

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 70-25/85-04

Docket No. 70-25

License No. SNM-21

Safeguards Group I

Licensee: Rockwell International Corporation
Rocketdyne Division
Atomics International
6633 Canoga Avenue
Canoga Park, California 91204

Facility Name: Headquarters Site and Santa Susana Field Laboratory

Inspection at: Headquarters Site and Santa Susana Field Laboratory

Inspection conducted: July 8-12, 1985

Inspectors: B. L. Brock
B. L. Brock, Fuel Facilities Inspector

8/5/85
Date Signed

Approved by: R. D. Thomas
R. D. Thomas, Chief
Nuclear Materials Safety Section

8/5/85
Date Signed

Summary:

Inspection on July 8-12, 1985 (Report No. 70-25/85-04)

Areas Inspected: A routine unannounced safety inspection was conducted of management organization and controls, operator training and retraining, operations review, radiation protection, environmental protection, and emergency preparedness.

The inspection involved a total of 32 hours onsite by one regionally based inspector.

Results: No violations or deviations were identified in the six areas inspected.

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DETAILS

1. Persons Contacted

*G. W. Meyers, Vice President, Atomics International
*C. J. Rozas, Director, Health, Safety and Environment
*R. D. Barto, Director, Security
C. A. Parker, Manager, Technical Training
M. Martini, Senior Instructor
C. Nealy, Senior Scientist
W. R. McCurmin, Manager, Nuclear Operations
F. H. Badger, Health and Safety Engineer
*J. D. Moore, Health and Safety Engineer
Q. Koon, Lead Engineer, Calibration Quality Assurance
E. P. Gutierrez, Electrical Supervisor, Facilities and Industrial Engineering
M. B. Vetter, Senior Engineering Planner
L. E. Rodman, Senior Fire Protection Engineer (Emergency Coordinator)
J. A. Gump, Fire Protection Engineer
R. M. Michlich, Senior Staff Engineer for Training
S. Harrison, Staff Chemical Engineer
F. C. Schrag, Member Technical Staff
S. M. Bradbury, Senior Engineer
D. Allen, Staff Assistant
R. Cutting, Shift Leader
R. S. Frazier, Member Technical Staff
W. I. Greenwall, Captain, Security Department
C. M. Bower, Captain, Security Department
R. D. Day, Lieutenant, Security Department
J. C. Bliss, Sergeant, Security Department
R. F. Hanabrey, Electronics Technician
S. A. Peck, Records Clerk
M. Smith, X-ray Technologist, Medical Department

*Denotes those attending the exit meeting.

2. Management Organization and Controls

Section 9 of NRC License SNM-21 incorporates Part 1 of the licensee's application and supplements dated October 29 and December 17, 1982, and March 2, 7, May 29 and June 12, 1984 as license conditions.

A. Organizational Structure

Section 11.3 of the license application requires certain organizational divisions of responsibility to provide a check and balance system in the important areas of plant safety.

The inspector's review of the licensee's organizational structure found it unchanged. Safety functions remain organizationally independent of operations.

The licensee plans increased attention to quality assurance and has appointed a new Vice President of Assurance Management reporting directly to the Rocketdyne President. Additionally a Director, Systems Review and Evaluation Task Team has been appointed and will also report directly to the Rocketdyne President.

B. Procedure Controls

Section 11.3.4 of the license application requires that changes in established procedures must be authorized in advance by appropriate management.

The planned review of the adequacy of the licensee's followup on applicable Information Notices (85-01-01) was delayed until the next inspection. The principal contacts, the Director of Nuclear Safety and Licensing and the Manager of Radiation and Nuclear Safety, were both on travel during the inspection.

No violations were identified.

3. Operator Training and Retraining

Condition 14 of the current license requires that prior to unsupervised work with special nuclear material appropriate formal training shall be given in criticality and/or radiation safety.

