the aisles fill first, but those of you in the back, there are a bunch of seats along the sides and a whole row up front where the images are really big. Anyone who wants to come up. And with that I'll turn the meeting over to Doug.

DS: Well, welcome I'm impressed by the turnout tonight. This is great. I would like to welcome you on behalf of the three parties, the EPA, the Department of Energy and Washington State Department of Ecology. We're trying something a little different tonight. You're not going to hear from all three parties and hopefully we'll get to your comments a little earlier. The purpose of the meeting tonight is to discuss modifications and obtain your comments on our refocussing of the environmental restoration program. We have a tentative agreement that's been signed by the three parties and tonight we're here to get your comments on those modifications. In addition, the modifications that we've made have focussed on clean up in the near term and accelerating clean up along the Columbia River. In order to achieve that goal of early clean up in these areas, we need to have a place to put the waste and the second part of the meeting tonight is to discuss the environmental restoration disposal facility which we hope will be the site where the wastes from clean up of the 100 and 300 areas will go. I

would like to go through briefly kind of the negotiation process, a scope of the existing milestones in the agreement and a brief discussion of the status of the existing projects and then go through really where the changes to our agreement are and then I would like to provide the lead in to Pam Ennis who's going to talk briefly about the environmental restoration disposal facility. The parties agreed to renegotiate the milestones for the environmental restoration program at the end of the tank waste remediation system negotiations last year. During those negotiations we received a lot of input from the public, from the tribes and other stakeholders about Hanford clean up and during that process we actually started some new initiatives under the environmental restoration program. To look at early ground water clean up in the 200 areas and to move more quickly in the 100 areas and to look at the Columbia River as the main receptor for contaminants from the site. As a result of this we as three parties decided to initiate negotiations this year to kind take those new initiatives and fit better into the base program for the environmental restoration program. During these negotiations we also met several times with the public throughout the region and then also during this process we met on pretty much a weekly basis during negotiations with the affected Indian Tribes. We also had an enhanced role for the State of Oregon. We met with them on a rather continuing basis throughout the negotiation process. Is it on? The two processes which we use, the two regulatory processes that are used to cleanup the Hanford site are the RECRA past practices cleanup process which is the Resource Conservation and Recovery Act Process. And then the super fund process which is the Comprehensive Environmental Compensation and Liability Act process. What is important here is not all the things in the first two columns. It is really the things that are in the third column. It is the goal of what those processes are and we have milestones that correspond to various parts of these processes. Milestone M-13 is really development of

the plan for investigating the site and identifying proposed remedial alternatives that might be used for cleanup. The second milestone actually deals with performing those investigations and narrowing down the alternatives to be used for cleanup. And the final part is where we are tonight for the Environmental Restoration Disposal Facility which is we are obtaining public comment on the proposed plan for constructing that facility. This is followed then by a record of decision or permit modification which is the document that essentially decides what cleanup action will be taken and then we move into the actual cleanup actions themselves. That is kind of a description of three of the milestones that were renegotiated over this year. The other two milestones that were also effected by these negotiations were milestone M-20 which is the schedule for closing certain active recra facilities at Hanford and that milestone was changed by essentially coordinating the closure of those active units with the operable unit or the group of waste sites in which that active unit was located. So it was an effort to streamline the regulatory process if you will for those active units. The final milestone that we worked on was called the N-area pilot project. It was another effort to streamline the regulatory process to look at cleanup of the N-reactor facility as well as investigation and cleanup of the waste sites and the groundwater contamination in that area. And those are essentially the milestones which were dealt with during this process. What I would like to do now is briefly take a look at how this is broken down in terms of the areas of the Hanford sites and give you kind of a current status of the cleanup program by area. This map was developed by the Future Site Uses Working Group, it was a group that kind of divided the Hanford site into a variety of different areas that they felt may be available for different future uses. And for these six areas I would like to just go through where the major changes and what the status is in each of the areas. The first area, the Arid Lands Ecology Reserve

it is the green area to the south-part, southwest part of the map. There really was no effect on the cleanup activities in that area. Those have already been determined by a record of decision that was issued last year for cleanup of the 1100 area. So those activities are kind of ongoing and really unchanged by this agreement. The second area north of the river or the Wallukey slope area, this is an area where we had an ongoing removal action to remove contaminated material. It was completed in, I believe it was October of this year and there is still some activities going on out there and there will not be, there will be a finally decision document on the effect of those removal actions that will come out in the near term. The next area is the Columbia River. Last year during the ??? negotiations we started activities to assess the extent of contamination along the river. And during this last summer we took some more samples of sediments throughout the Hanford reach of the river as well as behind the dams between the Hanford site and the Columbia River. And there really wasn't a major change in focus through the course of these negotiations for the river. The all other areas portion of the site this is the big blue portion of the site. There were some sites where operable units groups of waste site within that are who are actually accelerated by the negotiations if you see the IU6 operable unit that is listed there. That is essentially groups of waste sites around the old Hanford town site. But these are not very significant sites and they were present before Hanford operations started. Probably would not have been a high priority otherwise. But if we would like achieve future site uses, goals and objectives for unrestrictive use in this area, those sites would need to be cleaned up and so we have moved those, accelerated the cleanup of those sites. The two areas that were primarily effected by these negotiations were the reactors along the river area which we have accelerated some cleanup activities and moved some investigations forward in those areas. The four remaining

operable units that are listed there will all be investigated before the turn of the century, they are all scheduled to be complete by December of 1999. And so literally for all of the areas in blue and the areas in purple, all the cleanup decisions will be made at or about the turn of the century for those areas. The areas where there was some delay, is in the 200 areas. We have delayed some investigations of what we call source units or groups of waste sites. But we have also concentrated a lot of work on treating and containing the groundwater in that area. Some of the reasons for why we chosen to delay the activities in the 200 area is that there really is a need for some very sophisticated technology to treat some of the wastes in the 200 areas. We really don't have good cleanup solution for some of these waste materials today. Some of the cleanup solutions will probably involve technologies that are being produced to handle other wastes at the site for instance, there is some contaminated soil with very high activity in the 200 areas that may require vitrification. The Environmental Restoration Program, really isn't funded in a manner to build another vitrification plant. We have to build one vitrification plant that is currently planned under the tourist program and that vitrification plan is probably going to have to handle the highly contaminated soil from of these sites. As well we have some transuranic waste sites that will probably require a facility like the RAP facility, the Waste Repackaging Facility for transuranic waste. So it didn't make a lot of sense to proceed with investigations of those site now knowing that the technology to mediate them would probably not be around until 2,005 time frame. So there are good reasons for some of the delays. Over all we feel that these are good changes and that they reflect the public values that we received both through the Future Site Uses Working Group process and through the Tank Waste Task Force process. And we certainly appreciate your comments on these changes tonight. What I would like to do now is to lead into the Environmental

