

NUCLEAR REGULATORY COMMISSION

REGION II 101 MARIETTA ST., N.W. ATLANTA, GEORGIA 30323

SEP 2 8 1989

Report No.: 70-824/89-08

Licensee: Babcock and Wilcox Company

Naval Nuclear Fuel Division

Lynchburg, VA 24505

Docket No.: 70-824

License No.: SNM-778

Facility Name: Naval Nuclear Fuel Division

Inspection Conducted: August 30 - September 1, 1989

Inspector: K. Z. Marstor

R. R. Marston

Approved by:

T. R. Decker, Chief

Radiological Effluents and Chemistry Section Emergency Preparedness and Radiological

Protection Branch

Division of Radiation Safety and Safequards

SUMMARY

Scope:

This routine, unannounced inspection was conducted in the areas of radiological effluent treatment and monitoring, radiological environmental monitoring, and radiological measurements and quality control.

Results:

in the areas inspected, violations or deviations were not identified.

The licensee maintained an effective program to monitor and control releases of radioactive material.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- R. Bennett, Manager, Safety and Licensing *C. Boyd, Licensing and Compliance Officer
- J. Jakobowski, Records Administrator
- *S. Schilthelm, Supervisor, Health Physics
- *L. Trent, Manager, Safety and Safeguards

Other licensee employees contacted during this inspection included technicians and administrative personnel.

*Attended exit interview

2. Audits (88035, 88045, 84844)

The inspector reviewed the Safety Audit Subcommittee Audit Report conducted on March 28-29, 1989. This audit resulted in no findings, but did make six recommendations. One recommendation was a repeat item from the previous audit. The audit discussed the status of items from previous audits; closing out 11 items. The report then presented the details of the audit.

The inspector reviewed the Monthly Health and Safety Audits conducted in April through July 1989. These audits were primarily physical inspections of facilities and record reviews. Most items noted were corrected during the audits. Each audit also ussed previously opened items.

The audit programs appeared to be conducted in accordance with Section 2.8 of the License Demonstration and Conditions.

No violations or deviations were identified.

3. Procedures (88035, 88045, 84844)

The inspector reviewed selected Area Operating Procedures and Technical Procedures for tasks within the scope of this inspection. The procedures reviewed were primarily those which had been revised since the last inspection (70-824/89-03) in this area. The existing procedures appeared to be adequate. The licensee stated that Phase II of their Procedure Formalization Program was scheduled to be complete by December 30, 1989.

No violations or deviations were identified.

4. Liquid Effluent Processing and Monitoring (88035)

The inspector reviewed Technical Procedures pertinent to the program, inspected facilities and equipment, examined sampling and analytical equipment, reviewed sampling and analysis records, and discussed the program with licensee representatives.

The inspector reviewed sampling and analysis records for Liquid Waste Disposal Pit (LWDP) Tanks 5k-1, 5k-2, 10k-1, 10k-2, and 13k; Upstream and Downstream James River Samples; LRC Pond, NNFD Pond, Dirt Coffin Basin, Silo Draintile, Silo Drains, and Wells OI through O7 (Well O5 was dry). These samples were taken from April 6 through August 18, 1989. Sampling was done at the frequency specified in the license application and effluent concentrations were within the limits stated in the license application.

No violations or deviations were identified.

Airborne Effluent Program (88035)

The inspector reviewed Technical Procedures pertinent to the program, toured the plant and examined components of the system, and discussed the program with licensee representatives. A licensee representative stated that underground ducts to the Building "C", stack were being dug up, and only above-ground ductwork carried effluents to the stack.

The inspector reviewed the Weekly Air Sample records for the period from April 12 through August 16, 1989. Gross alpha and gross beta analyses were done. A licensee representative stated that the particulate filters were changed each Wednesday, and normally counted the following Monday.

The inspector reviewed records showing that the annual 50 Meter Stack Flow Measurement had been conducted on July 8, 1989. Effluent concentrations were within specified limits and sampling and analysis had been conducted at required frequencies.

Pressure differential recordings across HEPA filter banks were reviewed for the period from April 7 through August 11, 1989. Differential pressures were maintained within action limits.

No violations or deviations were identified.

Environmental Monitoring Program (88045)

The inspector and a licensee representative toured the plant grounds and examined environmental sample locations and equipment. The inspector reviewed environmental TLD records for the first and second quarters of 1989, and the river sediment samples for the first quarter of 1989. Records were also reviewed for surface and ground water samples for April through August 1989. Weekly environmental air sample results were also

reviewed. Levels were consistent with previous levels for these parameters.

No violations or deviations were identified.

Instrumentation and Quality Control (88035, 88045, 84844)

The inspector examined the Building "C" Stack Monitor system. The gas monitor and the particulate monitor were in current calibration. The iodine monitor was in current calibration thought it was not turned on. A licensee representative stated that the iodine monitor was used only when it might be needed.

The Health Physics Laboratory used a Beckman Widebeta II gas proportional counting system primarily for counting air samples and a Sharp Lowbeta primarily for counting water samples.

The inspector reviewed the calibration data and control charts for the gas proportional instruments. All systems were found to be in current calibration and control charts were current.

No violations or deviations were identified.

8. Exit Interview

The inspertion scope and results were summarized on September 1, 1989, with those persons indicated in Paragraph 1. The inspector described the areas inspected and discussed in detail the inspection results listed above. Proprietary information is not contained in this report. Dissenting comments were not received from the licensee.

The licensee appeared to be conducting a well-managed and safe program within the scope covered by this inspection.