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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 HANFORD PROJECT OFFICE
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RICHLAND, WASHINGTON 99352

February 16, 1995



Russell Jim
Program Manager
Environmental Restoration/Waste Management
Yakama Indian Nation
P.O. Box 151
Toppenish, Washington 98948

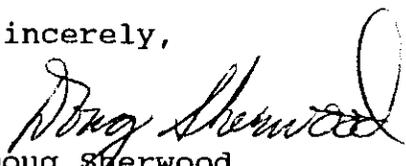
Re: Environmental Restoration Disposal Facility (ERDF)

Dear Mr. Jim:

I have enclosed the relevant portions of various documents as stated in a letter dated January 23, 1995 from Chuck Clarke to Jerry Meninick relating to the Environmental Restoration Disposal Facility (ERDF) decision-making process which specifically discuss the issues and concerns of the Yakama Nation.

If you have any further questions or concerns regarding the ERDF, please contact me at (509) 376-9529 or Pamela Innis, ERDF Project Manager, at (509) 376-4919.

Sincerely,


Doug Sherwood
Hanford Project Manager

Enclosures

cc: Chuck Clarke, EPA, w/o Enc.
Jerry Meninick, Yakama Tribal Council, w/o Enc.
Mary Riveland, Ecology, w/o Enc.
John Wagoner, DOE, w/o Enc.
Administrative Record w/Enc.

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ENCLOSURE 1

**EPA Responses to Issues Raised by Mr Russell Jim's January 13,
1995 Letter to Chuck Clarke, EPA Regional Administrator**

Issue 1a - Environmental impact analyses performed to date for the ERDF do not take into account future Yakama Indian Nation activities.

Issue 1b - Evaluations performed by the Agencies to date for the ERDF have not reflected the comments of the Yakama Indian Nation.

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Comments Received from the Yakama Indian Nation

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The latter of the two, that's, ok, thank you.

Marty Roselle

Ok, thank you. In the back, are you able to hear the question or do I need to repeat them? Can you hear them in the back. Ok, good.

Is there another question?

Yes sir.

Questioner 2 (Bob Cook - Yakama Indian Nation)

Yes, relative to institutional controls, what's the design for giving up institutional controls for the facility? How long do you assume institutional controls persist to protect the environment and public health and safety?

Bryan Foley

That's a good question.

Questioner 2

You don't know, I assume you don't know the answer.

Bryan Foley

It doesn't jump right into my mind with the. . .

Questioner 2

Let me ask another question. Do you intend to design the facility for the long term, such that you don't need institutional controls? Is there a design requirement? You talked about long-term effectiveness. Is there a requirement on long-term effectiveness or is that a goal or what do you mean by effectiveness? Is it free use, you had this nice picture up on the wall. Does that mean that we could put a farm there and a person putting his well down through the middle of the thing when you're saying it's closed, yes.

Bryan Foley

No. The, in terms of long-term effectiveness, it gets the bottom line is that we expect that the facility, this proposal would be protective of human health and the environment for the duration that it through its final. . .

Questioner 2

Infinity.

Bryan Foley

Well, through the closure of the facility and. . .

Questioner 2

Well, that's 30 years in, what about 100 year in?

Norm Hepner

Let me help out here. We are going to assure that we are going to protect the environment. There's going to be a lot of risk based data going into that and I believe the numbers up in the, to get to the Columbia River up at 10,000 years.

Questioner 2

No, I'm just talking about the site right there.

Norm Hepner

I realize that. There will have to be institutional controls. You will not be able to place a well through the landfill.

Questioner 2

Ok, so if you're going to commit the site resources permanently to this purpose, don't you need to have an EIS with a record of decision rather than this other process to commit the, to go through a regular EIS process to commit that resource permanently?

Bryan Foley

I guess what I would share with you is that, the values and the intent of NEPA we're hoping through this pilot project to be able to show that those values are captured in the regulatory package and they're considered and evaluated and I guess what might be helpful is, you know, I know things like socioeconomic impacts, accumulative impacts, long-term, that kind of thing, which is typically associated with or look at under the NEPA process, what in, we're hoping to capture those things and if there's something that you have in your mind that you think that an EIS might have that this regulatory package or this framework might not have, that would be helpful.

