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

REGION V

Report No. 70-754/80-02

Docket No. 70-754 License No. SNM-960 Safeguards Group 1

Licensee: General Electric Company
Vallecitos Nuclear Center
P. O. Box 460, Pleasanton, California 94566

Facility Name: Vallecitos Nuclear Center

Inspection at: Vallecitos Nuclear Center, Pleasanton, CA

Inspection conducted: March 25, 1980

Inspectors: W. J. Cooley, Fuel Facilities Inspector — 4/29/80 Date Signed

Date Signed

Approved By: R. D. Thomas, Chief, Materials Radiological Protection Section — 4/30/80 Date Signed

Approved By: H. E. Book, Chief Fuel Facility and Materials Safety Branch — 4/30/80 Date Signed

Summary:

Inspection on March 25, 1980 (Report No. 70-754/80-02)

Areas Inspected: This inspection consisted of a review of the licensee's actions as expressed in his September 19, 1979 letter reply to IE Bulletin 79-19. That bulletin required NRC licensees to review their low level waste handling programs particularly with respect to packaging of those wastes. The licensee replied that he would generate a Vallecitos Nuclear Center Safety Standard on handling and packaging of radioactive waste and would review and revise existing waste handling procedures, as required. Additionaly, a formal rad-waste training/retraining program; a plan for auditing the program; and a completion of an interim audit to evaluate the existing program was contemplated by the licensee. Those efforts were planned for individual completion dates ranging from October 10, 1979 through January 31, 1980.

Results: This inspection revealed that the license had completed the interim audit of waste handling and packaging procedures with a report dated November 27, 1979. A complete revision of the Vallecitos Nuclear Center Safety Standard on Radioactive Waste Handling (revising the original standard dated 12/69) had been issued effective March 1980. An audit plan was completed at the time of the interim audit. An interim report on the status of the Vallecitos Nuclear Center program evaluation dated February 11, 1980 indicated progress with the revision of the existing procedures but also indicated slippage in the planned completion date. No items of noncompliance or deviations were observed during the inspection.

RV Form 219 (2)

DETAILS

1. Persons Contacted

*W. H. King, Manager, Nuclear Safety Technology
*G. E. Cunningham, Senior Licensing Engineer
R. E. Butler, Manager, Radioactive Products and Services
D. L. Zimmerman, Radioactive Products and Services Analyst
J. I. Tenorio, Manager, Remote Handling Operations
J. E. Delzell, Radiation Monitor Technician

*Denotes those attending the exit interview.

2. Vallecitos Nuclear Center Safety Standard - Radioactive Waste Handling.

A Vallecitos Nuclear Center Safety Standard on radioactive waste handling, Safety Standard Number 7.3, was revised in its entirety, effective March 1980. That revision addresses accountable rad-waste and liquid rad-waste as special considerations. It specifies the types of packages contemplated for use in low level waste shipments. It details the packaging and onsite transfers of low level rad-waste along with interim storage locations and the actual loading of rad-waste packages for shipment. Employee training, procedure requirements and other requirements are described. Responsibilities of the various Vallecitos Nuclear Center components for carrying out the program are detailed. Appendix A and Appendix B to the Safety Standard 7.3, Revision 1 present both general and specific packaging limits and requirements of both the Beatty, Nevada and Richland, Washington land burial disposal sites. Those requirements are presented in the Appendixes for each packaging model which the licensee contemplates using for the transfer of low level waste. Also presented are the dose rate and external contamination limits of the Department of Transportation as they apply to comtemplated rad-waste shipments.

A strong feature of the revised Site Safety Standard was its use of references to the title 10 CFR and title 49 CFR as well as other Vallecitos Nuclear Center Safety Standard, Vallecitos Nuclear Center Quality Assurance Program, internal and government required transfers forms and Vallecitos waste handling procedures.

3. Licensee Interim Rad-Waste Program Evaluation Report.

An interim report on the progress of the rad-waste program evaluation was dated February 11, 1980. That report originated with personnel in the Radioactive Products and Services, who have a leading role in the generation and reevaluation of the Site Standard Number 7.3, Revision 1 and revisions of procedures resulting from that Site Standard. That leading role is determined by the fact that Radioactive Products and Services is responsible for the interim storage and final loading for transport of low level radioactive waste packagings. A final staging area is the Hill Side Storage Facility located in the 200 area of the Vallecitos site which is managed by Radioactive Products and Services.

The interim report indicated that review of revised waste handling procedures of the various rad-waste generating components was under way and should be completed in March 1980. The report indicated that final publication of procedures and the initiation of training for Radioactive Products and Services personnel would follow the issuance of the Vallecitos Nuclear Center Safety Standard by approximately 6 to 8 weeks. Because that Site Safety Standard was delayed until the beginning of March 1980, the licensee presently anticipates completion of the program including initial training of employees during the second quarter of 1980.

4. Interim Audit and Audit Plan For The Handling and Packaging of Low Level Radioactive Waste.

As stated above in this report, an interim audit was completed by the licensee in November 1979. At that time an audit plan was generated by Nuclear Safety Technology. It was the interim audit, inpart, which led to some of the revisions described above. That interim audit noted variations in the type of procedures and instructions to employees with regard to waste handling and observed that no formal training within the employee training program was given on the subject of waste handling.

5. Inspection of Low Level Waste Containers.

This inspection included observation of partially filled wooden box, (4' X 4' X 8'), which was being used for the accumulation of typical low level radioactive waste. It consists of light weight, contaminated material contained in plastic bags and/or cardboard boxes. Similar containers which had been completely filled were observed to have had their lids nailed on and steel bands (one vertical and one horizontal) applied externally over the surface of the containers.

A 55 gallon drum which had been filled with liquid and solidified with a combination of Microcell and cement was opened in the presence of the inspector and it was observed that the container showed no residual liquids. The container was a 17H drum in new condition. Labeling on the container indicated a surface dose rate of 40 mR/hr and 3 mR/hr at 3 feet. That label identified the contents as mixed fission and activation products. The label also indicated removable contamination of less than 100 cpm beta gamma and less than 200 dpm alpha. The words radioactive - LSA were stencilled on the drum.

Discussions with licensee representatives indicated that approximately 1 year accumulation of low enriched uranium waste containing transuranics was presently on site. They indicated that it could not be disposed at the Richland, Washington or Beatty, Nevada sites because of the site limitations on the concentration of transuranics. Licensee representatives indicated they could store an additional year's supply of that type waste using the present on site storage facilities.

6. Management Interview

The results of this inspection were discussed with licensee representatives on March 25, 1980. They indicated they expected the revised waste handling program to be fully implemented within the second calendar quarter of 1980. The licensee representatives were informed that no items of noncompliance with NRC requirements were observed within the scope of the inspection.