



Confederated Tribes and Bands  
of the Yakima Indian Nation

Established by the  
Treaty of June 9, 1855

July 9, 1991

Robert M. Bernero, Director  
Office of Nuclear Materials  
Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Sir:

The subject of this letter is the regulation of the Department of Energy (DOE) high-level radioactive waste long-term storage or disposal at Hanford and a request for action under 10 CFR 2.206

**BACKGROUND:**

We conclude that the Department of Energy is currently in violation of 10 CFR 30 requirements for a license since various near surface geologic repositories, referred to as cribs, ditches, trenches and single shell tanks, but meeting the definition of "geologic repository" in the 10 CFR 60 have received and currently hold in "long-term storage" or "disposal", "high-level radioactive waste".<sup>1</sup> In some cases the specific activity of such wastes is low compared to much of the "high-level radioactive waste" at Hanford. However, the source of the wastes we refer to is consistent with the source-based definition intended by Congress in Section 202 of the Energy Reorganization Act (ERA) and reviewed by the State of Washington in a petition regarding this definition now pending before the NRC.

Definitions contained in the 1973 AEC Manual further illuminate the source-based definition in use at the time the ERA was enacted. These definitions were forwarded by separate correspondence regarding the above mentioned petition from F. Robert Cook, whom since has become an employee of the Yakima Nation. This petition is now under evaluation by NRC staff.

A key fact contributing to this conclusion regarding the need for regulation is that DOE, ERDA or the AEC expressly authorized the "long-term storage" or "disposal" of these wastes by operations contractors. The operational definition of long-term storage, established by the AEC, also is contained in the 1973 Manual. This definition was being used by the AEC contemporaneously with the

<sup>1</sup>. It has been suggested that the Congress by Section 202 (4), regarding long-term storage facilities, in specifying "authorized for the express purpose", meant authorization by Congress. However, the more logical meaning is authorization by the Director of Division of Waste Management and Transportation as provided by Chapter 0511.032 (c) of the AEC Manual on 1973--see attachment A. It should be noted that Congress did not routinely authorize specific long-term storage, but authorized general funding for waste management.

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writing of the ERA, and it can logically be concluded that this was the definition intended by Congress, consistent with the logic described by the petitioners in deducing the intent of Congress with respect to the source based definition for "high-level radioactive waste."

As with the definition of "long-term storage", "storage" entails the capability to readily retrieve wastes. Disposal is defined as an operation that does not provide for recovery. (There was no concept of interim storage expressed in the AEC Manual in 1973.) The DOE and its predecessor entities have long recognized that the "stabilization" and "interim stabilization" of in-tank single shell wastes and the "storage" of waste in soil columns, and otherwise in non-retrievable earth and ground water is long-term storage and/or disposal. This can be seen from various historical documents concerning the decision in the early 1960's to proceed with solidification of wastes in single-shell tanks at Hanford in contrast to General Electric recommendations for a sound program of waste management at Hanford involving the calcination of tank wastes with storage in bins similar to the scheme currently used by the Idaho Chemical Reprocessing Facility.

The current immense problems associated with safely sampling, much less retrieving, waste, in single shell and some double shell tanks at Hanford attest to the "disposal" of the waste accomplished by DOE and its predecessor entities in the past. The large inventories of radioactive materials discharged directed to the soils and groundwaters at Hanford constitute the disposal of high-level radioactive waste. A recent document, "Tank Wastes Discharged Directly to the Soil at the Hanford Site," WHC-MR-0227, summarizes many of the sites which received high-level radioactive wastes. For example, two major disposal sites are 216-B-37 trench and 216-T-25 trench that received concentrated high-level radioactive wastes in the form of evaporator bottoms.

Furthermore, the DOE's final environmental impact statement, "Disposal of Hanford Defense High-Level, Transuranic and Tank Wastes", DOE/EIS 0113, provides assessment of the long-term performance of waste disposal systems contemplated for Hanford in the future. For example, Appendices R and S to DOE/EIS 0113 estimate the radiological effects of various disposal scenarios associated with the disposition of high-level radioactive waste and TRU wastes. These analyses indicate 10 to 100 rem thyroid dose over a 70 year lifetime for the max exposed individual, depending upon the scenario considered. These analyses indicate the potential for the existing high-level radioactive waste disposal sites at Hanford to cause health effects in the future and, hence, the need for NRC regulation to enforce corrective actions with respect to these unacceptable conditions.

## COMMENTS

1. The NRC should not redefine the term "high-level radioactive waste", since this term was established by Congress. Only the courts can embellish this term in their roll of interpreting laws. The original source based definition should be recognized and compliance with the spirit and intent of the law achieved. The Yakima Indian Nation endorses the comments of Mr. Cook with respect to the above mentioned petition to NRC by the State of Washington. These comments are attached for your ready reference.

2. Therefore, the issue which NRC should be concerned with is the regulation and/or licensing of the Administration's (DOE's) long-term storage and/or disposal facilities. The Yakima Indian Nation is particularly interested in participating in a licensing hearing with its adjudication of the technical issues associated with operation and remediation of the storage and/or disposal facilities.

3. In light of the actions being planned in connection with the cleanup of Hanford under the DOE/EPA/Washington State Tri-Party Agreement, it is important to incorporate appropriate actions with respect to the remediation of radioactive contaminants remaining in soils and groundwater from the disposal of high-level radioactive wastes in the past. Such action is necessary in order to assure public health and safety and an acceptable environment.

4. The Yakima Indian Nations is particularly interested in the remediation of the radioactive contamination in order to freely exercise its rights under the United States/Yakima Nation Treaty of 1855 concerning access to the lands and waters of the Hanford Site and other rights.

5. The Yakima Indian Nation considers the Director of the Office of Nuclear Materials, Safety and Safeguards, as well as other United States Government employees, are committed to act in a trustee status for Yakima Indian Nation members and therefore should respond to the interests of its members as indicated in this letter.

## REQUEST FOR ACTION UNDER 10 CFR 2.206

The Director of the Office of Nuclear Materials, Safety and Safeguards is requested to exercise his authority to require a license application from the Department of Energy with respect to high-level radioactive wastes in sites at Hanford and to expedite regulation in accordance with provisions of 10 CFR 30 or other applicable chapters of the CFR. Such regulation should include the appropriate licensing of the DOE activities and/or facilities with mandatory conditions to remediate the Sites to maximize Yakima Indian Nation access and future utilization.

Thank you for your attention to this matter.

Sincerely,

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