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DEPARTMENT of  
NATURAL RESOURCES

Environmental  
Planning/  
Rights Protection  
Program

SECRET



CONFEDERATED TRIBES  
of the

*Umatilla Indian Reservation*

P.O. Box 638

PENDLETON, OREGON 97801

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March 13, 1992

Dan Duncan  
U.S. Environmental Protection Agency, Region 10  
1220 Sixth Avenue,  
Seattle, WA 98101  
FAX 206/ 553-0124

Dear Mr. Duncan:

RE: Submission of Comments on Site Wide Draft Permit

Attached please find the comments of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) on Washington state's Department of Ecology Site Wide Draft Permit for Hanford Cleanup.

Staff contact person is J.R. Wilkinson, Hanford Projects Coordinator, Environmental Planning and Rights Protection Program, CTUIR Department of Natural Resources, P.O. Box 638, Pendleton, OR, 97801. His phone number is 206/ 276-3449.

Sincerely,

Michael J. Farrow  
Director of Natural Resources  
Confederated Tribes of the Umatilla Indian Reservation



949335-0054

- - CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION - -

COMMENTS ON WASHINGTON STATE'S DEPARTMENT OF ECOLOGY  
SITE-WIDE PERMIT  
FOR THE DEPARTMENT OF ENERGY'S  
HANFORD NUCLEAR RESERVATION

INTRODUCTION

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The Treaty of 1855 reserved for the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) the,  
*"exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians, and at all other usual and accustomed stations in common with citizens of the United States, and of erecting suitable buildings for curing the same; the privilege of hunting, gathering roots and berries and pasturing their stock on unclaimed lands in common with citizens, is also secured to them."*

Lands ceded to the federal government by this treaty includes the site now occupied by the Department of Energy's (DOE) Hanford Nuclear Reservation. Hence, the CTUIR have treaty reserved rights at the Hanford Reservation, of which, the DOE are the federal agency in a fiduciary position.

The permitting of the following three facilities by Washington's Department of Ecology and the U.S. Environmental Protection Agency, signatories to the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement/TPA) along with DOE, represents movement towards addressing the various cleanup operations proposed by DOE. This permit for the 616 Non-Radioactive Dangerous Waste Storage Facility, the 183-H Solar Evaporation Basins, and the Vitrification Plant, inherently pose different issues.

Comments addressing each facility are not highly technical in detail, [i.e., commenting whether the current design of the Vitrification's Plant (Vit) off-gas treatment system will adequately protect the air shed], but rather are larger issues not addressed by the permit. Currently, the CTUIR lack the technical staffing to adequately review plans in detail for protection of treaty-reserved rights to the ceded lands. General comments, trailed by specific issues about each of the facilities, are as follows.

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Comments on Site-Wide Permit  
March 13, 1992

## GENERAL COMMENTS

On page 10 of 102 in the Permit, the term "independent" is defined relative to "engineer, expert," or "inspector." The CTUIR request that when independent consultants are required the tribes shall be given the first opportunity to provide this service. This request is based on the CTUIR's treaty reserved rights to their ceded lands and would provide the necessary basis for independent verification of cleanup operations. Additionally, this action would provide staffing enhancement for oversight capabilities at Hanford.

On page 17 of 102, the term "reasonable" is used in reference to "Duty to Mitigate." The permittee "shall take all reasonable steps to minimize releases to the environment," and, "reasonable [measures] to prevent adverse impacts on human health and the environment." This is vague working, especially given the nature of what is being defined. What, or where, are the mechanisms to define what reasonable actually is?

On page 26 of 102, Section II.A.2.1., the CTUIR request that notification also be provided to tribal police and fire departments (503/ 278-0550) to allow for an assessment of needed actions to protect CTUIR tribal lands, tribal resources, and tribal members.

Protection of the groundwater and the Columbia River is paramount to the CTUIR. Section II.F., "Facility Wide Groundwater Monitoring," outlines several actions related to groundwater. The cultural basis of the tribes rests with the natural resources of the environment, one of which is water. Thus, the CTUIR request the tribes be allowed to independently monitor actions taken in regards to groundwater monitoring. This activity would allow the tribes to assess whether actions taken or planned will adequately protect tribal resources and treaty-reserved rights to the fisheries of the Columbia River.

Several sections deal with records (i.e., page 37, Section II.I.). Yet, there appears to be no mention of where the records will be located or their availability for review by the tribes or members of the general public.

In Section II.N., page 43, the CTUIR request advanced notification of shipments coming to Hanford of dangerous waste generated off-site. Due to the sovereign nation status of the CTUIR, their fire and police departments are the principle agency involved with incidents should it occur on tribal lands.

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On the same page is section II.O., "General Inspection Requirements." Because of the ceded lands issue, the CTUIR request that inspections of any facility at Hanford include a CTUIR representative, especially given the nature of and the area of visual inspections. The national security of the CTUIR rests with protecting the natural resources of their ceded lands. Thus, this action would allow for independent verification of inspections and an assessment from a tribal perspective.

### 616 NONRADIOACTIVE DANGEROUS WASTE STORAGE FACILITY

Milestone M-12-02

Comments submitted based on "616 Nonradioactive Dangerous Waste Storage Facility Dangerous Waste Permit Application", October 1991, DOE/RL-89-03, Revision 2. "This is an active storage unit for dangerous wastes which are shipped to off-site commercial treatment or disposal facilities."

