U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

Region I

Report No. 79-02

Docket No. 50-201

License No. CSF-1 Priority: 1 Category: RP

Licensee: NFS, Incorporated
6000 Executive Boulevard
Rockville, Maryland 20352

Facility Name: West Valley Reprocessing Plant

Inspection at: West Valley, New York

Inspection conducted: June 6-8, 1979

Inspectors: P. E. Clemons 9/11/79
P. E. Clemons, Radiation Specialist date signed

Approved by: C. P. Stohr for 9/11/79
J. P. Stohr, Chief, Radiation Support Section, FF&MS Branch date signed

Inspection Summary:
Inspection on July 6-8, 1979 (Report No. 50-201/79-02)
Areas Inspected: Routine, unannounced inspection by a regional based inspector of the Radiation Protection Program including: outstanding items, procedures, respiratory protection, radiation areas, labeling, dosimetry, bioassay, audits, 10 CFR 71.51, radiation surveys, smears, instrument calibration, annual report, termination report, posting, leak tests, organization and training. Shortly after arrival, areas where work may have been performed were examined to review radiation control procedures and practices. The inspection involved 18 inspector-hours on site by one regional based inspector.
Results: Of the 18 areas inspected, no items of noncompliance were identified in 15 areas. Apparent items of noncompliance were identified in three areas (Infraction - Failure to follow procedures - Paragraph 4; Infraction - Failure to post radiation area, Paragraph 5; Deficiency - Failure to label container, Paragraph 6).

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DETAILS

1. Persons Contacted

Mr. J. Duckworth, Acting General Manager
Dr. A. Pierce, Operations Manager
Mr. R. Smokowoski, Health and Safety Manager
Mr. C. Seitter, Quality Assurance Supervisor
Mr. D. Wilcox, Health and Safety Specialist

The inspector also interviewed several other licensee employees during the course of the inspection. They included the Training Coordinator, Health and Safety Personnel and the Assistant Operations Manager.

2. Outstanding Items

(Closed) Noncompliance (201/78-09-01) Licensee did not perform smear surveys in certain areas as required by procedures. The inspector reviewed smear survey data for specific areas and determined that the surveys were being performed in accordance with internal requirements.

(Closed) Noncompliance (201/78-09-03) Records of surveys were not maintained. The licensee representative stated that a discussion was held with the Health and Safety Specialists regarding the record keeping requirements. The inspector reviewed a revised Health and Safety Procedure in which instructions for recording sample data had been incorporated and the inspector also noted that records of surveys were being maintained.

3. Licensee Internal Audits

Technical Specification 7.1.6 states, "Audit of Operations Management shall provide for periodic audits of the operations...with regard to radiological and nuclear safety. These audits shall be performed by competent company or other technical personnel not directly responsible for the operation audited."

The inspector reviewed an audit report of the Health and Safety Program which stated that the required audit was conducted by a corporate staff member who was not directly responsible for the operation audited, on May 29-30, 1979.

The inspector also reviewed records of audits of the radiation protection program conducted by the Quality Assurance Department as required by Section 1.2.4 of the Health and Safety Manual, developed pursuant to Section 7.1.4 of the Technical Specifications. The records reviewed were for the period January-March, 1979.

No items of noncompliance were identified.

4. Procedures

The licensee's Technical Specifications, incorporated in his license, require certain procedures.

Technical Specification 7.1.4 states:

"Detailed written procedures, run sheets, letters of authorization and extended work procedures shall be provided for operation of the plant. In addition, procedures for handling abnormal operating conditions and for radiation protection shall be provided." Item 1.2.6 of Section 6 Administration of the Health and Safety Manual states "It is the responsibility of each employee to follow all controls, standards and procedures in order to maintain a safe work environment..."

Procedure RWP No. NFS-1, dated January 1, 1979, "Radiation Area Extended Work Procedure NFS-1", developed pursuant to Technical Specification 7.1.4, requires personnel to monitor using the hand and foot counter when leaving a Zone II area in the building lobby.

The Health and Safety Procedures Manual, the section on Personnel Monitoring - "Hand and Foot Counter" states that personnel must stand on the hand and foot counter for ten seconds.

