

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-275/89-18 and 50-323/89-18

License Nos. DPR-80 and DPR-82

Licensee: Pacific Gas and Electric Company
77 Beale Street
Room 1451
San Francisco, California 94106

Facility Name: Diablo Canyon Power Plant, Units 1 and 2

Inspection at: Diablo Canyon, San Luis Obispo County, California

Inspection Conducted: June 19-23 and July 10-14, 1989

Inspector: M. C. North for 7/26/89
H. S. North, Senior Radiation Specialist Date Signed

Approved by: E. M. Garcia for 7/26/89
E. M. Garcia, Acting Chief Date Signed
Facilities Radiological Protection Section

Summary:

Inspection on June 19-23 and July 10-14, 1989 (Report No. 50-275/89-18 and 50-323/89-18)

Areas Inspected: Routine unannounced inspection of followup of Information Notices and occupational exposure, shipping and transportation; including, audits and appraisals, changes, planning and preparation, training and qualification, external and internal exposure control, control of radioactive materials and surveys, ALARA, shipment of low-level radioactive waste and review of periodic and special reports. Inspection procedures 30703, 83750, 90713 and 92701 were addressed.

Results: In the areas inspected, the licensee's programs appeared capable of superior performance in meeting their safety objectives. One Non-Cited Violation was identified involving failure to satisfy the requirements of 10 CFR 20.408(b), Reports of personnel monitoring on termination of employment or work. The violation is not being cited because the criteria specified in Section V. G. of the Enforcement Policy were satisfied. No deviations were identified.

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DETAILS

1. Persons Contacted

- + J. D. Townsend, Plant Manager
- * J. V. Boots, Chemistry Manager
- + W. G. Crockett, Instrument and Control Maintenance Manager
- + K. C. Doss, Onsite Safety Review Group
- *+C. L. Eldridge, Quality Control Manager
- * S. Fahey-Benson, Onsite Safety Review Group
- + S. R. Fridley, Operations Manager
- *+B. W. Giffin, Assistant Plant Manager, Technical Services
- *+R. Gray, Senior Radiation Protection Engineer
- *+W. J. Kelly, Regulatory Compliance Engineer
- + M. E. Leppke, Engineering Manager
- + D. B. Miklush, Assistant Plant Manager, Maintenance Manager
- * R. P. Powers, Radiation Protection Manager
- *+D. A. Taggart, Director Quality Support
- + L. F. Womack, Assistant Plant Manager, Operations Services

*, +: Denote those individuals present at the exit interviews conducted on June 23 and July 14, 1989, respectively. In addition discussions were held with other members of the licensee's staff and contractor personnel.

2. Follow-up (92701)

Receipt and initiation or completion of review of Information Notices Nos. 88-63, 88-79, 88-101, 89-27 and 89-44 was verified. No concerns were identified.

3. Occupational Exposure, Shipping and Transportation (83750)

a. Audits and Appraisals

Audits performed by the licensee's Quality Assurance staff in the inspection topic area were examined. The audits included:

Supplier Implementation Audit 88231S, Helgeson Scientific Services, September 8, 1988;

In-plant Radiological Controls; Housekeeping; Cleanliness; Audit 88830T, October 17-24, 1988;

Radiation Protection: Personnel Monitoring and Dosimetry Processing; Audit 89809T, May 15-24, 1989.

With respect to the first audit no deficiencies were identified and no Audit Finding Reports were issued.

With respect to the second audit a total of eight Audit Finding Reports were issued to document deficiencies. With two exceptions the report noted that the discrepancies, "... appeared to have



minimum impact on plant operations as the deviations are in the area of administrative documentation". The first of the two exceptions dealt with the observed failure of two individuals to properly frisk out of an area with surface contamination, this was called to the attention of a Chemistry and Radiation Protection (C&RP) technician at the time who assured that a proper frisk was accomplished. The second exception addressed the apparently untimely response to previously identified concerns related to the marking of tools and portable equipment designated for use in the Radiologically Controlled Area (RCA) with magenta or yellow paint. During facility tours the inspector noted that tools in a RCA tool room appeared to be appropriately marked.