Restoration Disposal Facility discussion and the F area ones. The next one. There have been a lot questions in the other cities about what type of wastes are we really talking about disposing in the Environmental Restoration Disposal Facility. This picture is a picture of an excavation that was preformed in the 100 F area it was of what is called a Pluto crib, this is a essentially it is a drain field that received liquid waste from the reactors during the time when the reactor had a fuel element failure. And what we did at this particular site, was that we tried to determine what the character of that waste was. We were concerned that it might transuranic waste and would be subject to some other disposal requirements. So what we did was essentially dig down and find out what was there. Most of the waste that would be destined for the Environmental Restoration Disposal Facility is contaminated soil. It is not highly radioactive, doesn't require a shielding to remove this material and currently the waste from this particular excavation is being stored in large boxes until hopefully we get a place to put it. That is what Pam is going to discuss tonight is issues with the Environmental Restoration Disposal Facility.

LP: Good evening everyone. I would like the people in the back to find a seat and if there is an empty seat near you, raise your hand and may be some of these people would like to take their chances on sitting down. Come forward now if you would like, there are a lot of seats along the edge and some over here too. Anyone else like to come forward and grab a seat before we go on with the presentation? Good evening everyone.

PE: Good evening everyone. As Doug described changes are underway that could lead to earlier clean-up along the Columbia River. Clean-up which will likely generate large amounts of contaminated soil. We believe that this facility is needed for the disposal of Hanford clean-up waste.

Tonight we would like to hear your concerns and answer questions about the proposed plan for this facility. This proposal is for a CRCLA landfill that protects human health and the environment, provides for timely clean up, moves contaminants away from the Columbia River, allows disposal of only Hanford clean up waste and the site is to support initial clean up activities. To provide you a brief framework for where we are now, I would like to start by briefly going through the process that we have been working with. The information that I will cover is covered in more detail in the handouts that are in the back of the room. Originally we were working with two regulatory processes, RECRA and CRCLA. In order to provide more timely clean up we selected CRCLA for the ERDF. We have prepared documents that evaluate the options for disposal of Hanford clean up waste. The RIFS, Remedial Investigation Feasibility Study, provides the evaluation of these options. It also provides the additional information about the need for the facility and discusses the proposed site and the waste that may be going to ERDF. The proposed plan provides a summary of the RIFS and proposes a preferred option. As part of this effort, we have integrated two regulatory processes, CRCLA and the National Environmental Policy Act or NEPA. The proposal reviews and considers elements that normally are found in the NEPA environmental impact statement. Throughout the development of these documents, we have asked for input from the tribes, the Hanford Advisory Board, and the National Resource Trustees and considered the recommendations from the Hanford Future Site Use Working Group. We have tried to respond to your needs by including many of the concerns we have heard within the documents that have lead to this proposal. We encourage you to review the complete package and give us your comments. Siting the landfill was not an easy task. We're proposing that the landfill be located in the central plateau of the Hanford site between 200 East and 200 West. Those are the gray blocks in the middle of that picture. As shown on this

figure, the location is within the area that the Hanford Future Site Use Working Group recommended for waste management. That's the block that outlines the 200 East and 200 West area. We looked at other sites, but we believe that this site is more protective of ground water and the Columbia River and provides for more timely clean up. The site that we're proposing would be available for clean up waste in 1996. Unfortunately, putting the landfill and support facilities at this proposed site could destroy up to 1.6 square miles of mature sagebrush habitat. This habitat is important to the wildlife such as the sage sparrow and the loggerhead shrike and has been designated by the Washington Department of Fish and Wildlife as priority habitat. In response to your concerns, we have made a commitment to require mitigated actions for the loss of this habitat. We have developed a range options for the loss of this habitat including restoration and creature enhancement of similar habitat by seeding, planing nursery stock or transplanting mature sagebrush. These options will be evaluated as part of the site-wide mitigation program. The clean up waste disposal options that we looked at are option one, the double-line trench. This option proposes a landfill that will be built using a standard RECRA liner. The liner would collect liquids that may be generated during operation. The double liner would provide an additional more reliable system to protect ground water. Option 2, is a single liner. This option proposes a landfill with a single liner in the trench. The liner could collect any liquids generated during operation. Option 3 is the unlined trench. This option proposes an unlined landfill. Option 4 is no action. This option consists of not constructing a landfill at Hanford and included looking and transporting waste offsite or using existing Hanford facilities. Other than the no action option, each option includes the use of a RECRA compliance protective cap over the completed landfill and requires that waste going into the ERDF meet specific waste acceptance criteria. At this time I would like Norm

Heppner to talk a little bit about the waste acceptance criteria.

