EDO Principal Correspondence Control

FROM: DUE: 02/24/04 EDO CONTROL: G20040091
DOC DT: 02/06/04
FINAL REPLY:

Russell Jim
Confederated Tribes and Bands
of the Yakama Nation

TO:

Chairman Diaz

FOR SIGNATURE OF : ** GRN ** CRC NO: 04-0061

Virgilio, NMSS

DESC:

Provisional Agreement in 1997, Between NRC and DOE Regarding Onsite Disposal of "Low-Activity" Wastes at the Hanford Site

DATE: 02/12/04

ROUTING:

Travers
Norry
Paperiello
Kane
Collins
Dean
Burns/Cyr
Mallett, RIV
Lohaus, STP

ASSIGNED TO: CONTACT:

NMSS Virgilio

SPECIAL INSTRUCTIONS OR REMARKS:

EDO/Commission to review response prior to dispatch. Add EDO and the Commission on for concurrence.

OFFICE OF THE SECRETARY
CORRESPONDENCE CONTROL TICKET

Date Printed: Feb 11, 2004 15:18

PAPER NUMBER:	LTR-04-0061	**LOGGING DATE:**	02/10/2004
ACTION OFFICE:	EDO		
AUTHOR:	Russell Jim (Yakama Nation)		
AFFILIATION:	WA		
ADDRESSEE:	CHRM Nils Diaz		
SUBJECT:	Concerns provisional agreement in 1997, between NRC and DOE regarding onsite disposal of "low-activity" wastes at the Handford site		
ACTION:	Direct Reply		
DISTRIBUTION:	Chairman, Commissioners, SECY to Ack		
LETTER DATE:	02/06/2004		
ACKNOWLEDGED	No		
SPECIAL HANDLING:	SECY/EDO/DPC for immediate release Commission to review response prior to dispatch		
NOTES:			
FILE LOCATION:	ADAMS		
DATE DUE:	02/26/2004	**DATE SIGNED:**	

EDO --G20040091

Confederated Tribes and Bands
of the Yakama Nation

Established by the
Treaty of June 9, 1855

February 6, 2004

Nils J. Diaz, Chairman
United States Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738

RE: Provisional Agreement in 1997, between NRC and the U.S. Department of Energy regarding onsite disposal of "low-activity" wastes at the Hanford site.

Dear Chairman Diaz:

The U.S. Department of Energy's Hanford site was developed on land ceded by the Yakama Nation under the 1855 Treaty with the United States. The Yakama Nation retains reserved rights to this land under the Treaty and also has well-defined treaty rights to fish in the Columbia River, which runs through the Hanford site.

Thousands of tribal people are very dependant on the river for sustenance, and as a result, are the most vulnerable human population to environmental contaminants near Hanford. This was underscored in the summer of 2002 by an EPA study which reported that risks of tribal people contracting fatal cancer from eating contaminated fish in the Hanford Reach, running through the DOE site, are as high as 1 in 50.[1]

In this context, I am writing to seek the Commission's views and an update of NRC's activities regarding the U.S. Department of Energy's "accelerated cleanup" at the Hanford site.

As you may know the DOE is seeking to terminate its environmental mission at Hanford within the next 30 years. To accomplish this goal, the DOE, among other things, is: (a) seeking to permanently dispose of about 90 percent of the wastes from Hanford's high-level waste tanks onsite; and (b) transferring approximately 95 percent of the land it occupies to the Department of Interior, as part of the Hanford Reach National Monument.

Under the Nuclear Waste Policy Act, the NRC has authority to regulate the disposal of defense high-level radioactive wastes.[2] [3] In 2001, the NRC staff underscored it regulatory

[1] U.S. Environmental Protection Agency, Columbia River Fish Contaminant Survey, EPA-R-02-006. August 2002.

[2] The Nuclear Waste Policy Act, P.L. 97-425, Jan. 7, 1983, 96 Stat. 2201 (Title 42, Sec. 10101 et seq.).

[3] Nuclear Waste Policy Amendments Act of 1987, P.L. 100-203, title V, subtitle A, Sec. 5001-5065, Dec. 22, 1987, 101 Stat. 1330-227 to 1330-255.

authority to the Commission in June 2001 regarding high-level waste processing at Hanford by stating:

> *"From a regulatory perspective, LAW[low activity waste] is still HLW and has high radiation levels requiring handling within shielded structures...[4] Under the present system, unless the NRC determines that this LAW/incidental waste is not HLW, the waste must be disposed of as HLW in a federal repository."* [5]

In early 1993 the NRC outlined criteria for DOE to demonstrate that Hanford tank wastes could be processed for onsite disposal as "low activity" or "incidental" wastes. They included:

> *"1. waste has been processed (or will be further processed) to remove key radionuclides to the maximum extent technically and economically practical."*
>
> *2. waste will be incorporated in a solid physical form at a concentration that does not exceed the applicable concentration limits for Class C low-level waste as set out in 10 CFR Part 61; and*
>
> *3. the solid immobilized waste will be managed, pursuant to the Atomic Energy Act of 1954[performance assessment requirements under DOE Order], so that safety requirements comparable to the performance objectives set out in 10 CFR Part 61 are satisfied."*[6]