Questioner 2

Well, we'll give you that comment. I was just trying to understand whether or not you anticipated that if a permanent commitment of resources required an EIS or not.

I think I hear you saying, "No, it doesn't."

Bryan Foley

Well, under, there is not an intent to do an EIS under the NEPA process.

Questioner 2

The answer is no, we don't need an EIS for the permanent commitment of those resources.

Bryan Foley

Yes.

Questioner 2

What, one other last question. What about judicial review of that ROD? Are you going to have that feature, which is inherent in the NEPA process, or no?

Bryan Foley

That opportunity to appeal, is that what you're talking about?

Questioner 2

Yeah, to go to court and ask the question, hay, is this a legitimate, permanent commitment of resource?

Bryan Foley

I would certainly think, but I'm not positive, but I would certainly think that there'd be an opportunity for you to be able to make that kind of, to do.

Questioner 2

So, that'll be in the regulatory process and that feature of NEPA will be in the process.

Bryan Foley

To not have an opportunity to be able to have judicial review or to be able to make an appeal about this, doesn't seem like that we would be able, that wouldn't make sense.

Questioner 2

I see.

Norm Hepner

I think EPA _____ with us.

Pam Innis

Bob, under the CERCLA authority there is not a judicial review. If there is a question about this, then it would probably be brought up under some other scenario other than at CERCLA. . .

Questioner 2

Well, that's what I'm trying to understand, this, you don't have a CERCLA review, you don't have RCRA review, you don't have a NEPA review. You got some sort of thing that's neither fish nor fowl, it sounds like, so the question is, what features of NEPA, particularly the judicial review aspects that are inherent in NEPA process, are going to be inherent in this process that you're describing? I think that's the question.

Pam Innis

Thank you. I'll have to get back to you on that one, Bob.

Marty Roselle

Another question?

Yes ma'am, in the back.

Questioner 3

I apologize for missing the presentation. If this is a low-level waste landfill, plus hazardous waste, are you taking into consideration in your packaging and in the possibilities of lining the trenches and what not, that some low-level waste is much more toxic and much more deadly than some high-level waste? You know, that our definitions are mixed up and low-level is not truly low-level all the time and that high-level is sometime less toxic than low-level, I mean, how are you dealing with that issue?

Pam Innis

We have specific waste acceptance criteria that are going to be imposed on the facility that we're looking at and part of that input that we have on siting with those waste acceptance criteria are risk assessment of those different constituent that would be going into the facility. We have set specific criteria that they must meet as far as risk and I believe it's stated in the Tri-Party Agreement at the boundary of the facility with the first 100 years will be a 10 to the -5 risk at that boundary directly below the facility to the water table and after that it will be a 10 to the -4 risk.

Questioner 3

Can you translate into publicly understandable language what 10 to the -4 and 10 to the -5 means to just the general public? How, it's like translate the math. I don't know my math that well when it comes to 10 to the minus.

Norm Hepner

1 to 10,000.

Questioner 3

100,000 what.

Bryan Foley

Again, I guess I would tell you that I know we have a plan to try to execute.

Questioner 8

Any way you look at it. I think you're premature in this hearing. You don't have anything to present.

Marty Roselle

Well, and that was the other comment early in question. We are at the beginning in a scoping and so that's a good question that been noted.

Questioner 8

You have a construction schedule, you're going to start in 8 months and you're going to meet all the NEPA requirement. That's what you said.

Marty Roselle

Yeah.

It's an ambitious schedule and it may not be doable, to see what, but the comments are good ones and that's what we need to hear and why.

Ok, last call for questions at this point. Any more?

Ok.

All right, comments.

I do have some cards and again, if you'd like to make a comment I'd appreciate it if you'd pick up a blank card. There are a couple of people around the room with them. Our timekeeper, our volunteer timekeeper, what was your first name again? Eric. If you wouldn't mind standing up when there's about 30 seconds before the 5 minute time period. I'd appreciate it.

