

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 70-25/94-01

Docket No. 70-25

License No. SNM-21

Licensee: Rockwell International Corporation
Rocketdyne Division
6633 Canoga Avenue
Canoga Park, California 91309

Facility Name: Santa Susana Field Laboratory (SSFL)

Inspection at: Chadsworth, California

Inspection Conducted: January 10, 1994, and January 13-14, 1994

Inspector: M. Cillis 2/8/94
M. Cillis, Senior Radiation Specialist Date Signed

Approved by: M. Cillis for 2/8/94
James H. Reese, Chief Date Signed
Facilities Radiological Protection Branch

Summary:

Areas Inspected: This was a routine announced inspection of licensee activities during decommissioning of the Rockwell International Hot Laboratory (RIHL); including licensee followup action on violations and a deviation, radiation protection, environmental protection, waste generator requirements, and a tour of the RIHL facility. Inspection procedures 30703, 92702, 83822, 83890, 88025, and 84850 were used.

Results: The licensee's performance appeared adequate and their programs appeared capable of accomplishing their safety objectives. No violations or deviations were identified.

DETAILS

1. Persons Contacted

P. D. Rutherford, Manager, Radiation Protection & Health Physics Services

*P. H. Horton, Manager, Nuclear Operations

*B. J. Barnes, Radiation Safety Officer (RSO)

*R. Moore, Manager of Decontamination & Decommissioning Operations

J. Mitchell, Decontamination & Decommissioning Operations Engineer

*R. Harcombe, Facility Health Physicist

*D. Hickman, Facility Health Physicist

*Denotes those attending the exit interview on January 14, 1994.

In addition to the individuals noted above, the inspector met and held discussions with other members of the licensee's staff.

2. Followup on Licensee Action on Violations (92702)

Item 70-25/92-01-01 (Closed): This violation involved the licensee's failure to perform flow rate calibrations of the Hot Laboratory's air sampler every six months. The inspector verified that the corrective actions described in the licensee's timely response to this violation, dated September 28, 1992, had been effectively implemented. Applicable procedures and calibration records were reviewed. This matter is closed.

Item 70-25/92-01-03 (Closed): This violation involved the failure to replace HEPA filters in the Hot Laboratory which had exceeded the required two year criteria. The inspector verified that the corrective actions described in the licensee's timely response to this violation, dated September 28, 1992, had been effectively implemented. Applicable procedures and maintenance records were reviewed. This matter is closed.

Item 70-25/92-01-02 (Closed): This deviation involved the failure to complete quarterly reviews of the radiation safety and environmental program within the required 90 days following the end of the quarter. The inspector verified that the corrective actions described in the licensee's timely response, dated September 28, 1992, had been effectively implemented. The examination disclosed that subsequent reviews of the radiation safety and environmental program were completed within the required 90 day period. This matter is closed.

No violations or deviations were identified.

3. Radiation Protection/Decontamination and Decommissioning (83822 - 83890)

The inspector reviewed the licensee's radiation protection program during the decontamination and decommissioning (D&D) of Building 20. The review was conducted for the purpose of verifying that D&D

activities were in compliance with the requirements of 10 CFR Parts 19 and 20, License Conditions, the latest Decommissioning Plan (DP) dated October 27, 1992, and licensee procedures.

A. Background

Operations at Building 20 prior to decommissioning consisted of hot cell operations that involved the examination and decladding of irradiated nuclear fuels and examination of reactor components. Building 20 operations were suspended in 1989 at which time operations were diverted to decontamination and decommissioning of the facility for unrestricted use. On April 26, 1993, the licensee informed the NRC in writing that decommissioning of Building 20 is not expected to be completed until 1998. The current DP indicates that decommissioning of the RIHL facility is expected to be completed by June 1995. The licensee plans to submit a change to the DP to reflect the change in the work schedule.

B. Status of D&D Activities

D&D procedures, D&D scheduling, radiation protection, D&D organization, training programs, radiation protection procedures, and licensee records; such as, survey reports, the 1992 environmental monitoring report, maintenance reports, training records, waste disposal reports, respiratory program records, and personnel monitoring records were reviewed during the examination. Additionally, discussions were held with the licensee's staff and tours of Building 20 were conducted.

The inspector concluded that licensee activities had been accomplished in accordance with the applicable regulatory requirements, the License, and the DP. The review of personnel exposure reports indicated that the licensee had implemented and effective ALARA program. The licensee's training programs and posting and labeling were found to be consistent with 10 CFR Parts 19 and 20.

Staffing in the licensee's D&D organization had decreased since the previous inspection. One change in the D&D organization included the appointment of a new Manager of D&D Operations. This change was made due to the pending retirement of the previous D&D Operations Manager.

The inspector noted that the licensee was in the process of removing radioactively contaminated drain lines that previously serviced the hot cells. Portions of the hot cell ventilation system had also been removed. The majority of the surfaces in the facility had been decontaminated to less than 20 disintegrations per minute/100 square centimeters (dpm/100 cm²) alpha, and less than 200 dpm/100 cm², beta-gamma. Most of the radioactively contaminated systems previously servicing the cells had been

removed and/or secured to a safe condition. All radioactive material removed during the D&D process is packaged for transfer to the licensee's Radioactive Materials Disposal Facility (RMDF) for subsequent disposal under the licensee's Department of Energy (DOE) license. All of the steel cladding (e.g., liner) installed on the walls of the hot cells had been decontaminated and removed. Some steel cladding installed on the ceiling and around the doorways of each hot cell still remained. External surfaces of the cladding installed on the ceiling and doorways had been decontaminated. All piping penetrating the cells had been removed. The licensee was in the process of transferring the material to the RMDF for disposal. The hot cell doors had been removed and transferred to another facility for further decontamination.

C. Implementation of 10 CFR Part 20.1001-20.2401

The inspector also examined the licensee's efforts to implement the new 10 CFR Part 20 regulations, e.g., 10 CFR 20.1001-20.2401.

The inspector determined that the licensee had implemented the new Part 20 changes on January 1, 1994, as set forth in Federal Register 56 FR 23377, dated May 21, 1991, and that decontamination and decommissioning activities of the RIHL were consistent with the DP.

The licensee's performance in this area appeared adequate and their radiation protection program appeared capable of accomplishing its safety objectives. No violations or deviations were identified.

4. Maintenance/Surveillance Testing (88025)

An examination of this program area was conducted for the purpose of determining whether general maintenance of equipment was performed and also if surveillance tests were conducted in accordance with license requirements. The inspection of this area consisted of observations made during facility tours, review of surveillance and maintenance records, and from discussions held with the licensee's staff.

The licensee's performance in this area was determined to be satisfactory. No violations or deviations were identified.

5. Environmental Protection (88045)

The inspector reviewed the licensee's environmental protection program implemented since the previous inspection for compliance with 10 CFR Part 20, License Conditions, and licensee procedures. Applicable environmental program procedures and monitoring reports were reviewed.

The inspector concluded that licensee's performance in this area was consistent with license conditions and that their environmental

protection program was capable of meeting its safety objectives. No violations or deviations were identified.

6. Waste Generator Requirements (84850)

Radioactive solid waste generated at the Rockwell International Hot Laboratory (RIHL) continues to be mixed fission/activation products that are transferred by the RMDF for disposal by DOE. The licensee's radioactive waste classification and characterization program was determined to be consistent with 10 CFR Part 61.

No violations or deviations were identified.

7. Exit Interview (30703)

The inspector met with the licensee representatives, denoted in Section 1, at the conclusion of the inspection on January 14, 1994. The scope and findings of the inspection were summarized. The licensee was informed that no violations or deviations were identified.