

DETAILS

1. Persons Contacted

AP&L

- *J. Levine, Executive Director for Nuclear Operations
- *D. Akins, Radioactive Waste (Radwaste) Supervisor
- *T. Baker, Technical Support Manager
- *E. Bickel, Health Physics (HP) Superintendent
- *E. Ewing, General Plant Manager, Plant Support
- *L. Humphrey, General Manager, Nuclear Quality
- *D. Lomax, Plant Licensing Supervisor
- *P. Michalk, Licensing Specialist
- *J. Vandergrift, Operations Manager

Others

- *W. Johnson, Senior NRC Resident Inspector

*Denotes those present at the exit interview on May 27, 1988.

The NRC inspector also contacted other licensee personnel including reactor operators and waste control operators.

2. Inspector Observations

The following is an observation that the NRC inspector discussed with the licensee during the exit interview on May 27, 1988. Observations are not violations, deviations, unresolved items, or open items. This observation was identified for licensee consideration for program improvement, but the observation has no specific regulatory requirement. The licensee stated that the observation would be reviewed.

- o Use of High Sensitivity Personnel Contamination Monitors - The licensee does not utilize high sensitivity personnel monitors at the exits from radiological work areas in the new or old radioactive waste storage buildings.

3. Followup on Previously Identified Inspection Findings

(Open) Violation (368/8706-02): Failure to Monitor Gaseous Effluents - This item involved the failure of the auxiliary gaseous effluent sampling system to collect a representative sample of the effluent. This item remains open pending resolution of Audit QAP-9-87 findings.

(Open) Deviation (368/8706-03): Failure to Install, Calibrate, and Operate Radiological Monitoring Systems - This item involved the failure to install radiological monitoring equipment in the radioactive waste storage building. This item remains open pending resolution of Audit QAP-9-87 findings.

(Open) Open Item (313/8706-04 and 368/8706-04): Radioactive Waste (RW) Organization - This item involved the lack of formally defining reportability for the RW organization in Technical Specifications (TS) or safety analysis reports. This item remains open pending resolution of TS change requests.

4. Organization and Management Controls - Transportation/Radwaste
(83522/83722)

The NRC inspector inspected the licensee's staff assignments including: organization, assignment of responsibilities, authorities, staffing, identification and correction of problems, audits and surveillances, communication to employees, documentation and implementation relating to radioactive effluents and solid wastes, and the transportation of radioactive materials to determine adherence to commitments contained in Section 11 of the Updated Safety Analysis Report (USAR) for Units 1 and 2 and the reply to NRC Bulletin 79-19 and the requirements in Units 1 and 2 TS 6.2.

The NRC inspector reviewed the licensee's organization responsible for management of solid radioactive waste processing and transportation of radioactive material (RAM). The licensee's lack of an accurate organization chart in either the TS or the USAR that depicts the Radioactive Waste Group's interface with other site organizations was previously discussed in NRC Inspection Report 50-313/87-06; 50-368/87-06, and is being tracked as Open Items 313/8706-04 and 368/8706-04. The NRC inspector noted that the licensee had changed several titles of personnel within the Radwaste Group and added the position of an HP supervisor to the group. Since the licensee is anticipating NRC approval to remove the TS 6.2 organization charts from all the TS, these open items will be further reviewed during a future inspection.

The NRC inspector reviewed the licensee's senior management policies and implementing procedures for control of low-level radioactive waste (LLRW) processing and transportation of RAM (ANO Procedure Series 1603.XXX) including the NRC approved Process Control Program (Procedure 1012.003), field quality control activities (Procedure 1000.23), and quality assurance for transportation activities (NRC approved program, Docket 71-0341).

The NRC inspector reviewed the licensee's audit program including current and planned audits for LLRW and RAM transportation activities. The following audits and surveillances were reviewed:

- ° Surveillance 88-087, Radioactive Material Shipments
- ° Surveillance 87-073, TS 4.3.1/Procedure 2304.37
- ° Surveillance 87-056, Process Monitor System Calibration
- ° Surveillance 87-051, GERM Channel Test
- ° Audit QAP-18H-87, Inplace Filter and Charcoal Leak Tests
- ° Audit QAP-28-88, Little Rock General Office Technical Analysis Section Activities (Environmental)
- ° Audit QAP-9-87, Design Control (LLRW Storage Building)

The licensee's audits were found to be comprehensive and included an adequate amount of performance based objectives. Due to the deficiencies/findings identified in QAP-9-87 (concerning the installation of the effluent and process monitors in the LLRW Storage Building), Violation 368/8706-02 (monitoring of effluents) and Deviation 368/8706-03 (radiological monitoring systems operation) referenced in NRC Inspection Report 50-368/87-06 will not be closed out until the licensee has resolved the similar audit findings of QAP-9-87.