On Wednesday, June 6, 1978, the inspector and two licensee representatives were preparing to exit the Fuel Reprocessing Building lobby, a Zone II area. Procedure RWP No. NFS-1 requires everyone to moritor using the hand and foot counter before leaving the lobby. The licensee representatives preceded the inspector in using the monitor, and the inspector observed that the first employee used the monitor in the correct manner, that is, he monitored his hands and feet for approximately ten seconds, the amount of time that would permit the instrument to detect the presence of radioactive material, and respond if the material were present.

The inspector observed the second employee step onto the hand and foot counter to monitor himself and the inspector noted that this individual remained on the hand and foot counter a maximum of two seconds. The inspector informed the Health and Safety Manager of his observation.

On Thursday, June 7, 1979, the inspector and the Health and Safety Manager were in the lobby when the inspector noted an employee monitor himself using the hand and foot counter. This person also remained on the hand and foot counter a maximum of two seconds. The Health and Safety Manager also observed the individual monitor himself, and when asked by the inspector for his estimate of the time the individual remained on the monitor and he said "about two seconds."

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The inspector stated that failure to follow procedures represents noncompliance with the license condition. (79-02-01)

5. Posting

Regulations require that certain areas be posted in a certain manner.

10 CFR 20.203(b), "Radiation Areas," states: "Each radiation area shall be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: Caution - Radiation Area."

10 CFR 20.202(b)(2) states: "'Radiation area' means any area, accessible to personnel, in which there exists radiation, originating in whole or in part within licensed material, at such levels that a major portion of the body could receive in any one hour a dose in excess of 5 millirem, or in any five consecutive days a dose in excess of 100 millirems."

As the inspector toured the fourth floor of the Reprocessing Building, the floor on which the Control Room is located, on June 6, 1979, the inspector noted that two areas were posted as radiation areas, the Control Room and the area in which the exhaust filters were located.

The inspector left these areas, still on the fourth floor, and proceeded through two doors, neither of which were posted, and proceeded to the roof of the Ventilation Exhaust Cell. Using his instrument, the inspector made measurements as he approached the exhaust duct located in this area. The inspector observed dose rates to the major portion of his body up to 20 millirem per hour five feet from the exhaust duct.

The inspector noted that neither of the two doors leading to the Ventilation Exhaust Cell Roof were posted, and neither was the exhaust duct, or any other area near it, posted as a radiation area.

The inspector was told by a licensee representative that he had gone past posted radiation areas to get to the Ventilation Exhaust Cell Roof. The inspector stated that each radiation area is required to be posted, and the exhaust duct with dose rates up to 20 millirem per hour was not posted so as to inform workers of the presence of radiation.

The inspector noted that failure to post a radiation area represents noncompliance with the regulations (79-02-03). All other areas in the facility were posted as required by 10 CFR 19 and 10 CFR 20.

6. Labeling

The regulations require the containers containing licensed radioactive material must be labeled.

10 CFR 20.203(b), "Containers," states: "Each container of licensed material shall bear a durable, clearly visible label identifying the radioactive contents."

A label required pursuant to the above shall bear the radioactive caution symbol and the words "Caution - Radioactive Material" or "Danger - Radioactive Material."

The inspector was told by a licensee representative that they were sending samples of radioactive material to Oak Ridge National Laboratory for analyses. The samples consisted of "hulls" of fuel elements and smear samples. The inspector was informed that the samples were being sent in the Oak Ridge shipping container USA/6697/B(L), Type B, Model No. 8500 and Serial No. 8471.

The inspector was also informed that Oak Ridge was the shipper.

The licensee representative was informed, in the presence of the inspector, by another employee that the shipping container had been loaded with the radioactive material and had been taken to the Warehouse awaiting shipment.

The inspector asked to see the Oak Ridge container, and he was escorted to the Warehouse by two licensee representatives on June 6, 1979. The inspector saw the Oak Ridge container at an open, rollup door in the Warehouse, and the container was unattended and neither did it bear a label indicating its contents.

The inspector stated that failure to label a container containing licensed material represents noncompliance with the regulations (79-02-04).

7. Dosimetry

The inspector reviewed dosimetry records for approximately 30 employees for the period January through June 1979 to determined if the licensee was in compliance with the regulatory requirements. The records indicated the exposures for the period reviewed were well within acceptable limits.

No items of noncompliance were identified.

8. Bioassay

Section 4.2 of the licensee's Health and Safety Manual, developed pursuant to Technical Specification 7.1.4, requires annual bioassay samples to be taken from employees. The licensee collects urine samples collected from employees in December 1978 and January 1979.