NH: Option 1 can safely dispose of Hanford clean up waste, but to give you a better understanding of what wastes are being placed in ERDF. I would like to discuss some of the wastes. Doug alluded earlier that most of the waste would be contaminated soil. We're looking at 75% of that material. Another 25% would be garbage. Basically rags, clothing, pipes, contaminated with organics, metals and radio nucleids. The worst contaminants would include Cesium 137, Strontium 90, and Chromium 6. The ERDF is proposing and we're developing waste acceptance criteria currently to allow certain wastes, but not all. What we would consider allowable would be bulk waste. Basically uncontainerized waste that would be able to be retrieved. We're still saying ERDF is going to be the final resting place for the waste, but we don't want to eliminate the possibility that some day we may actually want to retrieve this waste. We're saying the waste will only Hanford clean up waste and CRCLA allows us to do that. We will not be accepting transuranics into this disposal facility, nor spent fuel, nor high level waste. We will be following RECREA which is the Resource Conservation Recovery Act which basically says has strict rules on what can and cannot be accepted. We will be following land disposal restrictions. The guidance provided by the federal government and the State of Washington which restricts certain wastes from land disposal. We will treat those wastes to applicable standards before disposal. One of the technologies that we're exploring currently is soil washing which will minimize the volume of waste disposed of in the ERDF and we want to be able to accept that at ERDF. Again, the double-lined leche collection system proposed tonight in this landfill is a conservative system that can safely dispose of these wastes.

PE: As you can see we have a variety of wastes that need to be

disposed of in a protective manner. Again, we looked at the four options for disposal of Hanford clean up waste. These options were evaluated using the 9 CRCLA criteria, 8 of the 9 CRCLA criteria. The reason we're here tonight is for the 9th CRCLA criteria which is community acceptance. Our proposal alternative for the Hanford site clean up waste is the RECRA compliant double-lined trench with a leche collection system and recovery system. We believe this option protects human health and the environment, follows the law by complying with the applicable or relevant and appropriate requirements or laws, and provides long term protection of the ground water and the Columbia River. The proposed landfill would provide capacity for Hanford clean up waste generated over the next six years. We would consider expanding the landfill only if there were a justified need and only after your opportunity to comment on the expansion. Again tonight we would like to hear your concerns and answer questions about the proposed facility. Copies of the proposed plan are located in the back of the room. We urge you to review this document and send us your comments. Linda?

LP: In the other cities in which we're having meetings there a stakeholder or someone from one of the public interest groups that has joined the panel at this point and given a presentation from his or her point. That's not going to happen here, so we're moving right into the formal comment period. That's for those of you that wanted to come and make a comment and leave and not really hang around for the questions and answers. This meeting was structured so that there could be some informal time and give everyone a chance to have that question and answer so we're hoping that most of you will stay for that before making formal comments on the record. Is there anyone that doesn't have the time to stay I would like you to come forward now. Please identify yourself and the ground rules for these comments are that we've giving five minutes for people to comment and I have a

handy dandy stopwatch. So I'm the keeper of the hook and at four minutes I'll let you know that you have a minute left. If you're representative of an organization and you are speaking officially for that organization, let me know and you'll be given ten minutes and I'll let you know when nine minutes are up and if you don't get everything said that you wish to say in the allotted time you may either add comments in writing or hang around until everyone has finished their first round of comments and we'll call on you and you can keep going for your next five minutes until you feel that you've had time, but that way if we keep it to five, everyone gets a chance pretty quickly in the program to make a comment. Go ahead.

NV: ??? (too far from mic) ...representing the Environmental Restoration Waste Management Program for the Yakima Indian Nation. The ERWM Program that is the Environmental Restoration Waste Management Program I'm very used to dealing with a lot of bureaucrats so I apologize for all of the acronyms that I will be using. The ERWM Program of the Yakima Indian Nation is here this evening to clarify for the general public our perspectives on the ERDF as proposed. Our government has been in consultation with the Tri-Parties on this particular project since January of this year. We recognize the difficulty in finding acceptable disposal options for the wastes that have been generated for nearly 50 years production and operations here at the Hanford nuclear site. We are in favor of a swift and effective remediation and restoration for the area. The Yakima Nation ERWM Program recognizes the reevaluation which has reduced the proposed site from the original six square miles to the current 1.6 square miles. Waste acceptance criteria are being formulated. We would support criteria which meets the nuclear waste policy act 500 year past closure requirements. We're opposed to the long term reliance on institutional controls for safety and health assurance. Aside from a lower long term effectiveness, such policy is against the

nuclear waste policy act which calls for unrestricted use of a site after 500 years past closure. Intrusion scenarios in the ERDF plan are optimistic at best. At no point is the potential for inadvertent intrusion as to the drilling of a well considered. Since the current proposal does call for the placement of a layer of top soil over the facility, it is reasonable to assume that at some point past closure, the land would be utilized due to the obviously arid nature of this region utilization of the land would presumably require a water source such as a well. Some intrusion scenario based on this assumption is logical. That is what would happen if some future resident wishes to drill a well on top of what is currently known as the environmental restoration disposal facility. We see a very real need for consideration of such a potential and we do recognize the difficulty in identifying a solution for this scenario. The Yakima ERWM Program is not convinced that this ERDF proposal adequately protects the health and safety of all people. The lack of protection of human and health safety over an extended period of time is very disturbing to us. Present ERDF planning and structure has the effect of putting real hazard management responsibilities on future generations. This responsibility is made more difficult through the below ground disposal option exercise for the facility. Now in addition to finding adequate management techniques our children and their children must also disinter the wastes that they wish to treat. In addition to human and health and safety issues we're disturbed that there are appears to be a limited commitment to the mandate to not cause additional disturbance during remediation activities. The ERDF represents a nearly two square mile disturbance to the environment. If the area currently targeted for the ERDF is covered with old growth sagebrush, this is a unique shrub step community which is quite sensitive to perturbation. Old growth sage represents the habitat for a number of both mammalian and avian species. We feel that natural resources are at risk if the Hanford mission has indeed shifted to

environmental considerations then activities should not pose a greater risk to sensitive resource areas. As I stated earlier, we have been in ongoing consultation with Tri-Parties for this and other activities here at the Hanford site. In our role as an affected sovereign government, I'm here to clarify for the general public our concerns as they've been raised in other meetings with the US Department of Energy, the US Environmental Protection Agency, and the Washington State Department of Ecology. Thank you all for your time.

LP: Thank you. Is there anyone who wishes to make a comment on the record at this point?