In 1997, the NRC entered into a "provisional agreement" allowing onsite disposal of LAW portion of the Hanford tank waste."[7] However the NRC staff had several reservations about this agreement. In particular, the Commission was informed:

> *"Staff considers that the information presented is not sufficient to make an absolute determination at this time. Note that if the Hanford tank waste is not managed using a program comparable to that set forth in the Technical Basis Report, the incidental waste classification must be revisited by DOE, and NRC consulted. As a fundamental element of the incidental waste classification, DOE must ensure that the contractors perform LAW separation and disposal and do so in accordance with the criteria set forth in the March 1993 letter and the approved Technical Basis report."*[8]

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[4] U.S. Nuclear Regulatory Commission, Overview and Summary of NRC Involvement with DOE in the Tank Waste Remediation System-Privatization (TWRS-P_ Program, NUREG-1747, June 29, 2001,. P. 1.
[5] NUREG-1747, p. 215.
[6] WHC-SD-WM-TI-699 Rev. 2 (1996) pp ES i-iii.
[7] U.S. Nuclear Regulatory Commission, Memorandum for the Commissioners, Classification of Hanford Low-Activity Tank Waste Fraction as Incidental, SECY-97-083, April 14, 1997 p. 7.

[8] Ibid.

Furthermore, the NRC's Center for Nuclear Waste Regulatory Analysis stated in a 1997 review of Hanford's high-level waste program that:

> *"If continuing characterization of tank wastes results on a determination that radionuclide inventory values should be significantly increased, classification of wastes will be reevaluated."*[9]

Specifically the NRC agreed to allow DOE to dispose of some of its wastes from Hanford's high-level radioactive waste tanks only if, "The proposed new determination would include processing the tank wastes to accomplish the following:

> 1. Radionuclide removal to the maximum extent technically and economically practical will leave no more than 5 MCi Cs-137 and 3.4 MCi Sr-90 in the LAW [low activity wastes].
> 2. Remove TRU as required ...to ensure all solidified LAW is < 100 nCi TRU/g.
> 3. Meet all disposal requirements including those defined by the performance assessment [required by DOE Order]." [10]

This provisional agreement with the DOE was based on the processes outlined under DOE's Tank Waste Remediation System (TWRS) at Hanford. The basic goal of TWRS was to process and dispose of high-level wastes (HLW) in all of Hanford's 177 tanks at the Waste Treatment Plant (WTP). A key objective was to reduce the volume of HLW for geological disposal. Thus, a major portion of radioactivity was to be removed (>95 %) from soluble salt cake and liquids (~75% of total volume) -- which DOE calls "low-activity" wastes (LAW).

The treated HLW would be combined with the separated radionuclides from LAW processing and vitrified in the HLW glass melter. The HLW glass would be stored on site and later disposed in a geological repository. Treated high-volume "low-activity" waste would also be vitrified into glass and placed in steel canisters for onsite disposal in accordance with NRC low-level radioactive waste and Washington State hazardous waste standards.

However, the DOE's "accelerated Cleanup" program, initiated in 2002, has brought about major changes in these processes. In doing so, DOE appears to be significantly deviating from the 1996 "Technical Basis Report," which the NRC stipulated as the technical boundary conditions underlying its provisional approval for onsite disposal of LAW.

Under the plan, a major preponderance of Hanford's HLW will not be sent to the Waste Treatment Plant as outlined in the "Technical Basis Report" to the NRC. Instead, wastes from dozens of tanks, including sludges, are to be processed, without major removal of radionuclides, using "supplemental technologies" for permanent

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[9] U.S. Nuclear Regulatory Commission, Report on DOE Hanford Waste Tank Classification, Center for Nuclear Waste Regulatory Analysis, February 1997, p. x.
[10] WHC-SD-WM-TI-699 Rev. 2 1996) pp. ES vi, vii.

onsite disposal. Tanks are to be closed by adding cement or grout in an attempt to immobilize undetermined concentrations of residual long-lived radionuclides.

Given these circumstances, I respectfully request you provide the Yakama Nation with answers to the flowing questions:

1. Has the NRC reviewed whether or not DOE's "accelerated cleanup" program is meeting the terms of the provisional approval NRC granted for disposal of LAW at the Hanford site?

2. Has the DOE sought an agreement from the NRC that would deviate from the provisional agreement granted in 1997?

3. Is the DOE engaged in consultation with the NRC to allow for an increase in the onsite disposal inventory of radionuclides at Hanford above that approved in 1997?

4. If so, what increases in onsite disposal of radionuclides are being proposed by DOE?

5. Since the NRC gave provisional approval in 1997 for onsite disposal of "low activity wastes" at Hanford, a major preponderance of the Hanford site is now to be transferred to the Department of Interior as part of the Hanford Reach National Monument. This could result in significant relaxation of management and access controls. Given these changed circumstances, does the NRC plan to reconsider its 1997 provisional approval at Hanford, in light of the very real possibility of tribal people exercising their treaty rights to hunt, gather foods and medicines; or increasing numbers of members of the public visiting the Monument site?

Thank you for your attention on this matter. I look forward to your response.

Sincerely,

Russell Jim
Director,
Environmental Restoration and Waste Management Program
Yakama Nation

cc Martin J. Virgilio, Director, NRC Office of
Nuclear Material Safety and Safeguards