No violations or deviations were identified.

4. Training and Qualifications - Transportation/Radwaste (83523/83723)

The NRC inspector inspected the licensee's training program including adequacy of training, employee knowledge, qualification requirements, position descriptions, apprentice program for radwaste helper/HP technician, contract technician screening and training, INPO accreditation, audits, training not covered by INPO accreditation to determine agreement with commitments in Units 1 and 2 USARs and the reply to NRC Bulletin 79-19 and compliance with the requirements of Units 1 and 2 TS 6.3 and 6.4.

The NRC inspector observed work practices and interviewed Radwaste Group personnel. The licensee's INPO accredited HP/RW training program, which radwaste technicians participate in, training lesson plans, and requalification tests were reviewed. The licensee's yearly requalification program for personnel involved in radwaste processing and transportation activities was reviewed.

No violations or deviations were identified.

5. Solid Radioactive Waste (84522/84722)

The NRC inspector inspected the licensee's program for the control, classification, characterization, and shipment of low-level radioactive waste to determine compliance with the commitments contained in Section 11

of Units 1 and 2 USAR, and the requirements contained in Unit 1 TS 4.29.4 and Unit 2 TS 3.11.4, 10 CFR Parts 20.301, 20.311, 61.55, and 61.56, and the recommendations of NRC Branch Technical Position papers on LLRW classification and waste form.

The NRC inspector reviewed the licensee's computerized program for management of waste processing and packaging activities. The licensee's annual evaluation of waste streams and development of isotope correlation factors was reviewed. The licensee's LLRW characterization and classification program is well documented (Procedure 1603.008). The NRC inspector reviewed the licensee's processes for dewatering of filters and resins. The licensee has implemented a comprehensive chemical control program so that a transition to high integrity polyethylene containers for waste burial can be made. The NRC inspector noted that the licensee is currently shipping dry compactible and noncompactible radwaste to vendors for additional (super) compaction and segregation. These out-of-state vendors possess agreement state and NRC (if required) licenses. The licensee is currently planning to test the feasibility of shipping radwaste for burial using a combination of truck-trailer and railcar-trailer routing. The NRC inspector discussed with the licensee the pertinent aspects of 49 CFR Part 174 concerning shipment of trailers containing radioactive materials by rail.

The NRC inspector reviewed the licensee's records for LLRW shipped since 1985. The following tabulation shows the total volume of LLRW shipped for 1985-87.

Volume Shipped (Cubic feet)

<u>Year</u>	<u>Goal</u>	<u>Actual</u>	<u>Curie Content</u>
1985	30,000	24,300	1,750.0
1986	21,000	4,200	218.3
1987	8,200	18,400*	1,626.8

*This figure includes a carryover of approximately 14,600 cubic feet from the 1986 year and was part of a planned reduction in long-term stored LLRW due to economic forecasts involving radwaste burial charges.

No violations or deviations were identified.

6. Review of Periodic and Special Reports (90713)

The NRC inspector inspected the licensee's semiannual effluent reports for 1986-87 for compliance with the requirements of Unit 1 TS 6.12.2.6 and Unit 2 TS 6.9.3.5, and the recommendations of Regulatory Guide (RG) 1.21.

The NRC inspector noted during a review of the licensee's shipment records and data on waste shipments that the 1987 semiannual effluent and waste report data concerning volume of waste shipped and whether or not any spent fuel had been shipped were in error. The licensee stated that they

had already identified the problem as occurring in the transfer of radwaste disposal data from the Radwaste Group to the group (Radiochemistry) that incorporates the data into the RG 1.21 report. A revision to the two semiannual reports for the year 1987 was being prepared. The NRC inspector determined that TS 6.9.3.5 and RG 1.21 do not fully explain the type of data required when some of the radwaste shipments are composed of RAM to waste processors and the final volume of radwaste following decontamination, reclamation, and supercompacting being shipped to burial sites is unknown or could be considerably less (50 percent or more) than that shipped. The licensee was also confused over the inclusion of a spent fuel shipment into the RG 1.21 report when they (licensee) were not the "Shipper of Record." Approximately six spent fuel pins were shipped to the Babcock and Wilcox plant for inspection by the Department of Energy. No other problems were identified with current or past semiannual effluent reports. This will be considered an Open Item (313/8818-01; 368/8818-01) pending licensee action to clarify radwaste disposal data requirement for the semiannual effluent reports and submittal of revised reports for 1987.