All right. Our first commentor or speaker is Bob Cook with the Yakima Indian Nation. Bob.

Bob Cook

I eluded to some of the comments I was going to make by my questions, but basically, there was note of the U.S. Ecology site right next door to this particular site. It has requirements of no institutional controls being allowed to be assumed beyond 100 years past closure of the site, and it assumes that you can't take credit for any engineered barriers beyond 500 years after the engineered barrier's installed. You can't assume a life for an engineered barrier beyond 500 years to protect the public health and safety. I'm not sure what the public health and safety risk is, but I don't think it's 10 to the -4 for that site, I think it like 10 to the -6, that the assumed cancer death rate would be for somebody living and farming the area

right at the site. I think you need to consider all the scenarios that are potential scenarios that could exist on the site and around the site, including farming scenarios, irrigation scenarios, that can raise the groundwater right up into the waste disposal facility, particularly, potentially considering those hydrologic conditions there. There very well may be some sort of co-leachate zone in that area that causes the groundwater to be perched up into inundate that material. The BC crib area had about 32 million gallons of water dumped into the area in the past and told, I don't know if this is for sure, but I'm told that the tritium that went in never reached the groundwater. That was the case in other areas where the ground was more permeable, but it very well could be due to some sort of aquetard, not aqueduct, but a co-leachate layer or something else that kept the water and caused it to spread out. One of the comments that the land use group, which I was a member of, said was to, don't create any harm, don't do anymore damage to the resources. This clearly looks like it's utilizing a new uncontaminated area, which is inconsistent, at least the way I interpreted that, that advice is inconsistent with the advise that that group gave you.

The buffer zone was not intended to be a disposal zone, it was intended to be a buffer zone. The intent was to utilize the areas for waste management activities that are already being utilized, not new waste management areas and that buffer zone was intended to keep people away, not to create a new waste disposal area. At least that was the way I understood the buffer zone, and that went along with the idea that you don't utilize new uncontaminated area. That was a big issue, to do no harm to the natural resources.

The last thing that the Yakima Nation is clearly involved, interested in is making sure the treaty rights are not abrogated in some regard by some permanent action that such a disposal facility may cause, the Yakimas have rights to gather fruits and medicine and utilize that land for various other uses including hunting and pasturing stock. Pasturing stock, we have indicated is probably limiting scenario, if they chose to do that with respect to the U.S. Ecology site, which the state is looking to close and trying to do a performance assessment on. The scenario involves irrigating crops, irrigating alfalfa crops for pasturing stock, three crops a year for example. That's a lot of through flux of water and that scenario should clearly be a scenario that's used in whatever performance assessment you use to determine acceptability. We are very skeptical that you can in fact achieve or do your disposal, like you're possessing it without treatment as was suggested here, and without any long-term engineered barriers and still meet those requirement with a large influx of water coming through the surface, in the future, which is going to be, so this whole issue of institutional controls you should come to grips with and would hope that you wouldn't be any less conservative with respect to institutional controls than the low-level burial ground right at the edge of the site. And the other thing is that the cumulative impacts of all the other burial grounds should be considered and the site should be safe and usage should be allowed in the future it seems.

Marty Roselle

Thank you Mr. Cook.

Cynthia Sarthen, Heart of America Northwest.

Transcripts from the ERDF Proposed Plan Public Meeting Held In Richland, Washington, November 16, 1994

NV: I am Patrice Kent 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.

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Responses to Comments Received from the Yakama Indian Nation

Issue 2 - The Yakamas do not agree that long-term institutional controls are effective or warranted.

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Issue 3 - A NEPA evaluation of the impacts from the ERDF must occur, and an allowance should be made to allow for a NEPA legal challenge.

15. FUTURE LAND USE

15.1 Comment Summary: National Sacrifice Zone

Several commenters expressed opinions regarding the level of cleanup which should be achieved at Hanford. Some commenters felt that it would be in the national interest to establish Hanford as a "national sacrifice zone" while others indicated they would "...not stand for an abandoned national sacrifice zone." Commenters also urged EPA and Ecology to prevent the Department of Energy from citing institutional controls as a justification for lower cleanup levels. These same commenters expressed a need for a comprehensive site-wide Environmental Impact Statement.