A. Open Item Review

The NRC inspector reviewed the status of the master training records and found that although the licensee made an effort to correct the discrepancies in the various training records, the licensee was not fully successful. The failure to fully correct the records was attributed to changing computer programmers. The licensee's corrective efforts included: first, rerouting training records to assure the master record system was the first record updated; second, a meeting of the various related record holders was held to review differences among the records and verify the changes to be made; and third, the appropriate adjustments to the records were prepared for input to the computer data file.

This item (85-01-02) will be reviewed again in the next inspection.

B. Training Tape Review

The inspector reviewed two of the licensee's training tapes. The tapes were introductions to Radiation Safety and Criticality Safety. The material presented was appropriate. The licensee has prepared an updated script to be used to prepare a replacement tape for the introduction to Radiation Safety.

No violations were identified.

4. Operations Review

Section 2.1 of the license application requires the licensee to comply with all the requirements of the regulations, to operate the facilities in a safe and efficient manner and within the requirements of all license conditions under which the activities are authorized.

A. Conduct of Operations

License Condition 25 requires that the licensee follow the general decommissioning plan submitted in the enclosures to the letter dated March 15, 1978.

- (1) Cleanup of Building 055 is continuing. Current efforts involve cutting up the radioactive liquid waste drain pipe and packaging it for shipment to a burial site for radioactive waste. The licensee is still stripping the tile glue off the floor.
- (2) The EBR-II decladding operation in the Rockwell International Hot Laboratory (RIHL) cells 2 and 3 are continuing.
- (3) Cell 1 of the RIHL is being cleaned up in preparation for the Fermi decladding operation. The cell had been used for Fermi decladding development work but because of the significant changes made in the planned process some of the development equipment will not be used.

No violations were identified.

5. Radiation Protection

Protection against radiation hazards associated with licensed activities is required by 10 CFR Part 20.

A. Tour of Facilities

- (1) The RIHL (Building 020), NMDF (Building 055), the Quality Assurance Calibration Laboratory (Building T-11), the Santa Susana Fire Station and the sanitary sewer holding station were visited. Portable survey instruments and monitoring equipment were in current calibration. The inspector reviewed the Computerized Recall Inventory System (CRIS) and found it is adequately used to alert instrument users to the need for recalibration of specific instruments.
- (2) The inspector reviewed records of the Facilities and Industrial Engineering Department, which is responsible for the calibration of the Radiation Alarm System (RAS). The RAS was calibrated quarterly though only annual calibration is required. HEPA filters are also tested by this department. Testing of HEPA filters is facilitated by a computer listing tickler file kept by the Health and Safety Engineer. A separate Computer Inventory Tracking System (CITS) that includes HEPA filter systems is kept by the Senior Engineering Planner.

- (3) The inspector reviewed the operation of the sanitary sewer monitor that diverts radioactive liquid waste to a holding pond by activating an automatic valve. The licensee had repaired the valve position indicator light circuitry. During the test, the lights repetitively displayed the correct valve position through several test cycles as the valve responded properly to the test sequence. This successful test closes item 85-03-01. The inspector was told that an upgrade underway in the sanitary sewer holding station is being undertaken to reduce the release of biological constituents.
- (4) The inspector's check of the status of the hot spot (14,000 DPM in 2 ft²) in Building 055 found the spot had not yet been removed by scabbling. Plans to remove it have not changed but have not been implemented. Floor related activities currently involve removing the radioactive liquid waste drain pipe and packaging it for shipment to a radioactive waste burial site. Nearly 160 feet of the drain pipe outside the building had not been removed at the time of the inspection. The nearly 800 gallons of liquid in the tanks to which the drain pipe lead had been sampled after filtration and measurements indicated it contained up to 6.91 E-10 uCi/ml alpha and 4.82 E-08 uCi/ml beta activities. The licensee plans to ship the low level liquid waste to the Radioactive Materials Disposal Facility (RMDF) for processing in the waste evaporator. The resultant sludge will be packaged for burial.
- (5) The licensee had not determined at the time of this inspection that the drain pipe ditch at Building 055 did not contain contamination above NRC's release limits. NRC samples taken from the empty section of the ditch will be independently analyzed if the licensee's measurements show that section of the ditch meets NRC release limits. These samples will not be analyzed if the licensee's samples indicate the ditch needs cleanup. Additional attention is needed to preclude requesting NRC participation before the licensee's responsibilities have been met.
- (6) The Building 055 decontamination schedule has not been provided to NRC. The licensee has informally indicated that the Building should be ready for an NRC overcheck in mid-1986.

