SAXTON NUCLEAR EXPERIMENTAL CORPORATION

1998

ANNUAL REPORT

FOR THE

SAXTON NUCLEAR EXPERIMENTAL CORPORATION FACILITY

January 1, 1998 - December 31, 1998

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EXECUTIVE SUMMARY

During the report period January 1, 1998 through December 31, 1998, various activities were conducted at the Saxton Nuclear Experimental Corporation (SNEC) Facility to prepare for Final Status Survey (FSS) and license termination. Technical Specification Amendment 15 was approved on April 16, 1998, allowing decommissioning activities to commence. SNEC Facility Radiological Controls personnel continued to monitor adiological conditions at the site to assure protection of the health and safety of the general public and site personnel.

This report reviews those activities as required by the Technical Specifications Section 3.8.2 and includes:

- A. Information relating to changes in those management and supervisory positions designated in the Technical Specifications Section 3.1 (Organization and Responsibilities) as being responsible for decommissioning the facility.
- B. A summary of decommissioning, design, and maintenance changes made to the deactivated facility.
- C. Results of surveys and monitoring performed in accordance with Technical Specifications Section 3.6.2.1 (Radioactive Effluent Controls Program) and 3.6.2.2 (Radiological Environmental Monitoring Program).
- D. A review of the performance of access control and surveillance measures.

ANNUAL REPORT IN COMPLIANCE WITH PARAGRAPH 3.8.2 OF THE SNEC TECHNICAL SPECIFICATIONS JANUARY 1, 1998 - DECEMBER 31, 1998

This report was prepared in accordance with Section 3.8.2 of the Saxton Nuclear Experimental Corporation (SNEC) Technical Specifications. The reporting period covers January 1, 1998 through December 31, 1998. Each section presented corresponds to the appropriate requirements of the Technical Specifications.

- A. Section 3.8.2.1 The following is information relating to changes in those management and supervisory positions designated in Section 3.1 of the Technic 1 Specifications:
 - 1. The incumbent Group Radiological Controls Supervisor (GPCS) was promoted to the position of Radiological Engineer.
 - Two incumbent Radiological Controls Technicians were promoted to the position of GRCS.

All Radiological Controls personnel, who received supervisory promotions, meet or exceed the qualifications of ANSI N18.1-1971 (paragraph 4.5.2 and 4.3.2) as required by Section 3.3.1 of the Technical Specifications.

There were no other changes to SNEC management/supervisory staff positions as designated in Section 3.1 of the Technical Specifications.

- B. Section 3.8.2.2 The following is a summary of decommissioning, design, and maintenance changes made to the deactivated facility:
 - Septic Tanks A and B and Chlorinator Tank were removed from the SNEC Facility Yard for disposal.
 - The Containment Vessel (CV)/ Decommissioning Support Facility (DSF) Ventilation System was installed, tested, and placed in service.
 - 3. A 10' x 15' access hole from the Material Handling Building (MHB) to the CV was cut to allow direct personnel access and materials/oquipment transfer.
 - A 10-ton monorail crane was installed from the CV to the MHB for materials/equipment transfer.
 - The Cavity and Primary Compartment Shield Blocks were painted to seal contamination in place, removed from the CV and shipped to F. W. Hake Incorporated for processing and disposal.
 - Temporary steel plates were fabricated and installed over the Reactor Cavity and a clean room (Kelly Enclosure) was erected for access/contamination control.

- The Polar Crane Bridge drive gears and couplings were replaced and new wire rope installed.
- 8. Teleflex/Incore shielding and portions of the support steel were removed to allow sufficient clearance for Reactor Vessel removal.
- The Air Circulating Fan and other miscellaneous structural items were removed from CV 818' elevation.
- 10. The following Reactor Cavity mechanical and structural components were removed from the CV and packaged for shipment and disposal:
 - Incore Instrument Guide Brackets around the Reactor Vessel
 - Support steel and grating around the Reactor Vessel Head 793' elevation
 - Reactor Coolant piping
 - Safety Injection piping
 - Super Critical Heat System Components
 - Reactor Vessel Support Can
 - Miscellaneous piping and instrument tubing
 - Miscellaneous loose equipment and materials (e.g. old rigging, hoses, refueling tools, etc.)
- 11. The following Primary Compartment mechanical and structural components were removed from the CV and packaged for shipment and disposal:
 - HVAC units and associated duct and piping
 - Regen and Non-Regen Heat Exchanges and associated piping and instrumentation
 - Reactor Coolant piping and pump
 - Pressurizer relief, surge and associated piping and instrumentation
 - Main Steam and Feedwater piping
 - Remaining miscellaneous piping and instrumentation
 - Structural steel and platforms
- 12. The following Auxiliary Compartment mechanical components were removed and packaged for shipment and disposal:
 - HVAC units located at 795', 781, and Rod Room
 - Component Cooling Water heat exchangers, pumps and associated equipment
 - Storage Well heat exchangers, pumps and associated equipment
 - Shutdown Cooling heat exchanger, pumps and associated piping
 - Reactor Coolant drain tank, pumps and associated piping
 - CV building sump pumps and associated piping
 - Purification/Make-Up filters and associated piping
 - Miscellaneous piping and instrumentation