Response:

Land use is dependent upon many factors, including environmental quality and land ownership. At Hanford, environmental quality and the potential to return the land to other uses will depend, in large part, on the success of remediating contamination and preventing future contamination.

Long-term environmental impacts of Hanford operations, and future land use at the Hanford Site were addressed, in part, in the Final Environmental Impact Statement - Disposal of Hanford Defense High-Level, Transuranic and Tank Wastes (HDW-EIS). The preferred disposal alternative identified in the HDW-EIS included several disposal methods, depending on the nature of waste involved. Each of these methods will affect potential land use.

In summary, it is intended that present and future high-level wastes from double-shell tanks will be sent off-site to the planned national deep geologic repository; retrievable transuranic wastes will be sent off-site to the Waste Isolation Pilot Plant; and low-level wastes will be disposed on-site in a cementitious (grout) mixture in near-surface vaults.

A key objective in all remedial actions will be consolidating waste to maximize the land area necessary for permanent disposal, thereby maximizing the land available for other uses. In general, it is intended that low-level wastes will be consolidated and buried in a 32-square mile zone within the 200 Area plateau. This area would be permanently identified with stone monuments and a subsurface marker system, in accordance with 40 CFR Part 191.

Excluded from consideration in the HDW-EIS were low-level radioactive and chemical wastes in liquid and solid form discharged to various "land treatment" systems. Decisions concerning these wastes and associated disposal units were deferred at the time for review under applicable hazardous waste regulations, and will be addressed in accordance with the requirements and schedules established in the Agreement.

Regardless of when site-specific remediation occurs, or what the final disposition of wastes will be, cleanup standards will be defined and implemented with strict adherence to federal and state laws and regulations. These requirements include closure and post-closure performance standards required under WAC 173-303-610, and implementation of other "applicable or relevant and appropriate requirements (ARARs), under CERCLA Section 120(d). The detailed processes leading to Hanford Site compliance and remediation, including all proposed final determinations made by EPA and Ecology, will be subject to public review and comment.

The Hanford Site has been a federally owned "controlled area" for security, public health and safety reasons since 1943, and is expected to remain so for the foreseeable future. However, the long-term potential land uses at Hanford have not been determined. Such determinations will be a key component in defining appropriate remedial action, and should be a focal point in the public forum.

Concerning the call for a comprehensive Hanford EIS, the parties determined that the size and complexity of the Hanford Site makes it impractical and not cost-effective to have a separate site-wide environmental analysis conducted in addition to the HDW-EIS, and the site characterization processes that will take place under RCRA and CERCLA. This is not to suggest regional impacts will not be considered. As specified in the Action Plan, these processes will be supplemented, as necessary, to ensure compliance with National Environmental Polity Act requirements.

15.2 Comment Summary: Limiting Areas for Waste Burial

Several commenters highlighted the need for minimizing the total land area used for waste burial. It was also suggested a comprehensive plan be written for achieving this goal.

Response:

Note: This comment involves DOE policy issues regarding future land use. Therefore, the following response is provided by DOE.

Reducing waste volume is an important criterion in selection of remedial action alternatives under CERCLA and RCRA. The Hanford Waste Vitrification Plant will significantly reduce the volume of high-level liquid wastes at Hanford, and prepare wastes for permanent off-site disposal in a deep geologic repository.

Disposal of wastes from active units will be regulated under both federal and state programs, which rank land disposal as the least preferred alternative for final waste disposal.

Developing a comprehensive plan for minimizing the land area used for waste disposal will be an iterative process that will occur over many years. This is due to the enormous volume of waste and the size of the Hanford Site. Inherent in the requirements for approval of final remedial action plans by the regulatory agencies is the goal of reducing the land area potentially affected by waste disposal.

Issue 4 - ERDF design criteria must be specified which meet the specifications previously supplied to the Agencies by the Yakamas.

Issue 5 - Alternative remedial actions suggested by the Yakamas should be considered for long-term waste management.