No violations or deviations were identified.

7. Transportation (86721/86740)

The NRC inspector inspected the licensee's program for transportation of RAM, spent fuel, procurement of packaging and evaluation of packaging, preparation of packages for shipment, and receipt of RAM for compliance with the requirements of 10 CFR Part 71 and Department of Transportation regulations (49 CFR) incorporated by 10 CFR Part 71.

The NRC inspector reviewed for completeness RAM shipment records for the period 1987 through May 24, 1988. The licensee's authority to utilize specific shipping packages was verified. The NRC inspector reviewed the documentation, including advanced notification of the NRC and state authorities, for a spent fuel shipment conducted by the DOE in July 1987 from ANO. The NRC inspector noted that the licensee routinely used extensive checkoff lists for accomplishing shipments of RAM.

The NRC inspector discussed with the licensee the apparent generic problem with swing bolt securing devices on cargo containers (sea/land) with removable tops in that, when the tops are compressed during lashing-down of the containers on trailers, some of the swing bolts lose their hold on the lid and fall away. The containers are designed for utilization of another type of hold down device other than cargo straps. The licensee was aware of the problem and routinely reinspects the hold down bolts and verifies tension prior to the container's departure from ANO. It is conceivable, if retensioning is not performed, that all hold down bolts could come loose during transport. The licensee/vendor uses these packages as "strong-tight containers" for shipment of low specific activity (LSA) noncompactible (solid) RAM in accordance with the requirements of 49 CFR Part 173.425. This particular shipment was

destined for the ALARON Company in Wampum, Pennsylvania, a radwaste recycler and metals salvage operation. Mr. J. White, NRC Region I Nuclear Materials Safety Branch, was informed of the inspector's concern.

The licensee had not experienced any transportation incidents which caused a reduction in the effectiveness of packaging since the previous inspection.

No violations or deviations were identified.

8. Liquids and Liquid Wastes (84523/84723)

The NRC inspector inspected the licensee's program for control, processing and discharge of radioactive liquid wastes (RLW) to determine agreement with the commitments contained in Section 11 of Units 1 and 2 USAR, and compliance with the requirements of Unit 2 TSs 3/4.11.1, 3.11.1.1, 3.11.1.3, 3.11.1.4, and 3.3.3.10.

The NRC inspector reviewed the licensee's program for controlling discharges of RLW including discharge permits, valve lineups, tank recirculation, sampling and analysis of liquids, and the verification of discharge isolation valve operation upon receipt of a high activity signal. Reactor control room readouts of process monitors were observed. Discharge permits (Procedure 2104.14) for Unit 2 releases conducted in 1988 (47) were reviewed for adequacy as were selected discharge permits of the 165 releases of RLW from Unit 1. The licensee's calibration and periodic channel test of effluent discharge control monitors were reviewed for adequacy (Procedures 1304.026, 1304.027, 2304.026, and 2304.027). The NRC inspector also observed a planned RLW release conducted by Unit 2 personnel involving the Boric Acid Condensate System.

No violations or deviations were identified.

9. Gaseous Waste System (84724)

The NRC inspector inspected the licensee's program for control of radioactive gaseous effluent releases to determine compliance with the requirements of Unit 1 TS 4.29.2 and Unit 2 TS 3.11.2.1.

The NRC inspector reviewed the licensee's documented program for control of waste gas releases to verify that proper sampling and analysis are provided, dose rates in unrestricted areas do not exceed the TS limits, and that release permits are adequate to control gaseous effluent releases. The NRC inspector also reviewed the licensee's audits/surveillances of gaseous effluent monitor calibrations for Unit 2 per TS 4.3.3.9 and the control room in-place filter and charcoal testing per TS 4.7.6.1.2. The following procedures were reviewed:

- 2304.027, "Process Rad Monitoring System Calibration" (Unit 2)
- 1304.077, "Process Rad Monitoring System Calibration" (Unit 1)
- 2104.007, "Control Room Emergency AC Ventilation"
- 1802.006, "Inplace Leak Testing Ventilation Systems Containing HEPA and Charcoal Filters"
- 2304.006, "Gaseous Process Rad Monitoring System Calibration"
- 2607.018, "Sampling waste Gas Decay Tanks, Surge Tank, and Volume Control Tank Gas Space on Unit 2"

No violations or deviations were identified.

10. Exit Interview

The NRC inspector met with licensee representatives identified in paragraph 1 at the conclusion of the inspection on May 27, 1983. The NRC inspector summarized the scope and findings of the inspection.