- 13. Raytheon Nuclear mobilized on-site for the Large Component Removal Project (LCRP) in August 1998. Modifications for the CV dome opening supports were completed. Closure plates and lifting trunions were welded to the Reactor Vessel. A structural steel runway was installed in the Primary Compartment to facilitate Steam Generator and Pressurizer removal. All three components were filled with low-density grout and painted to fix any loose contamination. The vessels were lifted from the CV through two openings in the dome, using rigging and cranes supplied by F. W. Hake Incorporated. The Steam Generator and Pressurizer were placed on transport frames, secured and placed on a transport trailer. The Reactor Vessel was placed in a two piece steel-shipping container, welded together, voids filled with low-density grout and placed on a special transporter. The three vessels were transported to a rail siding in Huntingdon, Pennsylvania, secured to railcars and shipped to Barnwell, S.C. under Department of Transportation exemptions DOT-E-12114 and DOT-E-12115. Raytheon completed site cleanup and demobilized in November 1998.
- C. Section 3.8.2.3 Results of surveys and monitoring performed in accordance with Technical Specifications Sections 3.6.2.1 (Radioactive Effluent Controls Program) and 3.6.2.2 (Radiological Environmental Monitoring Program):

The results of the Radioactive Effluent Controls Program and Radiological Environmental Monitoring Program were previously submitted to the Document Control Desk via GPU Nuclear letters 1920-99-20231 and 1920-99-20233.

D. Section 3.8.2.4 - The following is a review of the performance of access control and surveillance measures:

Access Control

- A uniformed SNEC Site Watchman (Unarmed Security Officer) was hired in the beginning of 1998. This individual's primary responsibility is to provide access control during normal work hours. A SNEC Site Watchman was provided (24 hours per day, seven days per week) during temporary storage/packaging of the Steam Generator, Pressurizer and Reactor Vessel outside the Containment Vessel.
- A Conrail (armed) Security Officer was provided at the Huntingdon Rail Siding (24 hours per day, seven days per week) during loading of SNEC Facility Large Components onto rail cars. This individual's primary responsibility was to provide access control to the designated loading area.
- 3. A photo identification badging system was developed in 1998. All SNEC personnel are issued a permanent badge and are required to display the badge during normal work hours. Visitors are issued temporary badges and require a permanent badged escort during their visit until receiving a Radiological Site Access Briefing in accordance with 10CFR19.12.
- 4. The Exclusion Area was enlarged in 1998 to include the Decommissioning Support Facility (DSF). SNEC Facility Management personnel are responsible for maintaining access control. The DSF is maintained locked and a security alarm system is activated during non-working hours.

- Radiological Controls Management continues to control access to the Containment Vessel. The Containment Vessel is maintained locked and a security alarm system is activated during non-working hours.
- 6. There were no break-ins or known attempted break-ins at the SNEC Facility during 1998.

Surveillances

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All Technical Specification surveillances were performed in the required frequency as described in TS Section 3.5.3.1. The following surveillance inspections were reviewed for this report:

1. Verification that Exclusion Area access points are secured at the completion of each authorized entry.

There were no surveillance deficiencies involving Exclusion Area access in 1998.

 Verification of the operability of the Exclusion Area intrusion alarms shall be performed quarterly.

There was one deficiency involving Exclusion Area intrusion alarms in 1998. During work on the site telephone system, the telephone cable for the Exclusion Area alarm system was severed. The local alarm was not affected. A guard was posted (24 hours per day) until the system was restored to its normal operational status.

All surveillance inspections were performed satisfactorily in 1998.

 The Station Ventilation System effluent particulate monitor channel checks, source checks, channel test and channel calibration shall be performed at a frequency specified in the ODCM.

There were no surveillance deficiencies involving the station ventilation system in 1998. All inspections were performed satisfactorily.

 The Station Ventilation System HEPA filter will be tested to verify efficiencies in accordance with the requirements of the ODCM.

The station ventilation HEPA filters were initially installed and DOP tested satisfactorily on 5/4/98. There were no surveillance deficiencies involving station ventilation HEPA filter testing in 1998.