NV: Well I've been out there a long time and she's talked about a place to bury stuff. At East and West there's two big tunnels, concrete cover on them, you could bury a lot of stuff. Cover taken off and they got about four foot of soil on top of them. Up at Gable Mountains, the Indians they had the Gable Mountains filled back in again and up there we have holes 400 foot deep and one hole a thousand foot deep and equipment to drop the capsules in there and release them. I know it would take a lot of years, I don't know of any reason why that can't be used to take and put dry waste, a lot of dry waste down there. ??? 400 feet ??? site. They were down 400 feet and that was a big hole. So there's another place a lot of stuff could be put. I know Gable Mountain we had water tested and laid down the 8th hole to see how much water would leak out into the soil and they held the water. I know they had 352 wells that I was responsible for and so everyone, every month they would go out and check the wells and check and see how much water would leak out of them. Dry wells. Now they got record of which ones have got any liquid in them and ones that are just dry. I know that every one that they checked to see how much water would leak. They had a rubber ball they put down and go down and keep going down to whatever depth

because different wells are many different depths. So they would take and in between they would have the rubber ball to seal them the dry wells and check if there was any water leakage in or out. If there was any water in there, the way the equipment they have, it would go down until it hit bottom or hit liquid. Whenever would hit, whatever one or the other, then they come back up so then it'd go back down again and take a long time to go down but they tried to check all these dry wells to check and see how much liquid there was or whether there was any at all. So I know there was 352 that I had responsibility for and I know that after that they built some more. East and West, down the river, 300 area and all up along the side. So I'm told they got the record because I know at that time I had to get water wagon to put out so they could check to see any leakage in the soil.

LP: Thank you. There's no one else that wants to make a formal comment on the record right now so we'll move into the panel question and answer time and I hope some of you have come here with some questions and comments and the things you would like to ask the panelists. Meanwhile, I'd like to give an opportunity to the people to come forward again. This room is small. There was a misunderstanding and the group thought it was actually getting the room next door. So we would have had a little bit more room but there are seats up in the front if anyone is looking for one and there's lots of empty seats here. Anybody want to come forward? They want to be able to get out easily. Okay. So who has a question or a comment to anyone of the panelists and if you do know whether your commenting on ERDF or the full ER Refocussing Program please let them know so they'll know who should answer. Now's your chance. Could you please come to the mic because we are recording these and at the request of some of the interest groups putting the transcript of this question and answer period in the back of the record of decision.

BM: Berniece Mitchell, 115 Spring Street, Richland. My question is, I have several but I'll try to make some. One is, all of this paperwork that we have, how many of these people who are responsible for it, have read it all? Another thing is why haven't we learned by now to condense some of these things rather than have all of these reams of paper. Another thing is I saw something about a feasibility study, you do it before or after you did that agreement, the table model agreement thing you have there, the feasibility study and you don't have to answer that right now. They can answer later, but also I heard you say something about Hanford waste only and I've been reading in the paper about waste coming in here either from, and it was going to come in either out of the US and Hanford does not have any submarines, but we've had submarines buried, I need an explanation on that. So anyway there's a lot of things that I wish you guys would expound on because something is awry and he mentioned the ball so the ball is, we went from the ball to the rock, so the rock was legal seemed like.

NV: I'll answer your last question first. The question on Hanford waste only. The pertains only to the environmental restoration disposal facility. That's the landfill we're creating for the CRCLA waste. The clean up along the river. Other disposal facilities actually exist out on the Department of Energy's site and the Department of Energy would have to answer your question on those sites.

BM: While they're answering that I would like to know if we are indeed the world's nuclear waste graveyard? It seems like it.

LP: Nuclear waste, what was the last one, graveyard. Okay. Who would like to try that one? Looks like Mike.

MT: Certainly the Department of Energy does receive waste from other parts of the United States for instance what you

talked about the submarines. There's a environmental impact statement out that essentially says that up to 100 submarines may come to Hanford to be buried. That's just the submarine reactor compartments. They've defueled those and it's what's left of the reactor after the fuel's gone and they chop that part of the submarine out and they bring it here to be buried. I would image the Department of Energy would continue to dispose of Department of Energy wastes and wastes that the United States government has contractual responsibilities for nuclear waste here at the Hanford site, but that waste transportation and disposal would have to be within the laws of the United States and the State of Washington.

LP: There was a question on the paperwork.

NV: Just a brief perspective on paperwork. I certainly haven't read all of it. I read a tremendous amount of it, but there's a tidal wave more of it. We're I think over the last couple of years, I'm just seeing more and more efforts to try and shrink the paperwork either by taking let's say in some of the processes that we're taking that we are discussing this evening taking the number of months that overall investigation of waste sites are operable units can take and shrink them down or efforts to take some of the regulatory processes and the associated paperwork and to actually consolidate them into single documents. For example, one of the draft change requests that is out for public comment now is, I think Doug mentioned for the N area pilot project where we're looking at different types of facilities that are regulated under differing environmental statutes and whereas in the past you would have different groups of people working under different statutes, we're actually folding a number of those together in single documents. So there are more and more activities to try and shrink that overall flood of paperwork down.

- PE: Additionally there's a copy of the remedial investigation feasibility study for the environmental restoration disposal facility on the back table and that maybe what you were seeing. That kind of covers the thought process that we through in choosing the specific kind of facility that we proposed tonight.
- LP: Go ahead.
- BM: ??? (too far from mic)
- PE: Before or after the model was created?
- BM: ??? (too far from mic)
- PE: So I need to repeat the question so it's on the tape rather than have you crawl across all the people. The question is.
- NV: Berniece, I think you're referring to the green tentative agreement and then the remedial investigation feasibility study which is the brown covered document. That's about two to three inches thick. Okay.
- BM: ???
- NV: The TPA. The blue.
- BM: Before you put that together or after you put that together.
- NV: After.
- PE: So is this the one you're talking about?
- NV: Okay I know. I can address that. The feasibility study that was developed for the environmental restoration disposal facility was only one milestone contained in the blue document. In other words, producing that RIFS report

is only one commitment that the Department of Energy had made in that blue book. The blue book has been around since 1989 in various stages and it's been revised several times including a revision last January. So the commitment to do that big thick RIFS document on the environmental restoration disposal facility was done after the blue document was already produced.

