



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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November 23, 1979

The Honorable Morris K. Udall, Chairman
Subcommittee on Energy and the Environment
Committee on Interior and Insular Affairs
United States House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

This is in response to your letter of June 4, 1979, in which you posed two questions regarding the Nuclear Regulatory Commission's authority over the high-level wastes stored by Nuclear Fuel Services, Inc. at West Valley, New York.

The Atomic Energy Act of 1954 authorizes the Commission to require a licensee to provide with respect to a fuel reprocessing plant for (1) the removal and disposal of high-level liquid nuclear wastes, and (2) the decontamination and decommissioning of waste management facilities. A fuel reprocessing plant would be licensed under Section 103 or 104b of the Act, and such licenses may be subject to such conditions as the Commission may by rule or regulation establish to effectuate the purposes of the Act. Also, Section 161b of the Act authorizes the Commission to establish regulations for the possession of radioactive waste that it deems necessary to protect the public health and safety, and Section 187 of the Act authorizes the Commission to modify existing licenses to reflect such regulations. The Commission may also modify licenses by order under Section 161b of the Act without promulgating additional regulations. Pursuant to its authority, the Atomic Energy Commission (AEC) issued a statement of policy on waste management facilities related to fuel reprocessing plants in 1970. This policy statement is codified at 10 CFR Part 50, Appendix F, and provides:

1. Licensees are required to solidify high-level liquid wastes and transport them to a Federal repository no later than 10 years after reprocessing;
2. Licensees shall decontaminate facilities at the time the facility is decommissioned;
3. Applicants for licenses shall submit information regarding their financial qualifications to meet the requirements of Appendix F.

These requirements do not apply now to West Valley because paragraph 6 of the policy statement excluded already licensed reprocessing plants. Moreover, at the time West Valley was initially licensed, the AEC contemplated perpetual on-site storage of the high-level liquid wastes. This storage was to be accomplished

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by the periodic transfer of liquid waste to new tanks which would replace existing tanks as they deteriorated. Consequently, the license for West Valley does not now require solidification and removal of the high-level liquid waste at that site.

Of course, should the NRC find that waste solidification and removal is necessary to protect the public health and safety, the Commission could order these actions pursuant to its legal authority discussed above. However, the current condition of the waste storage system is satisfactory; and on the basis of currently available information, we believe that the waste storage system will remain satisfactory for a number of years. Thus, there is no basis for the NRC now to order removal and solidification of the high-level liquid wastes at West Valley.

In the absence of the need for emergency action, the Commission expects to conduct a public proceeding to determine how the West Valley license should be amended to carry out the purpose of Appendix F. 10 CFR Part 50, App. F. paragraph 6. This proceeding has not yet been initiated because the technical bases for decision making are not presently available. The technical information required includes waste characterization, development of specific methods for removing the wastes from the tanks, selection of an appropriate solid waste form, and engineering development of a waste solidification process. The Department of Energy (DOE), through its defense waste contractors, is the only organization with direct access to the technical knowledge, experience and resources needed to establish the technical bases for any regulatory action governing the removal and solidification of the NFS high-level waste. Thus, NRC has requested DOE to undertake the detailed engineering work necessary to permit removal and solidification of the high-level wastes at West Valley.

You have asked about the decontamination and decommissioning of other facilities at the NFS site. The NRC has the authority to require licensees to prepare for and implement decontamination and decommissioning. However, the future use of the West Valley facility has yet to be clearly and specifically defined. Decontamination and decommissioning efforts taken before this future use is determined would be premature and perhaps even counterproductive to the effective implementation of whatever future use is ultimately adopted. For example, decontamination efforts undertaken prior to decisions on the future of the facility may result in unnecessary exposure to radiation if shielded cells were decontaminated and subsequently used to house the solidification equipment. The NRC staff has been meeting routinely with the co-licensees to discuss information needed to determine future decontamination and decommissioning options. This information, which is being developed by NFS, includes the consolidation of construction

1739 177

records and engineering drawings that describe the entire facility by each plant area. NFS has also been preparing a report of their decontamination efforts during the life of the plant. This report will provide necessary insights into methods of decontamination actually used at that facility and should provide help in planning future decontamination efforts.

The Commission believes that its current authority for licensing non-Federal waste management activities at West Valley is adequate, and that this authority permits adequate evaluation of any DOE solidification activities at that site. As discussed above, the Atomic Energy Act of 1954 authorizes the Commission to regulate NFS's receipt, possession and transfer of licensed materials. The current commercial license for West Valley does not permit NFS to transfer high-level liquid waste to a DOE solidification facility, to modify its storage facilities to permit such a transfer, or to terminate its license in anticipation of a transfer to DOE of responsibility for the site. Consequently, before DOE could begin to solidify the high-level liquid waste at West Valley, the Commission must first amend the current NFS license. Of course, the Commission must find that such amendments provide adequate protection to the public health and safety and are in accord with the common defense and security. Accordingly, if DOE is authorized to build a waste solidification facility on the licensed NFS site, NRC could conduct analyses to determine: (1) whether any transfers to and from the licensed NFS waste storage facility can be accomplished safely, and (2) whether the impacts of the solidification facilities on other NFS-licensed facilities are contrary to the requirement for protection of the public health and safety.

Moreover, the NRC's authority under the Energy Reorganization Act of 1974 includes the imposition of waste form criteria on the solidified product from a DOE waste solidification plant at West Valley. Such solidified waste would result from activities licensed under the Atomic Energy Act. Consequently, DOE would require an NRC license to receive and store such material in a facility used primarily for these purposes. Waste form criteria would be included in such a license.

The authorities discussed above appear to provide the NRC with substantial and sufficient regulator oversight over any future DOE waste solidification activities at West Valley.

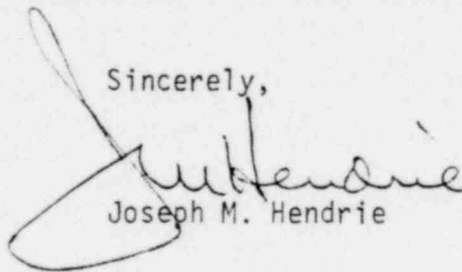
On the other hand, Commissioners Bradford and Gilinsky believe that the Commission could more effectively discharge its responsibilities regarding public health and safety at West Valley if it had direct authority to license a DOE solidification plant at that site. While the Commission could indirectly affect

1739 178

DOE's solidification activities there as explained above, it currently is not authorized to license a DOE waste solidification facility because such a facility would likely not be used primarily for the receipt and storage of high-level wastes resulting from activities licensed under the Atomic Energy Act as required by Section 202(3) of the Energy Reorganization Act of 1974. These Commissioners believe that the potential public health hazards related to solidification, the intimate connection between the licensed storage activities and solidification, and the need for extensive NRC review of the solidification process to assure that the appropriate quality assurance requirements have been identified support the extension of NRC licensing authority to a DOE solidification plant for the West Valley wastes. Moreover, in their view, such solidification activity would not present issues of national security because about 40% of the waste is of commercial origin, the radiochemical composition of the waste is publicly available, and NRC licensing would not interfere with any current national defense activities. Finally, these Commissioners believe that the Commission's existing regulatory process would provide the public participation necessary to any decision regarding radioactive waste management at West Valley.

The Commission appreciates this opportunity to express its views. If you have further questions on these matters, the Commission will be pleased to provide further assistance.

Sincerely,

A handwritten signature in dark ink, appearing to read "J. Hendrie", is written over the typed name. The signature is fluid and cursive, with a large loop at the end.

Joseph M. Hendrie

1739 179