Concerns expressed with the 616 are directed towards adequate CTUIR emergency preparedness and properly designed containment systems to protect Hanford's groundwater and the Columbia River. Again, an adequate review of plans for consistency in protecting CTUIR resources cannot be submitted due to a lack of personnel.

Given that "[a]pproximately 18 times a year, depending on the rate of waste accumulation, ... [containers will] be transported to a permitted TSD facility." The CTUIR currently lack the first responder equipment and personnel to protect the natural resources of the tribes in the event of a major transportation incident. Due to the sovereign nation status of the CTUIR, the CTUIR's police and fire departments are the lead agency in the event of a cross-CTUIR lands incident.

The potential this facility represents, IF an accident were to occur, is quite high given the wide variety of hazardous materials to be stored. In the event of a catastrophic accident, are the containment designs capable of protecting the groundwater and the surrounding environment?

This concern is heightened due to presence of a fault line in Gable Mountain. Will the building specifications be adequate to withstand a worst-case scenario? Additionally, when reviewing a map of shallow earthquakes in the Hanford region, a concentration can be found in the Cold Creek Valley. This issues should be rectified before completion of the facility.

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### 183-H SOLAR EVAPORATION BASINS

Comments based on "RCRA Closure Experience with Radioactive Mixed Waste 183-H Solar Basins at the Hanford Site," WHC-SA-0705-FP, January 1990.

I was unable to locate the appropriate document to allow for adequate review so comments are based on the above mentioned work.

One missing point in the paper was the lack of radiological data. As quoted, "[r]outine wastes consisted of uranium and technetium-99," yet the waste material was categorized as "low-level, nontransuranic radioactive waste." What justification is there for this characterization? How can independent verification be sought?

The 100-H area also has a Chromium plume under it. What plans are there to prevent exacerbating the plume's movement to the Columbia River? Will the activities associated with closure have any influence on the plume?

### HANFORD WASTE VITRIFICATION PLANT (VIT)

Milestone M-20-01

Documents reviewed were "Tank Waste Disposal Program Redefinition" WHC-EP-0475, Revision 0, and, "Hanford Facility Agreement and Consent Order Quarterly Progress Report for the Period Ending December 31, 1991," DOE/RL-92-2. For brevity I will use TWD and QPR, respectively, when referring to a document.

The previous two facilities represent relatively straightforward issues and concerns. However, the Vit Plant does not fall in this category. Here the concerns have to do with the overall program direction of dealing with the tanks' wastes. Several key points emerge, each with a lack of justification for moving ahead. Along with the Vit Plant are the attendant disposal issues, the "Grout" facility and the glass logs resulting from the vitrification process. What happens to the glass logs if the HLW repository is not open by the time the Vit plant is operational?

The same concerns expressed about the 616 facility apply to the Vit and grout/glass logs process. Will the facilities be sufficiently designed to ensure the safe operation of the facilities in case of an earthquake. Additionally, does the grout facility have the potential to change groundwater flow patterns?

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On page 2-4 of the QPR, it states that "[r]esolution of the environmental compliance and investigation of alternative pretreatment process and facility options, as well as other waste feed options for the HWVP, are continuing in support of the tank waste treatment program."

The question arises, why license a facility when so many variable and doubts may surface between the licensing of said plant and the actual operation of it? In other words, would it not be wiser to license each incremental step (i.e., the pretreatment process) allowing for the flexibility of alternative critical paths? For example, the TWD states on page 6-9 that the "risk assessment model showed TRUEX process development is on the critical path for the program and, as a result, introduces a risk of program delay."

Why license the end facility when the steps to get the waste from the tanks through pretreatment and to the plant have not been established? Alternatives in pretreatment facilities should be debated, then license that facility and initiate a tank-to-pretreatment and back-to-tank operation cycle to ensure that the wastes can be adequately pretreated in a safe manner.

On a similar vein, I have been unable to identify the justification for reduced consideration of alternative methods, such as calcining, in-situ vitrification, or plasma arc furnace. Further, the research and development side of disposal issues appears lacking. What efforts are being made at enhancing cutting-edge technology and research? Thus, more basic analysis of a wide range of alternative technologies and those yet identified should be done prior to making the Vit Plant a "done deal."

### CONCLUSIONS

The 616 and 183-H Basins both represent straightforward operations and should be permitted. However, the Vit Plant is not as clear of a permitting process and as such should not be licensed. Rather, the incremental steps to that possible end facility could be licensed to ensure that each step to final disposal of the tank waste is safely completed.

The concerns expressed about the Vit Plant also involve the attendant disposal facilities, the Grout facility and the glass logs. Concerns expressed are the lack of sound justification for disregarding other alternatives, the non-homogenous nature of the tank wastes and the low level of supporting laboratory analysis, and the unclear manner in which pre-treatment will occur. ■

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TELEFAX TRANSMISSION COVER SHEET

DEPARTMENT OF NATURAL RESOURCES  
Administration & Environmental Planning

DATE: March 13, 1992

TRANSMISSION TO: Dan Duncan, EPA

TRANSMISSION FROM: J.R. Wilkinson, CTUIR

C.T.U.I.R. FAX # (503) 276-3317

NUMBER OF PAGES (Including this sheet): 7

NOTES: Attached are comments on side wide permit. Also, Ecolog has received a copy of the same comments.

jrw

IF TRANSMISSION IS UNREADABLE..PLEASE PHONE (503)276-3449/3447

0400-561616

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