B. External Exposure

- (1) The NRC inspector's review of the exposure records for the second quarter indicated no exposures in excess of regulatory limits. The highest quarterly exposure was 875 mrem. The licensee is endeavoring to reduce individual exposures through careful planning as well as increasing the number of personnel available to participate in the work.
- (2) A necessary cell entry to repair the laser in cell 3 was observed and was well executed. Photographs effectively help the cell entry man to do his work efficiently. No poor health

physics practices were observed. A special effort was made to assure effective clear communication throughout the in-cell operation.

- (3) The exposure experienced in loading EBR-II assemblies into Cell 4 has been reduced by transferring out waste cans of EBR-II cladding. The waste cans are being stored in temporary racks set up in the RMDF.

No violations were identified.

6. Environmental Protection

Title 10 of the Code of Federal Regulation, Part 20.106 "Radioactivity in Effluents to Unrestricted Areas" requires that licensees control their operations to preclude releasing radioactive material in concentrations exceeding the limits specified in Appendix B, Table II of Part 20.

Of the two samples, from the offsite sampling stations, being analyzed at the Radiological and Environmental Sciences Laboratory (RESL) one is still in process. The sample reported shows essentially background uranium and thorium as does the results from the MRC-RV Mobile Laboratory. The results on the plutonium content of sample 61 are not yet available from either laboratory. The results will be included in a future report.

No violations were identified.

7. Emergency Preparedness

License Condition 24 requires the licensee to maintain and execute the response measures of his Radiological Contingency Plan submitted to the Commission on August 28, 1981, and revised on March 3, 1982. Additionally, Appendix A to the Radiological Contingency Plan states that the Master Emergency Plan has been approved as part of the license.

- (1) The licensee's emergency equipment vehicle which was temporarily out of service during the previous inspection has been repaired. The survey meters were within their current calibration period. All self contained breathing apparatus (SCBA) units on the emergency vehicle were up to pressure as were all the SCBA units on the fire trucks in the station. The fire extinguishers in the buildings visited were current with regard to inspections. Emergency vehicles fire extinguishers are checked by the third shift through a DETEX clock system. The Emergency vehicles are each parked in specific locations which facilitates this checkup.
- (2) The computer system for monthly inspections is still being developed. The Pre-Plan for Building 020 is not complete. The Pre-Plans are very helpful because they consolidate pertinent information about a building. A diagram in the Pre-Plan provides in addition to the structure's size and occupancy the location of domestic water, gas, electrical, riser, inspector's test valve, water heater, ladder, post indicator valve, outside stem and yoke,

hydrant and fire extinguishers. Gathering this information for a building Pre-Plan is a significant task. The buildings are being done by area. Building 020 is in Area 4. The current effort is directed towards completion of Area 2.

No violations were identified.

8. Exit Meeting

The results of the inspection were discussed with the licensee's staff identified in Section 1.

The topics included:

- ° the adequate solution of the escort badging problem
- ° the preparation underway for assuring the safe disposal of U-Zr fines from Fermi decladding
- ° the need for AI to remove the drain pipe and determine if the ditch meets NRC release limits
- ° closure of the open item related to the sewage holdup diversion valve lights
- ° the need to complete the Building 020 Pre-Plan for emergency use
- ° the status of the Building 055 decontamination effort
- ° the training record discrepancy still exists though training was current

The licensee again expressed an interest in correcting the training record discrepancy. The licensee also indicated they understood why NRC would store its samples until the licensee had finished their analyses.