BM: ??? (too far from mic)

NV: I need to, oh has the panel filled out the form?

BM: ??? (same)

NV: So the question is, has the panel filled out the comment form?

BM: No, have they rated the feasibility ???

NV: Oh is there an evaluation of the feasibility by the panel?

BM: ???

NV: I think that.

BM: We have reviewed, the regulatory agencies, have reviewed the feasibility study and our comments on that feasibility study are included in the administrative record for the disposal facility.

NV: I think I would like to take a little different spin on that. You're right this big RIFS document, feasibility study document, that you're talking about is really got all of the technical details of how this process proceeded to get to the decision for these four alternatives for the environmental restoration disposal facility. Hopefully, what we've done is in the very short document called the

environmental restoration disposal facility proposed plan, we have condensed most of that information that's needed to support a clean up decision and construction of the ERDF facility. So yes that big document provides a lot of technical detail. It's not very user friendly. It's very difficult for the public to read and understand and hopefully what we've done is developed a very short document that covers most of the material for people to read.

NV: And if you wouldn't mind going to the mic, if it's not too hard to get to otherwise I will repeat your question for you.

RL: My name is Rick Labon. I'm with the Lower Columbia Basin Audubon Society. I would like to know other locations that were considered for this project. If so, where are they and why were they not chosen?

LP: Did you all hear that question in the back? I didn't think so. He asked if other locations were considered for the ERDF facility and if they were, why were they not chosen?

NH: There were four locations considered for the environmental restoration disposal facility. Those locations, Danielle can we have the map, I think it would be easier to point them out on a map.

LP: He's got it. If you put it up a little higher they can probably see it better.

NH: The State of Washington used to lease this land. We no longer do. This is where the proposed ERDF is being placed. The other sites we looked at were here. This is a contaminated area. It's called the BC controlled area...(tape ended)

**TAPE 1 - SIDE B**

NH: ...found was it would be difficult to construct a facility in a contaminated location. We would first have to clean up the site, then we'd have to go in and build. It would have a lot of delay associated with that site as also mature sagebrush habitat. The other two sites were one here and one here. These were not as protective of ground water as the site we're proposing, but I think they were about 50-70 feet closer to ground water. They did have the mature sagebrush habitat. This one had a lot of power lines going through it. A lot of infrastructure that would have to be moved. That would be very difficult to move. Pam, is there anything I missed on the real big issues on why. It really boils down to this site was most protective for the long term. I mean this is the one that it would take a long time for these contaminants to migrate to ground water. Oh, White Falls Road also goes through this site. It's a natural historic site. It's being proposed.

NV: Was there any priority habitat in those two areas on the north end?

LP: The question is was there.

NH: Let me get the tech, Fred Rupps, is here. He's the technical person that lead the site selection process and you're asking some really good technical questions.

LP: One second Fred, the question was, was there any priority habitat on the other two sites.

FR: Yeah, it's a fractionated habitat on those sites. The site closest to 240 there's quite a bit of priority habitat on that one. That would be where Norm is pointing to right now. The 2 North area which is just north of 2 East, 2 West not as much. There's like Norm said, there's a lot of infrastructure on that site so there was a lot of clearing and grubbing pretty easily. There are a couple of other

reasons. The Future Site Uses Working Group as you saw on Pam's map outlined an area, right. We tried to keep the disposal facility within that. They were very interested in maintaining waste disposal activities within that boundary. That was another consideration.

NV: Was there a priority habitat in the extreme eastern?

FR: Yes.

LP: Question is was there priority habitat in the extreme eastern location?

PE: The habitat in the current proposed location and the BC controlled area is essentially the same habitat.

LP: Another question or comment from those of you in the audience.

JN: My name is Jim Neighbor. I have a sort of a number of parts to this question. I'll ask them all and maybe we can just get the answers then. One is, what is the predicted life of this double liner type of configuration? Second question, is there any monitoring of this configuration which would catch any type of break in integrity? Number three, what prevents radioactively contaminated buildings and equipment from being placed in this facility? And I guess I ask that question in the light of the people said it was going to be strictly 75% soil, is that true or can as you rip down buildings and pull out equipment, can that be dumped in here? Where does the soil go that you pull out of this hole? And in the future, what prevents, I look at this as sort of a foot in the door, what prevents modification into what you're doing now which wouldn't allow higher levels of radioactivity to be dumped here or placed here?

LP: Five questions. Who wants to, does anyone feel like they

can answer all the questions? Okay.

NV: I'll take a whack at that one. Those were good questions. Would you mind repeating them? No. As he said for the period we have planned in the operable units that will be becoming available at that time, there are no buildings in those operable units to be torn down. So within the timeframe we have for this thing. There's no buildings anticipated at this time, but they could later.

NV: So you're talking about soil in the 100 area, if you start to pull down reactors there.

NV: But we're not planning on doing reactors within that timeframe.

NV: Let me answer this question. There's an immense volume of soil. That's where the 75% comes from. We will accept rubble and debris. That was that 25% garbage figure I gave you. So we will accept low level contaminated buildings that would be found at those sites. That can go in the hole. 75% soil gives you a framework for how much volume of soil we're looking at putting in this facility. That's how much contamination that's out there. Your other questions I wrote them down and if I get them wrong, please correct me. The predicted life of the liner. We're proposing a facility that has a double liner. This way if the first liner leaks, there's a second liner to catch it. In this risk assessment that is provided in that huge three inch document which I would not recommend for anybody to read, but it's in there, we assume that the life of the liner is 30 years. Thirty years. What this does for us is it allows us to collect the leche and analyze what contaminants are coming out of it and making sure we are being protective of ground water. The fact is it may last more than thirty years. That's the assumed life for the liner.

NV: Can I add a little?

NV: Yes. Sure Mike.