The third audit resulted in the issuance of four Audit Finding Reports, two to Diablo Canyon Power Plant (DCPP) and two to Technical and Ecological Services (TES) which provides the thermoluminescent dosimetry service to DCPP. The audit identified the findings as administrative in nature. One of the findings noted that the appropriate DCPP procedure, RCP D-310, External Dosimetry Requirements and Records, had not been revised to reflect changes in General Office (GO) procedure NPAP E-7/NPG-2.9 Rev 4, Termination Reports of Radiation Exposure. The change transferred responsibility for issuance of termination reports, required by 10 CFR 20.408(b), from the GO to the DCPP and Humboldt Bay Power Plants, for individuals not assigned to full time work at the power plants. As a result of the audit finding the staff at DCPP conducted an investigation into the possibility that some Termination Reports might not have been issued in a timely fashion. The results of the licensee's investigation is discussed further in report section 3.e.

The licensee's formal audit program in the radiological controls area was conducted by qualified individuals and was effective in identifying deficiencies and obtaining appropriate corrective action.

Radiological Occurrence Reports (ROR) for the period January 19 to April 25, 1989, were examined. Beginning on April 21, 1989, the ROR reporting system was changed from hard copy documentation to a computer based system using the Plant Information Management System (PIMS). Based on the ROR's examined it appeared that appropriate measures for identifying and correcting deficiencies existed.

It appeared that the Licensee had implemented an effective system of audits and appraisals capable of adequately supporting the accomplishment of the licensee's safety objectives. No violations or deviations were identified.

b. Changes

Discussions with the licensee's staff did not identify any major changes since the last inspection. Matters under consideration, having potential for affecting the radiation control program were, discussed including:



- The licensee expects approval for the use of "Vantage 5" fuel. This fuel contains no inconel and therefore would not be a source of cobalt in the primary system with a potential for reduced primary system activity.
- The removal of the RTD Bypass Manifold is being considered. This action would be financially costly however a potential 25% reduction in radiation exposures in containment work could result due to the removal of some 60 primary system valves associated with the system.
- The licensee is moving toward higher filtration efficiency on the CVCS to minimize the primary system crud.
- The licensee reported that attempts to obtain acceptable replacements for valves with cobalt hard facing alloy seat materials is not proceeding well. The responsible engineers have not been able to find acceptable substitutes.

c. Planning and Preparation

During the last outage the Licensee concentrated all foremen in one office in an attempt to reduce the outage duration through improved communications and work group interface. In preparation for the next outage, scheduled for October 1989, a new concept is being tried in three areas, reactor disassembly/assembly, refueling preparations/fuel off load, and valve maintenance. Under the overall guidance of the radiological engineer responsible for ALARA, three "High Impact Teams"(HIT), have been formed. One in each area of emphasis. Each team has a team leader, usually an engineer with principal responsibility in the area. The teams include foremen and craft personnel, C&RP technicians, quality control, I&C personnel, work planning center personnel, a radiation protection engineer, and the operations outage management representative. The team members are permanently assigned to a single team for the duration of the preparation phase and the outage. The HIT begins activity with off-site training at a "Ropes" course conducted by a professor from Cal Poly. The course is a series of physical problems which must be solved by team work, evaluation, leadership, communications and team consensus. The result is a team which has demonstrated the ability to plan and work together. Subsequently the teams meet weekly and process through six phases by the end of the outage. The phases are, Scope Identification, Logic Diagram/Schedule, Detailed Task Analysis, Training and Outage Preparation, Implementation and Critique. The first-team was starting phase 3, the second team was working on phase 2 and the third team was working on phase 1 at the time of the inspection. This program started in March for an October outage. As an example of the types of findings resulting from this effort, the first team had identified 111 items that could be done to improve quality, performance and safety. The logic diagram indicates that the reactor head removal to the stand can be reduced from 7 to 4.5 days with some time to spare. The team leader is responsible for coordination of the work crews arrival at the job site. The radiological engineer assigned to the overall task of



implementing the HIT program was not assigned to any of the specific teams nor to the direction of the teams planning efforts. The HIT program was not specifically identified as an ALARA activity however it was expected to result in an overall reduction in exposure as a result of improvements in quality and reduced rework, performance and safety.

The activity in this area supported the licensee's safety objectives and the concept of ALARA.

d. Training and Qualification of Personnel

The licensee conducts an INPO accredited training program for C&RP technicians. A total of 66 C&RP technicians were on staff at the time of the inspection, of this number, 62 were plant qualified, 57 and 61 were ANSI qualified in chemistry and radiation protection, respectively, (ANSI/ANS 3.1, 1978), and 57 were shift qualified. In addition a force of 11-13 Chem-Rad helpers provide a labor pool in this functional area. Initial C&RP training requires 16-20 weeks, 8 and 12 weeks, respectively, for chemistry and radiation protection. Formal, continuing training, 15-20 hours per quarter, is provided in a sufficient number of sessions to permit all shifts to participate. Quarterly retraining programs were developed based on input from the training department, C&RP management and supervision and the technician staff. Based on a review of selected Continuing Training Outlines it appeared that appropriate topics were addressed. In addition a hand out, addressing Lessons Learned, was provided as a part of the training program for self study. The hand out included materials from a variety of sources with comments prepared by the training staff. The material provided and the comments appeared to give an excellent overview of industry and regulatory experience and concerns.

