

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

REGION V

Report No. 50-361/81-30

Docket No. 50-361 Construction Permit No. CPPR-97

Licensee: Southern California Edison Company
2244 Walnut Grove Avenue
Rosemead, California 91770

Facility Name: San Onofre Unit 2

Inspection at: Camp Pendleton, California

Inspection conducted: November 9-10, 1981, December 14-17, 1981

Inspector: *F. A. Wenslawski* 1/13/82
for G. H. Hamada, Radiation Laboratory Specialist Date Signed

Approved by: *F. Wenslawski* 1/13/82
F. Wenslawski, Chief, Reactor Radiation Protection Section Date Signed

Approved by: *H. E. Book* 1/13/82
H. E. Book, Chief, Radiological Safety Branch Date Signed

Summary:

Inspection of November 9-10, 1981, December 14-17, 1981 (Report No. 50-361/81-30)

Areas Inspected: Routine unannounced preoperational inspection to assess the near term capabilities of the radiochemistry and chemistry laboratories to perform required measurements. The inspection involved a total of 39 hours onsite by one inspector.

Results: No items of noncompliance or deviations were identified in the areas inspected.

DETAILS

1. Persons Contacted

- *T. Briggs, Compliance Engineer
- *S. Chick, Chemistry, Units 2/3
- *S. Corey, NCT Foreman, Units 2/3
- *P. Croy, Manager, Compliance and Configuration Control
- *W. Frick, Supervisor, Chemistry
- *E. Gault, Compliance Section
- *B. Katz, Station Technical Manager
- *P. King, QA/QC Supervisor, Units 2/3
- *W. Marsh, Compliance Engineer
- *G. McDonald, QA/QC Supervisor, Unit 1
- *W. Moody, Deputy Station Manager
- *A. Prosser, Supervisor, Chemistry, Units 2/3
- *C. Welch, QA Engineer
- *J. Young, Chemistry, Units 2/3

*Indicates those present at the exit interview.

2. Radiochemistry Laboratory and Counting Room

During the first phase of this inspection, (November 9-10, 1981) neither the radiochemistry laboratory nor the counting room had been officially turned over to the chemistry group. Test and calibration procedures could not be conducted until this had been done. Also, the ND-APT gamma spectroscopy system was still being tested and had not been completely checked out for acceptance.

During the second phase of this inspection (December 14-17, 1981), the facility had just been turned over to chemistry, and certain activities had already been initiated to bring the laboratory to a more functional level. There were indications, however, that the lack of adequate space in the laboratory for all of the required instrumentation could cause further delays in bringing radiochemistry to a fully operational level. Also, the gamma spectroscopy system had not yet been accepted by Southern California Edison (SCE). This situation precluded any testing or calibration activities for the system. Expectations, however, were that the gamma spectroscopy system would become available within a matter of days and that test and calibration operations as well as training activities could be initiated within one to two weeks.

3. Chemistry Laboratory

The chemistry laboratory performs conventional chemical analyses on nonradiological and low activity radiological samples; i.e., samples obtained from the secondary side of the plant, hydrogen supply

tanks, etc. (This means that for primary side samples, the radiochemistry laboratory must do the nonradiological chemical measurements as well as the radiological measurements.) Lack of space appears to be a generic problem for the laboratories. It was noted during the second phase inspection that a gas chromatograph system was still in its shipping carton because the laboratory appeared not to have the necessary space to accommodate this unit. In general, except for the gas chromatograph system, the chemistry laboratory is reasonably functional and could become fully functional in a relatively short time.

4. Procedures and Quality Assurance

Most of the procedures for sampling and analysis have been developed and compiled in a manual of procedures. While there are still a few procedures in draft form, a few being revised, and several others being developed, the likelihood of having all of the required procedures in place prior to plant startup is good.

Quality assurance considerations are, in general, incorporated in the individual procedures. Quality assurance procedures for the gamma spectroscopy system, however, are being developed separately, and the approved document is expected to be ready in about a month.

5. Laboratory Staffing and Training

Currently, the front line staff consists of a supervisor, a professional (engineer) who oversees the radiochemistry operations, a professional (engineer) who oversees the chemistry operations, 2 chemical technician foremen, 6 technicians, and another technician scheduled to report in late December, 1981. The proposed and anticipated staffing level was 11 technicians by October 1, 1981 and a total of 16 technicians by January 1, 1982. It appears, therefore, that the laboratory staff will be short by 9 technicians from the anticipated January 1, 1982 staffing. The licensee has determined that it would be possible to conduct a full radiochemical and chemical analysis program with the current staff; but this can be done only if all were placed on extended shift with no allowance for unplanned contingencies.

The current training requirements developed by the licensee for inexperienced personnel are such that two years of training are required before they are permitted to perform independent analyses. It is evident, therefore, that even a partial alleviation of the staff shortage problem must rely on the availability of experienced personnel. With this in mind, the licensee has embarked on a recruiting campaign to obtain the needed experienced personnel. Should this effort not be fully successful, the licensee intends to use the "rent-a-tech" program to fulfill its short term needs.

Laboratory functions are performed by a chemical technician structure that emphasizes versatility, and consequently, no single technician or group of technicians is assigned specifically to radiochemistry or chemistry. While specific individuals may specialize in certain procedures, it is intended that all be capable of performing other analyses as well. This means that most, if not all, of the technicians will require training in the operation of the new gamma spectroscopy system as well as the proportional counter and liquid scintillation systems. As of this inspection, none of these systems were in a fully operational mode.

6. Exit Interview

Inspection findings were discussed with members of management and staff indicated in paragraph 1. Problem areas requiring further attention were pointed out to SCE. Of particular concern were the problems associated with the lack of adequate space in the laboratories and the thus far unmet staffing level for the operation of the radiochemistry and chemistry programs. Management indicated that steps were being taken to resolve these questions. Management was also informed of NRC's intent to confirm directly, SCE's ability to perform radiological measurements. This is to be done with the Region V Mobile Laboratory, which will be brought to the plant site for intercomparison measurements as soon as the Unit 2 laboratory reaches an operational level that will permit these comparisons to be made.