MT: The (two talking at once) somewhat of a time perspective in that at a standard RCRA designed trench the liner is there primarily to protect the environment during the life of the operation of the facility. Before you put a cap over the top of it. It's there to collect whatever. Rain water may infiltrate through the facility before you close it. The real protectiveness of this facility does not come from the liner underneath the waste. That's a short term situation while we're operating the facility. The long term protectiveness comes from two things. First of all is the cap which will be designed to keep infiltration of rain water from going through the waste and second of all we cited this specifically in part of the Hanford site that has the deepest part of unsaturated soils, what we call the vados zone. Those soils are very good at collecting radio nucleids and holding the radio nucleids. We have a long history of that here at Hanford. In fact over the fifty year life of Hanford, we've purposely don't radioactive liquid waste to the soil and allow the soil to become a sponge for those wastes that we have an immense amount of data for that. So between the cover over top of the waste and the thick soils underneath of it, we feel that we have a well designed facility that will keep the wastes from getting to the ground water or to the Columbia River. It's not the liner that provides that long term protectiveness.

NV: The liner only has to maintain while you're filling it.

MT: Yes sir.

LP: The comment was from the audience was the liner only has to maintain it while you're filling it. Sorry, it seems so redundant, but I want to get all this on the record.

NV: There are numerous monitoring systems out there. We have a leche collection monitoring system to monitor the leche in the storm water run off and also we have air monitors there for any airborne contamination.

PE: We'll also be including ground water monitoring for the facility and that will meet the RECRA requirements for ground water monitoring and the type of air monitoring we currently looking at is air samplers and we've had significant comment from the public over these past two days about using continuous air monitors or cams out there and we're probably going to consider using those too.

NV: Where does this one and one half miles of soil go?

PE: The current design that we're looking at here is for a cut and fill. So we would use the materials that's coming out of the hole for developing the rest of the facility and additional material that would be coming out of the hole would be used for a daily cover which would be cleaned. Material that would be put over the waste that would be going into the hole to reduce the likelihood of contamination from windblown particles. Cut and fill is where they would dig down and build up at the same time. So you would be digging down in the hole and building up around the hole to reduce the amount of dirt that would be stockpiled.

NV: I think you can get a better idea for the cut and fill when you see the model outside. We have some people available for you after the presentation so we can answer those questions in more detail. You had one other question and I'm not sure I got it correctly. What prevents modification of accepting higher level radioactive wastes in this facility.

NV: Well I guess the question referred to if you start to pull

down buildings and contaminated equipment. I can see possibilities where you grind it up, mix it and get below your specification level, but you're dumping a lot more radioactivity in there.

NV: Okay.

NV: What prevents that or can you do that?

NV: The question was and I'm going to try and paraphrase you, was can we dump buildings and equipment with high level and mix it with cleaner materials so it's lower levels to go into the facility? No. We want to minimize the volume of material going into this facility. We're not saying we can't put those buildings and equipment as long as they meet those of the waste criteria. They can go in. But we can't mix them with cleaner material to make them cleaner. Was that understandable enough?

NV: Yeah. Thank you.

LP: Other questions or comments? Go ahead.

AC: My name's Allen Carlson and I'm a concerned citizen. I would like a clarification on one of the slides that was put up. The waste going to the ERDF will be meet land disposal restrictions under RECRA, is that correct?

PE: Yes it is.

AC: Okay. If that's the case, I think we're talking about a huge amount of material going into this ERDF facility. It would seem to me that you would expect some of that waste would not meet land disposal restrictions. That you will be retrieving from the 100 and 300 areas. If that's the case, don't you need a treatment facility, I don't see any plans for a treatment facility associated with this disposal

facility. All I see is a disposal facility right now. So has an assessment been made of the volume of waste that will be retrieved from these areas, that will require treatment prior to placement in the ERDF and if that assessment has been made are plans being made right now for a treatment facility to treat that waste, if not are provisions made for interim storage of that waste prior to disposal in the facility?

NV: If I may, that's beyond the scope of the ERDF. That would depend on the operable unit and this record of decision in this process of regulatory, what kind of pre-treatment would have to be done? If it does need it.

NV: I'd like to add a little bit more to that. We don't anticipate a lot of waste not meeting LTR's.

NV: Can you quantify?

NV: No I can't. We have in the document what the maximum concentrations of what we've seen out there so far. We're building a facility that we want to meet all the laws on the book. Because those laws were put there for a reason and that was to be protective of the environment. We feel we can meet land disposal restrictions in most cases. Where we can't during the investigations we're going to have to ask the public what's the right thing to do? If it's to treat the waste, we're going to treat it. If it can't be feasibly treated, we're going to say to the public, should CRCLA provide a variance for the disposal facility. The answer may be yes, it may be no. We have to wait until that happens. We don't anticipate that happening in the near term.

SC: So really there's no assessment has been made for any treatment or interim storage of any waste that will not meet land disposal restrictions?

- NV: The treatment evaluation has been done for each operable unit investigation. In other words, the treatment analysis was done for each waste source. Those documents that evaluate treatment will be out for public comment during the comment process for each of the operable unit waste groups, or groups of waste sites. The first of those and in fact there are feasibility studies available looking at that information for the first three operable units that are coming up that could potentially dispose of waste in the environmental restoration disposal facility. Those will be out for public comment around January 15th and if you're looking for it, it's called the 100 DR1, 100HR1, and 100BC1 Operable Units which are the first sources. Those will shortly be followed by the 300 areas waste disposal sites.
- SC: Thank you.
- LP: You had something you wanted to say Mike?
- MT: No.
- LP: Okay. Other questions or? There we go.
- DB: Dan Bell and I got a question. Behind 220 West Ray Docks and they gone by another man and I, we made a dry well, two dry wells, it's out of ties and craft paper on top of that we put a steel plate and a riser, so eventually I was transferred to another building and I come back and here there's a tanker from 300 area and I don't know how many loads and it's hot waste from 300 area was dumped in that dry well. ??? they thought a tank was down there. I said there's no tank, it's just sand down there because I helped build the dry well so I know so you better stop. Because I know doggone well it's hot and awful hot. It's a dry well behind 220 West Ray Docks. So if you want to find hot stuff it's there. If they haven't done so yet.

## PUBLIC SCOPING MEETING

November 16, 1994

LP: Want to answer that question? Okay.