Contract senior radiation protection technicians employed for outages (the only contract technicians authorized for job coverage activities), must be ANSI 3.1-1978 qualified (verified by the licensee), must pass a 2-4 hour specific knowledge examination, complete site specific orientation and exam (2-4 Hours), and receive training in applicable procedures. Junior technicians receive the same training but are not required to pass the specific knowledge exam.

Qualifications of 7 currently employed C&RP technicians, selected at random, were reviewed. No discrepancies were identified.

The licensee provides a 5 month, full time, technical staff training program. This program covers all aspects of plant operations. It is designed to provide a common base of knowledge to the technical staff. One member of the radiological engineering staff was participating in the training at the time of the inspection.



e. External Exposure Control

The licensee uses Panasonic TLD's for personnel monitoring. The dosimeters are processed by TES at the DCPD site. TES was previously accredited by NVLAP and was in reaccreditation process at the time of the inspection. The performance testing phase of the process had been completed with the on-site evaluation yet to be accomplished. The performance testing resulted in passes in all categories for which testing was requested.

<u>TLD Type</u>	<u>Categories</u>
UD-802	II thru VIII
UD-802/813	VIII
UD-808 (1)	V and VII

(1) UD-808 not routinely used. Supply available for special applications.

The reason for excluding category I from the certification process was discussed. The licensee stated that they did not believe that X-ray accident range testing was necessary or appropriate for their facility. They stated that response curves incorporating energies of 20, 29, 39, 51, 70, 167, and 210 Kev had been developed. In addition no assumptions were made as to the photon energy to which any badge is exposed. Energy estimates are made on all badges based on comparison of the Calcium to Lithium, E-3 to E-2, elements in the UD-802 TLD (e.g. $\frac{E-3 - E-2}{E-2}$).

In addition the processing program incorporates a flag to identify as X-ray any photon energies approximating 200 Kev or below. A total of 21 recently processed badge results were examined to identify the calculated photon energies. These values ranged from 486 to 723 Kev.

TES normally processes about 2000 TLD's per month plus approximately 1000 additional per month for hand issue. During peak periods up to 10,000 TLD's have been processed monthly, during an outage. TES had committed to a worst case badge processing time of 4 hours for special cases. However during normal operations a turnaround time of from 1-2 hours was expected. The licensee has approximately 26,000 TLD's in inventory. Comparisons between TLD and pocket ionization chamber (PIC) values are performed by the computer which evaluates as acceptable TLD vs PIC at 5 times the square root of the TLD value. This comparison results in approximately 20 disagreements at lower exposures which decrease as exposures increase. Comparisons are not done at exposures under 100mrem. PIC's are calibrated every 6 months.

During outages daily computer printouts of exposure are available at access control. During normal operations printouts are less frequent but still available at the same location.



A total of 5 standard TLD packs are used in addition to body badges. In addition UD-807 TLD's are used for finger and toe rings. Badges and packs are distributed by the DCPD dosimetry group which is also responsible for exposure records maintenance. Dosimetry record files for 14 current and 3 terminated employees were examined. No discrepancies were identified.

The licensee has established and proceduralized administrative controls for radiation exposure. The radiation protection staff prepared an evaluation, 1988-Radiation Protection "The year in summary". This document analyzed exposure experience and concluded that, "...performance remains below industry averages, but will increase beyond industry averages unless improvements in work efficiency and outage duration are made". The HIT program, discussed in report section 3.c., was an attempt to improve both efficiency and reduce outage duration. At the time of the inspection revised ALARA implementing procedures were in the draft stage. The licensee expected to have these procedures implemented by the October Unit 1 outage.

The present and proposed process for generation of Radiation and Special Work Permits (RWP/SWP) require an ALARA review, exposure estimate and exposure tracking for each permit. Current and historical survey data is used in the development of the ALARA estimate. The existing and proposed RWP/SWP ALARA review process involves multiple levels of review at increasing management levels as estimated exposures increase.