The urine sample analytical results had not been received by the licensee at the time of this inspection.

No items of noncompliance were identified.

9. Quality Assurance Program for Shipping Containers

10 CFR 71.51 states: "(a) The licensee shall establish, maintain, and execute a quality assurance program satisfying each of the applicable criteria specified in Appendix E, 'Quality Assurance Criteria for Shipping Packages for Radioactive Material,' and satifying any specific provisions which are applicable to the licensee's activities including procurement of packaging. The description of the quality assurance program shall include a discussion of which requirements of Appendix E are applicable and how they will be satisfied. A description of that program shall be filed, in accordance with this section, by January 1, 1979, with the Director, Office of Nuclear Material Safety and Safeguards, Nuclear Regulatory Commission, Washington, D.C. 20555. If a person has filed such a description, the continued use of his existing quality assurance program is authorized until the acceptability of the program has been finally determined by the Commission."

The inspector reviewed a cover letter dated October 9, 1978, submitted to the Office of Nuclear Material Safety and Safeguards, which stated that the quality assurance program was enclosed.

10. Surveys

Health and Safety Procedures Manual, Section 8, developed pursuant to Technical Specification 7.1.4, requires that radiation surveys and smear surveys be performed at stated frequencies.

The inspector reviewed smear and external radiation survey data for the period January through June 1979 to determine if the licensee was complying with the license conditions.

No items of noncompliance were identified.

11. Annual Report

10 CFR 20.407(b) requires licensees to submit personnel exposure and monitoring reports to the Director of Inspection and Enforcement, USNRC, within the first quarter of each calendar year.

The inspector reviewed the licensee's report submitted to the Director on February 14, 1979.

No items of noncompliance were identified.

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12. Termination Report

10 CFR 20.408 states: "When an individual terminates employment with a licensee subject to Section 20.407, or an individual assigned to work in such a licensee's facility, but not employed by the licensee, completes his work assignment in the licensee's facility, the licensee shall furnish to the Director of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, a report of the individual's exposure to radiation and radioactive material, incurred during the period of employment or work assignment in the licensee's facility, containing information recorded by the licensee pursuant to Sections 20.401(a) and 20.108. Such report shall be furnished within 30 days after the exposure of the individual has been determined by the licensee or 90 days after the date of termination of employment or work assignment, whichever is earlier.

10 CFR 20.409(b) states: "When a licensee is required pursuant to Section 20.405 or Section 20.408 to report to the Commission any exposure of an individual to radiation or radioactive material, the licensee shall also notify the individual. Such notice shall be transmitted at a time no later than the transmittal to the Commission, and shall comply with the provisions of Section 19.13(a) of this chapter."

The inspector reviewed documentation which indicated that the required report had been submitted to the Director and to the individual who terminated employment with the licensee in December 1978. The report was dated January 29, 1979.

No items of noncompliance were identified.

13. Instrument Calibration

Section 5.3 of the Health and Safety Manual, developed pursuant to Section 7.1.4 of the Technical Specifications, describes certain instruments and the requirement that the instruments be calibrated. The inspector reviewed the schedules established for instrument calibration, and selected approximately ten portable survey instruments to determine if they had been calibrated at the scheduled frequency during the period January to June 1979.

No items of noncompliance were identified.

14. Training

Section 5.4 of the Health and Safety Manual, developed pursuant to Section 7.1.4 of the Technical Specification, states, "...Selfmonitoring certification tests are given by the Health and Safety Specialists and are valid for a period of one year. Certification is renewed at the end of the lapse period through reexamination by Health and Safety Specialists."

The inspector reviewed the annual re-certification test that was administered by a Health and Safety Specialist for 13 employees during May 1979.

The inspector also reviewed the records of 25 employees who had received training in respiratory protection during May 1979.

No items of noncompliance were identified.

15. Plant Safety Committee

The Plant Safety Committee is required to review and approve all standard operating procedures annually as stated in Section 7.1.1.6 of the Technical Specifications. The inspector reviewed minutes of Plant Safety Committee meetings for the period November 1978 to May 1979. The meeting minutes indicated that the Committee reviewed numerous operating procedures during the period.

No items of noncompliance were identified.

16. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the meeting on June 8, 1979. The inspector summarized the purpose and the scope of the inspection and the findings as presented in this report.

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