GW: My name's Gene Weiskoff from Pendleton, South Carolina and we're in the process of moving out here so all of this is new and exciting to me. That last question brings up one of my thousands of questions, but I presume that after x number of years that the clean up has been initiated you know pretty well where the documented sites are, what percentage more undocumented sites does anybody suspect there might be? Such as the one that was just discussed and have you run into surprises so far that kind of elevated how many dollars have to be spent, how many man hours that type of thing?

NV: You might want to comment on whether that one was documented.

NV: I think that maybe the one the gentleman is discussing is documented actually. I think it's a dry well that's listed in one of our operable units that is a list of waste sites around the Redocks facility so I believe his waste site is documented. Are we finding more waste sites all of the time? Yes. And every year there is a document put out or an updated document put out called the Hanford Site Waste Management Units Report. It's a report that documents all of the known waste sites at Hanford and yes indeed we're finding sites all of the time and we're using a lot of different tools to look for those sites, both during our operable unit investigations and other times we're using aerial photos and looking at ground scars and a variety of other ways in which we find sites at Hanford. I don't believe there's a lot of major ones out there that we don't know about. I just think that we've done a massive search over the last five years and really we're probably going to find some more, I can't say we're not, but I think we've got the major ones.

LP: Anyone else on the panel want to comment on that?

NV: Just a follow on it. I think also some of the early clean ups that have been underway, instead of having so many surprises in them that it drives the cost to clean up a number of them actually, once we've gone into them it's been the other way around. Where it's been far simpler than was actually projected at the onset.

LP: Go ahead.

NV: I would like to suggest that the gentlemen that just spoke be put on one of these some panel or another. It's better to have a live breathing person who helped put these things out there to have, go out and create all your new instruments to look for them.

LP: Other questions or comments? Go ahead sure. There's still a lot of seats up here too. I'm selling seats in the front row.

LF: Lisa Fitzner, Kyona, Washington. I had a question about mitigation, you indicated that you plan to mitigate for wildlife habitat loss at this site. Just how do you plan to do that and how much do you anticipate that will cost?

PE: I don't think at this time we can really give a cost on how mitigation will be. It kind of depends on what exactly we end up doing. We are looking at some different mitigation things. I listed a couple of them up on the screen. Enhancement of the wildlife, transplanting of sagebrush, collecting seeds and starting a nursery for the plants that would go over the finished ERDF. We don't really want to piecemeal this in little parts, we'd like to have it approached as a site-wide program.

LF: I think you're going to find out it's going to run into the millions of dollars.

NV: I would like to add something.

LP: First repeat her comment okay?

NV: Okay. One of the things she said was it will cost probably in the millions of dollars. Probably true. And one of the things we're trying to do is minimize how much mitigation we have to do. So we're starting out small. We're starting with only two cells. Where approximately 165 acres will be disturbed as opposed to the land area that we have reserved for disposal capacity which is 1.6 square miles. So we're trying to cut those costs, keep them as low as possible by restricting it, at least for the first five years. About 165 acres. So maybe it won't be in the millions, at least not initially. We know the cost is there.

NV: I'd like to add one more thing and that is we really don't know how well some of this is going to work. They're starting a project now with the tribes in the area to revegetate and restore the Emsol site along the Columbia River. I think really we won't have a good idea of how much we need to do and what's the right approach until some information's available on their successes hopefully for the Emsol site which was disturbed along the river.

PE: Additionally, we're going to be working with Washington Department of Wildlife and the US Department of Fish and Wildlife and the Natural Resource Trustees to try and develop some mitigation ideas for the Hanford site.

LP: Anybody else have a question or a comment? No. So I'll close the end. Oh go ahead and please come to the mic.

NV: ??? I didn't know if you were going to that next phase.

LP: I'm moving on, the train is moving. You want to be a formal commentator then? Okay. All right. I'm going to close the

informal comment period and we'll move to the formal comment period which means that your comments are on the record and will be responded to within the documents that are produced as a result of this comment period. Please give your name and address for the record if you're willing to. Oops I thought he was going to the mic. Anybody want to make a formal comment? Please do. Again I'll let you know when four minutes have gone by and when it's five.

RL: My name is Rick Lamont. I represent the Lower Columbia Basin Audubon Society. I was a member of the Hanford Future Uses Site Working Group and am currently a member of the Hanford Advisory Board. Our great fear has for a long time been that in the clean up process we are going to destroy habitat and it will not be mitigated. The Hanford site is an absolute treasure of wildlife habitat, wildlife, native grasses, native plants. We know of at least forty-eight rare, threatened and endangered species on the site now. Their inventory is going on. We expect this count to dramatically increase. These species are here because of the security requirements for Hanford and they're here as an accidental by-product of that security not by the design, not by the management of the Department of Energy. Now that we're into the clean up phase and the security requirements are going away, we are gravely concerned that we're going to lose this habitat. We're losing shrub steppes of that habitat in this state at a faster rate than old growth timber. Basically the Hanford reservation, the Yakima Firing Center, are the last great places for shrub steppe habitat in Washington. DOE is off to a bad start. The north slope clean up took place this summer. Habitat was destroyed out there that did not have to be destroyed in the clean up process. We don't feel like there was sufficient oversight by the Corps of Engineers or the Department of Energy. We don't feel like the Fish and Wildlife service or the Washington Department of Fish and Wildlife were utilized as they should have been as oversight in this area. Now