During several tours of the facility, compliance with posting and labeling requirements specified in 10 CFR 19.11 and 10 CFR 20.203 was observed. No discrepancies were identified.

Reports Pursuant to 10 CFR 20.408(b)

Report section 3.a. above, noted that the licensee had conducted an investigation into the issuance of termination letters as a result of a finding in licensee Audit 89809T conducted May 15-24, 1989, report dated June 16, 1989. GO procedure NPAP E-7/NPG-2.9, effective July 29, 1988, specified that DCPD was to be responsible for issuance of termination letters for personnel not assigned to the DCPD site. This group included GO and traveling crew personnel. The DCPD staff was to be informed of the termination of such individuals by reports of terminations by the PG&E payroll office. For the purposes of the investigation the DCPD staff requested a listing from the payroll office of all non site PG&E personnel, who had been badged at DCPD, and had terminated since June 1988. The list was prepared by payroll on June 30 and received at DCPD on July 3, 1989. A total of 81 individuals were identified. Comparison of the list with DCPD records established that approximately 30% of the terminations had not been reported to DCPD. Further review established that in two cases termination letters had not been sent. The letters were sent on July 5, 1989, 127 days after the individuals had terminated. In six other cases letters had been sent but were delayed from 54 to 166 days after termination of the



individuals. The exposures of the individuals involved in the delayed reports were reviewed. In 5 cases the records indicated that no exposures had been received. In the remaining three cases the exposures ranged from 42 to 76 mrem. The licensee stated that in some cases the site staff had learned of terminations through unofficial channels and sent timely termination letters although no record of a report of termination from payroll could be identified. The inspector was informed of this event on his arrival at the site for the second week of the inspection. At that time the licensee was preparing both an Action Request (AR) and a Non Conformance Report (NCR) to initiate corrective action and evaluate the reportability of this occurrence. The licensee was in the process of resolving the breakdown in communications between payroll and the site which precipitated this event. Failure to provide timely reports of personnel monitoring on termination of employment appears to be contrary to the requirements of 10 CFR 20.408 (b).

The licensee's program appears adequate to accomplish their safety objectives. One apparent violation for failure to issue timely reports of personnel monitoring on termination of employment contrary to the requirements of 10 CFR 20.408 (b) is not being cited because the criteria specified in Section V.G. of the Enforcement Policy were satisfied.(NCV 50-275/323/89-18-01)

f. Internal Exposure Control

The licensee tracks internal exposures on the basis of air samples which are documented in the PIMS. In addition to the routine annual whole body counts (WBC) quarterly, random additional WBCs are performed. The quarterly random WBCs are based on exposure to airborne activity selected on the bases of RWP reported air sample data. During tours of the RCA appropriate use of respiratory protection devices was observed. Air sampling devices appeared to be appropriately located with respect to the work location.

The licensee has available both the Helgeson "Quicky" and bed type whole body counters. Daily source checks of the "Quicky" and bed counters are performed. Records of source checks contained in Log Book 25091 for the period October 8, 1988, through June 21, 1989, for the "Quicky" counter and Log Book 22333 for 1989 to June 21, 1989, were reviewed. Control charts of daily checks are maintained in the W.B. Counter Data Book.

The licensee reported one event that resulted in an exposure in excess of 40 MPC hours. On October 19, 1988, during disassembly of work platform equipment on steam generator 2-4, an ingestion occurred. The workman, a contract radiation protection technician, was removing a section of elephant trunk from an overhead area. Air sample results indicated that respiratory protection was not required. No respirator or face shield was used during this activity. The event was initially identified by a Personnel Contamination Monitor (PCM) when the worker attempted to leave the RCA. Attempts at decontamination of what appeared to be surface contamination were unsuccessful. The activity was determined to be



in the abdominal area and was mobile. Multiple ventral and dorsal whole body counts were performed. The licensee's inquiry into the matter established that the worker was a mouth breather. The following day a fecal sample was collected and counted. The sample was sent to TMA/NORCAL for analysis. Whole body counting after defecation indicated no residual internal deposition. The results of the whole body counting and sample analysis were as follows:

Nuclide	Whole Count Results (nCi)				Sample (nCi)	TMA/NORCAL (nCi)
	Face Up	%MPBB	Face Down	%MPBB		
Co-60	318	28.9	189	17.2	379	474
Co-58	291	10	151	5.2	150	311
Cr-51	385	0.2	339	0.1	1055	3256
Mn-54	74	1	40	---	153	188
Fe-59	---	---	---	---	60 + 49	---

