POWER AUTHORITY OF THE STATE OF NEW YORK

JAMES A. FITZPATRICK NUCLEAR POWER PLANT



CORBIN A. McNEILL, JR. Resident Manager

P.O. BOX 41 Lycoming, New York 13093

315-342-3840

February 8, 1982 SERIAL: JAFP 82-0131

Thomas T. Martin, Director
Division of Engineering and
Technical Inspection
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

SUBJECT: INSPECTION NOS. 50-333/81-22, 50-333/81-28 and 50-333/81-29

Dear Sir:

With reference to the inspections conducted on May 27-28, 1981 near Wasta, South Dakota, on September 24, 1981 at Barnwell, South Carolina and on November 18, 1981 at Richland, Washington, and in accordance with the provisions of 10 CFR 2.201, we are submitting our response to Appendix A Notice of Violation transmitted by your letter dated January 8, 1982.

APPENDIX A NOTICE OF VIOLATION

As a result of inspections conducted on May 27-28, 1981 by an NRC inspector, on September 24, 1981 by a representative of the State of South Carolina, and on November 18, 1981 by a representative of the State of Washington, of shipments of radioactive waste sent from your facility in Scriba, New York on May 22, 1981, September 22, 1981, and November 13, 1981, respectively, and in accordance with the Interim Enforcement Policy, 45 FR 66754 (October 7, 1980), the following violations were identified:

A. 10 CFR 71.5 prohibits delivery of licensed material to a carrier for transport unless the licensee complies with the applicable regulations of the Department of Transportation in 49 CFR Parts 170-189. 49 CFR 173.392(c)(1) states, "Materials must be packaged in strong, tight packages so that there will be no leakage of radioactive material under conditions normally incident to transportation."

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Contrary to the above:

- 1. On May 22, 1981, a waste shipment of licensed material containing 1.5 millicuries of LSA radioactive waste was delivered to a carrier for transport to the U.S. cology, Inc. burial site at Richland, Washington in a container that was not a strong, tight package. Drum No. 19081, a 55-gallon drum, used as a shipping container, had a one centimeter hole in its side.
- 2. On November 18, 1981, a waste shipment of licensed material, containing 10 millicuries of LSA radioactive waste, was delivered to a carrier for transport to the U.S. Ecology, Inc. burial site at Richland, Washington in a container that was not a strong, tight package. Upon arrival, liquid was found to be leaking from all corners of Box No. 74-81.

This is a Severity Level III violation (Supplement V.C.1).

B. 10 CFR 30.41 prohibits transfer of byproduct material unless it is in a form authorized by the recipient's NRC or Agreement State license. South Carolina License No. 097, an Agreement State License issued to Chem-Nuclear Systems, Inc., prohibits the receipt of solidified waste with "detectable free standing liquid," which is defined in the license as liquid in excess of 1.0 percent by waste volume for high integrity containers.

Contrary to the above, on September 24, 1981, a waste shipment of byproduct material containing 13.47 curies of solidified evaporator bottoms, was transferred to Chem-Nuclear Systems, Inc. at Barnwell, South Carolina in a high integrity Chem-Nuclear Systems, Inc. shipping cask, Model No. 14-195-H. The shipment contained free standing liquid (4.1 percent by waste volume).

This is a Severity Level III violation. (Supplement IV.C.6).

RESPONSE TO NOTICE OF VIOLATION

ITEM A

As noted in Inspection 81-28, the leaking drum was placed inside a larger drum. This action placed the FitzPatrick plant in full compliance with respect to this example on May 28, 1981.

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U.S. Nuclear Regulatory Commission

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Following return of the entire waste shipment to the FitzPatrick plant, an evaluation of the packaging process and container handling was conducted. The evaluation indicated that the drum was probably damaged during handling operations after filling and that additional action should be taken to provide assurance that the drum contents are properly processed. Based on these findings the following actions have been taken:

- 1. The material placed in the drum and the absorbant material are evaluated. Additional absorbant is placed in the drum as required to provide a margin between the absorbant required and the absorbant present.
- Each drum is inverted for severa! days after filling and then opened and inspected to verify adequacy of the absorbant to perform its function.
- Each drum is inspected for damage at the time of filling and again during the process of loading on the truck to provide assurance that the drum has not been damaged during handling or temporary storage.

The actions provide assurance that containers meet the requirements of 49 CFR 392 (c) (1) and that waste oil will not leak from a drum in the event some undetected damage to the drum occurs during handling or shipment.

With respect to the November 18, 1981 example, no evaluation of the condition of the container, or the liquid reported leaking from the container, by plant personnel was possible because the container was buried prior to any notification by personnel at the burial site. Notwithstanding a general lack of information concerning this example, a review of procedures used for processing LSA boxes and discussions with plant personnel indicates that it is possible that some oil or other liquid could have been introduced to the LSA box during processing (compacting) and resulted in the conditions noted on the writeen report issued at the burial site.

To prevent recurrence, the plant implemented additional administrative controls which require inspection of material to be compacted in LSA boxes, addition of absorbent material in the bottom of LSA boxes to prevent leakage of any liquid that is inadvertently or unknowingly introduced to the container, and lining of the LSA box with plastic to provide a barrier to liquids and allow the absorbent to perform its function.

Further, the filling and compacting of LSA boxes is restricted to knowledgeable personnel. These actions resulted in full compliance on November 23, 1981.

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ITEM B

The solidified evaporator bottoms shipment of concern was processed utilizing the urea formaldehyde process. Upon notification that the shipment contained free standing liquid in excess of the amount permitted by Condition No. 26 of the license, the use of urea formaldehyde process was discontinued. This action resulted in the FitzPatrick plant being in full compliance on September 24, 1981.

To prevent recurrence, the solidification process currently in use utilizes concrete and includes verification of acceptable results prior to transportation. The urea formaldehyde process will not be used in the future without some prior demonstration that acceptable results can be achieved.

Very truly yours,

Corbin A. McNeill, Resident Manager

CAM/VC: SW

CC: Leroy W. Sinclair - NYO

J. P. Bayne - NYO

R. A. Burns - NYO

L. Guaquil - NYO

R. Baker - JAF

M. C. Cosgrove - JAF

R. J. Converse - JAF

D. E. Tall - JAF

NRC Resident Inspector

NRCI-81-22 File

NRCI-81-28 File

NRCI-81-29 File

Document Control

Subscribed and sworn to before me this **8th** day of February, 1982.

BEVERLY R. PRUCNAL, #4628499 Notary Public - State of New York Appointed in Oswego County

My Commission Expires March 30, 1982