that we're moving, excuse me, back up on the north slope. I was assured at the Hanford Advisory Board meeting in October by Mr. Wagoner that the north slope would not be considered complete until this damage was restored and I was assured that the restoration was taking place. Last word I have restoration has not taken place. The area that was disturbed should have been reseeded before the fall rains started. It's probably too late to reseed now so when we're going to come back in next spring to reseed, you're going to have a problem with noxious weeds so it's going to cost the taxpayers more money to restore this habitat. We've got the second problem with the weeds. I just am very disappointed with the way the north slope was done. Fortunately, the habitat lost there was very small. With ERDF we've got 1.6 square miles, this is priority habitat, the loggerhead shrikes and the sage sparrow are here. The loggerhead shrike is a state and federal candidate species. The sage sparrow is a state candidate species. Transits have been run by the State Department of Wildlife along Army Loop Road just south of the ERDF site. The density of loggerhead shrikes along the Army Loop Road is the heaviest density of these birds in the state. The habitat along this road is identical to the ERDF site so we have to assume that we would find the same density of these shrikes at the ERDF site. Now these are candidate species and neither requires that they be treated as a listed species and we're very concerned that the restoration and mitigation is not going to happen. We've got the north slope as our example of how it's done. I don't want to just stand here and criticize the Department of Energy, the Corps of Engineers. What we want is the north slope to be restored and we want the ERDF area to be, the minimal amount of habitat to be disturbed. Keep it at the very minimum and then after the job is done, get in there and restore it. Now you just told us that we're only going to be disturbing 165 acres over the next five years. I think right now, we need to start mitigating for the entire 1.6 square miles so that these species have a

place to migrate to. I don't think it's of any value to go in there and just rip up all this habitat and then a couple of years later go over a mile and try to start reestablishing. It takes time for these native grasses and shrub steppe, sagebrush to mature. So we need to get in and do it as early as possible. We're off to a bad start. I hope we can turn that around. Thank you.

LP: Thank you. Anyone else wish to make a formal comment? Okay well we can go back to informal questions and answers if there's anybody who would like to go back into that mode? Is there anyone who's considering asking a question or making a comment informally? Or formally? Just needs a little more encouragement? Otherwise I'm going to close the meeting. Okay. Here we go.

GW: My name's Gene Weiskoff. One of my questions is how do I get more information. You've got the little update that gets mailed out informally or you know low level information. Is any of this information available in sort of a digital format? So if we want to search for our favorite contaminant we can do that? Is there a way to get it on mass without getting giant documents?

NV: No, we've talked about that. That's an interesting proposition.

GW: It probably starts that way and ends up on paper, so somewhere it's already digital. It's just a question of distributing it, if you're allowed to or whatever.

NV: If you're a real glutton for punishment, you could go to the Administrative Records here in town and look at all the information we've put there.

GW: On computer or on paper?

NV: Yes.

GW: Yeah, but as a member of the lay public, I don't know what I should read or what would interest me or what I would understand and is there one, what were you calling the.

NV: The Administrative Record?

GW: Okay and it has anything relating to it there?

NV: All of the documentation that would be used in decisions by the Department of Energy and the regulatory agencies by law has to be in the Administrative Record.

GW: And are there any local writers who might have written interesting books about this process for the average reader?

NV: There's some interesting things about the early history of Hanford, but not very much on the clean up efforts.

GW: Well I'll think about the move. Appreciate your help.

LP: Sounds like a book in the making.

NV: Right here.

LP: Uh huh

NV: I heard you say a few moments ago that anybody wanting to make a formal that would go on the record, are you saying informal statements are not considered part of the record?

LP: The distinction, all, everything that happens at all these meetings is going to be in the record, but when it's a formal comment on the record then the agencies are required to respond within, maybe someone else should answer this for me, but within the record of decision. They go in as

response to comment document, whereas the things in the informal question and answer part is just like going to be in there as an appendix in other words. So the agencies don't have to respond further in the formal documentation that's required by a lot of the federal and state requirements. So if you want something responded to within the document you should come back and make it formal.

BM: It's my formal document request I would like to reiterate the suggestion that you place the gentleman on your asset situation, debrief him and others like him for in the realm of investigative part of this operation. And while I'm up, I'll bring up a subject that has not been brought up except through the audubon situation. I would like to go on record as saying I would not like agricultural to be considered for any of that land for the simple reason that ag people seem to be now selling off some of the land that they have for housing projects so I don't see any need to expand land for them.

LP: Thank you. Sir?

CS: This is informal and my name is Charlie Schneider and how high is the ERDA above the 100 year flood plain?

NV: It's above the 100 year flood plain but what I'm getting to, there's a map in the document, is that true. How about if we meet afterwards and we'll take the document out and actually show you the contours.

LP: The panel has offered to hang around and talk with any of you individually after I close the meetings so that may be the next thing we do unless there's someone else who would like to be on the mic, formally or informally. Go ahead.

OE: I'm Oscar Elgert. I live near Kennewick, retired and a sometime nuclear engineer consultant. I comment on the

decision to promote the early clean up along the river. I applaud that decision to amend it, the TPA to emphasize, clean up of the areas along the Columbia River first. I believe it is desirable to remove radioactive chemical and petroleum contaminants from these areas as soon as possible. However the pace of actual clean up appears to be excruciatingly slow with a \$2 billion dollar Hanford budget, it would appear, annual budget, it would appear that much more resources both dollars and manpower could be allocated to clean up along the river. There also appears to be an ineffective effort in clean up. For example, according to the latest Hanford site environmental report for 1993, only about 1100 of a curies strontium 90 is entering the river and a strontium 90 concentration upstream of Hanford is the same as downstream of the 100 area. In other words, the release of that 1100 of a curie does not contribute to the overall level of strontium in the river. Still the projected effort to abate 90 strontium relieves on a temporary basis is ongoing and is projected to cost nearly \$35 million. I believe these funds could be more effectively used in actually removing the contaminated soil underneath these disposal facilities and thereby eliminating the source of strontium 90 from this general area. Thank you.

NV: I have a question. What type of vegetation will be allowed to grow over the cap of the ERDF and will this vegetation ever be allowed to reach a climax community of native shrub steppe habitat?

PE: I can answer the first part of the question, not too sure about the second part of the question. We in there looking at putting in the same kind of habitat that is surrounding the facility. So it would be trying to plant the brush grasses and a lot of the native plants within the facility, on the cap. The cap will be done such that it will promote growth of these plants. We're going to include the fine

soils on those for the plants. As far as will it mature to the mature sagebrush habitat, yeah I'm that will depend on a number of factors that I'm not really sure of at this point, but I can get back to you on that.

LP: Anyone else? Okay, this meeting is adjourned. I thank you all very much for coming and the panelists will be available to talk with you personally for a while.