The ingestion was identified by the PCM at 1730, October 19, 1988, and the sample was collected at 1830 on October 20, 1988. The licensee initially evaluated the exposure as 5 MPC hours exposure based on 10 CFR 20 Appendix B, Table 1, Column 2 (MPC-Water), and the dose as 37.5 mrem to the GI tract. The workman was informed of that evaluation pursuant to 10 CFR 20.408(b). Subsequently the licensee's staff reevaluated the exposure based on footnote 4 to 10 CFR 20.103 and on 10 CFR 20 Appendix B, Table 1, Column 1 (MPC-air) as 41.2 MPC hours. The licensee's records were revised to reflect the changed evaluation, a revised termination letter was prepared and the licensee was attempting to communicate with the worker.

The licensee evaluated the reportability of the event and concluded that it was not reportable. The corrective actions/lessons learned from the event were:

1. Use face shield for overhead work with a potential for dust generation;
2. Develop techniques for rapid determination of internal vs external contamination;
3. Collect excretion samples approximately 24 hours after the time of a suspected uptake;
4. Collect sputum samples as well as nasal smears; and
5. Recognize the limitations imposed in areas like steam generator platforms and continue to dress conservatively.

The inspector discussed the applicability of the use of respirators in similar situations. The licensee agreed but pointed out that the use of respirators causes delays in completion of work which in high dose rate locations, such as steam generator platforms, may not be justified on the basis of ALARA.

The licensee's procedures provided for the use of engineering controls to limit concentrations of airborne radioactive materials. The licensee also has such equipment available for use. The ALARA review process provides for evaluation of the use of such equipment.



The licensee conducts a respiratory protection program which includes training, medical examinations and fit testing. The licensee recently completed construction of an on-site facility which includes medical facilities. A physician and other medical and paramedical personnel are routinely on-site.

Review of the licensee's records of personnel exposure identified in report section 3.e. established that results of WBC and bioassays were included. It was determined that the reports and notifications of internal exposure met regulatory requirements. Discussions with the licensee's staff established that minors are not employed. The minimum age for employment as a radiation worker is 19 years. The computer which is used to process dosimetry data rejects entries for individuals under 19.

It appeared that the licensee's program for control of internal exposures met their safety objectives. No violations or deviations were identified.

g. Control of Radioactive Materials and Contamination, Surveys, and Monitoring

During tours of the facility it was noted that posted survey results were current and consistent with measurements made by the inspector using ion chamber survey instrument Nos. NRC-015843 and NRC-015844 during the first and second weeks of the inspection. The instruments were due for calibration on July 18 and September 26, 1989, respectively. It was confirmed that locked high radiation areas were in fact locked and inaccessible. Licensee instruments including GM friskers and portable survey meters were observed to be in calibration. Several PCMs were in use and operable at the access control area. PCMs are source checked daily. All materials leaving the RCA are surveyed by C&RP technicians assigned to that task.

Eight closed SWPs awaiting supervisory review were examined. It was noted that the completed records included appropriate surveys. The records appeared to be complete and were legible. Actual exposures received (PIC) had been entered for comparison with the ALARA estimate.

During tours it was noted that personnel were wearing protective clothing and dosimetry devices properly and were observing stepoff pads and contamination control barriers.

The licensee has implemented an active waste minimization program. Wet waste is dried prior to disposal.

It appeared that the licensee's programs for control of radioactive materials and contamination are capable of meeting their safety objectives. No violations or deviations were identified.



h. Maintaining Occupational Exposures ALARA

In report section 3.b. several matters under consideration, designed to reduce exposures, were discussed. The licensee is also using several methods to reduce corrosion products and crud buildup. These include: maintaining a hydrazene concentration of approximately 30 ppb on the secondary side to control oxygen input during resin regeneration. Piping changes to reduce oxygen introduction are planned. Feeding boric acid to the secondary side to control denting. Using a modified coordinated Lithium (3.5% rather than 7%) primary chemistry to increase pH. These techniques which may reduce the need for maintenance contribute to ALARA. The HIT program, discussed in report section 3.c., to be initially implemented during the October 1989 Unit 1 outage may also contribute significantly to ALARA through reduced rework and more efficient work practices and scheduling.

A number of workers, PG&E and contractor, were briefly interviewed concerning their understanding of ALARA. While the individuals interviewed could not be described as knowledgeable they were aware of the basic concept, the aspect of personal responsibility and the fact that the radiation protection staff was an appropriate source of information.

The licensee has established ALARA goals and is tracking exposure. A major portion of the licensee's report, 1988-Radiation Protection, "The year in summary", was devoted to radiation exposures received and the source of those exposures. The total exposure of 873 manrem represented an increase of more than a factor of 2.5 over the 1987 exposure total. During 1988 the licensee experienced refuelings at both units and a forced outage at Unit 2 as well as fuel pool reracking. The licensee is taking measures to reduce exposures through improved outage maintenance performance in the areas of schedules and quality.

The ALARA procedures were being revised at the time of the inspection. The licensee expects to have implemented these procedures by the Unit 1 refueling outage in October 1988.

The ALARA program appears to be capable of meeting the licensee's safety objectives. No violations or deviations were identified.

i. Shipping of Low-Level Wastes for Disposal and Transportation

Shipment of radioactive materials for disposal was discussed with licensee personnel and records related to waste shipments were reviewed. It was determined that radiation and contamination surveys of packages and vehicles, shipping paper documentation, package marking and labeling, vehicle placarding and driver instructions were generally in conformance with regulatory requirements and good health and safety practices. The licensee's representative stated that no route controlled shipments requiring notifications of state agencies had been made.



In the previous paragraph it was noted that the licensee's shipments were "generally" in compliance with requirements. The licensee reported two occasions when there were problems with shipments. In neither case was the licensee barred from the disposal site or subject to state regulatory action. Both events occurred in December 1988. In the first case 14 drums were shipped to the disposal site in a cask. Each drum was individually labeled, four of them incorrectly, and the cask was not labeled. These failures were identified by the licensee after shipment but before receipt at the disposal site. The disposal site operator was contacted and informed of the discrepancy. Initially the site operator disagreed with the licensee, persisting in the belief that the labeling was correct, however later concurring with the licensee. The shipment was accepted without challenge. The licensee generated an AR, revised the shipping procedure to include a labeling flow chart (the procedure had contained all the necessary information but was not user friendly), and discussed the matter with all technicians working in the area of shipping and transportation.

The second event concerned the shipment of a solidified liner containing filters. After shipment, receipt and burial it was found that the computer code (Supercalc) used to calculate the activity of the shipment contained an incorrect A-2 value for Co-58. The cask had been loaded to 95% of the maximum allowable based on the original measurements and calculations. After correction of the A-2 value it appeared that a type B shipment had been made in a type A cask. The values used to calculate the activity of filter shipments are those determined at the time the filter is removed from service. Filter activities are not decay corrected prior to shipment. After the Co-58 values were decay corrected and the curie content of the cask was recalculated it was found that the shipment was type A. Licensee corrective actions initially included verifying all the A-2 values. The licensee notified the burial site and reported the change in quantity. The burial site did not change any manifest numbers but wanted the licensee to document their findings in the licensee's shipping records. A Quality Evaluation was prepared which required the above corrective actions. Long term corrective actions included the finding that the use of the Supercalc computer program without validation and verification (V&V) was a procedural violation unless each value is independently calculated. The computer program is being V&Ved. Only one subsequent shipment has been made or is planned until the V&V process is completed. The one subsequent shipment was a liner of solidified waste which failed to solidify apparently due to low temperature. With the advent of warm weather the material solidified and was shipped without incident.

The licensee's program for shipping and transport of radioactive waste appears adequate to meet the licensee's safety objectives. No violations or deviations were identified.

4. Review of Periodic and Special Reports (90713)

The licensee's timely "Annual Personnel Exposure and Monitoring Reports", submitted pursuant to 10 CFR 20.407(a)(2) and Technical



Specification 6.9.1.4 were reviewed. The timely "Semiannual Radioactive Effluent Release Report" for the second half of 1988, submitted pursuant to 10 CFR 50.36(a)(2) and Section 6.9.1.6 of the Technical Specifications were reviewed. No violations or deviations were identified.

5. Exit Interview (30703)

The scope and findings of the inspection were discussed with the licensee's representatives identified in report section 1. The licensee was informed that one apparent violation was identified for failure to comply with the requirements of 10 CFR 20.408(b) "Reports of personnel monitoring on termination of employment or work". The inspector noted that this failure had been identified by the licensee as the result of a Quality Assurance audit, and that prompt and effective corrective action had been taken to correct the failure and prevent recurrence. This matter is addressed in report section 3.e. as a Non Cited Violation (NCV).

