U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-244/88-17

Docket No. 50-244

License No. DPR-18 Category C

Licensee: Rochester Gas and Electric
89 East Avenue
Rochester, New York

Facility Name: R. E. Ginna Station

Inspection At: Ontario, New York

Inspection Conducted: August 22-25, 1988

Inspectors: Barry S. Davidson
Barry S. Davidson, Radiation Specialist — 9/16/88 date

Approved by: Walter J. Pasciak
Walter J. Pasciak, Chief, Effluents
Radiation Protection Section, FRSSB, DRSS — 9/22/88 date

Inspection Summary: Inspection on August 22-25, 1988 (Report No. 50-244/88-17)

Areas Inspected: Routine, unannounced inspection of the licensee's radioactive waste program including training of personnel, procurement of packaging, delivery to carriers, records and reports, waste classification and labeling.

Results: No violations were identified. An effective program for characterization, classification and shipping radioactive wastes was found.

DETAILS

1.0 Personnel Contacted

During the course of this routine inspection, the following personnel were contacted or interviewed.

1.1 Licensee Personnel

*D. Filkins, Manager of Health Physics and Chemistry
F. Mis, Health Physicist
*A. Herman, Health Physicist
*T. Meyers, Superintendent Ginna Support Services
B. Quinn, Corporate Health Physicist
P. Filion, Radiochemist
J. Bodine, Nuclear Assurance Manager
S. Warren, Health Physicist
D. Bryant, Quality Assurance

Other licensee personnel were contacted or interviewed during this inspection.

1.2 NRC Personnel

*C. Marshall, Sr. Resident Inspector
*N. Perry, Resident Inspector

*Attended the exit interview on August 25, 1988.

2.0 Scope of the Inspection

The purpose of this routine inspection was to review the licensee's solid radioactive waste (radwaste) preparation, packaging and shipping program as implemented by the licensee from August 1, 1987 through August 25, 1988. During the period, the licensee made approximately thirteen shipments of radwaste for disposal. Nine of these shipments were reviewed in detail in the following areas:

Control of radioactive material transportation including:

- Training and qualification of personnel;
- Quality Assurance;
- Procurement and selection of packaging;
- Use of packages and delivery to carriers; and
- Records and reports.

Control of low level waste disposal, including:

- Organization;
- Quality Control;

- Waste manifests and tracking; and
- Waste characterization and classification.

3.0 Management Controls

3.1 Organization

The licensee's Manager of Chemistry and Health Physics has the overall responsibility for the radwaste program. This individual reports to the Production Superintendent, Ginna Station. A Health Physicist assigned to the Radwaste area is responsible for overseeing the day to day activities and program implementation. He performs calculations to support waste manifest radionuclide activities and classification under 10 CFR 61.55. A vendor laboratory performs analyses on waste streams to provide site specific scaling factors. Quality control personnel provide receipt inspections on packages, vehicle inspections, monitoring of radwaste preparation and shipping operations, and audits.

Within the scope of this review, no concerns were noted.

3.2 Procedures

The licensee's procedures for processing, preparation, packaging and shipping radwaste materials were reviewed relative to criteria in 10 CFR 20.311, 10 CFR 71.5, 10 CFR 71.12 and Agreement State Burial Site licenses. Procedure RD-10.6, "Shipping of Low Level Waste" Revision 20, was reviewed for adequacy and checked for implementation for nine radwaste shipments that were reviewed.

Within the scope of this review, no violations were found.

3.3 Indoctrination and Training

The licensee's indoctrination, training and retraining program was reviewed relative to commitments in the licensee's response to NRC IE Bulletin 79-19. Training records for five individuals with varying responsibilities for the nine shipments of radioactive waste were reviewed. All of the records for these individuals indicated conformance to IE Bulletin 79-19.

Within the scope of this review, no deviations were noted.

4.0 Quality Assurance (QA)/Quality Control (QC)

Specific quality control requirements are mandated by 10 CFR 20.311 to assure compliance with 10 CFR 61.55 and 10 CFR 61.56. The establishment of a QA program for the packaging and transportation of radioactive materials is required by 10 CFR 71, Subpart H. A Commission approved QA program which satisfies the criteria of 10 CFR 50, Appendix B, Quality

Assurance Program which is established, maintained and implemented for transport package is acceptable to meet the requirements of 10 CFR 71, Subpart H. The licensee elected to apply the established 10 CFR 50, Appendix B, Quality Assurance Program to packaging and shipping activities. The application of the licensee's QA/QC program to their responsibilities as a solid radwaste generator and shipper was reviewed.

4.1 Waste Generator QC/Process Control Program

Process control procedures for dewatering of resins and solidification of evaporator bottoms were reviewed to determine verification of proper radwaste form under 10 CFR 61.56. Radwaste, health physics and quality control personnel verify suitable waste forms. Calculations for determining waste classification under 10 CFR 61.55 have been manually performed and an in-house computer code is being phased into full time use. The licensee's audit No. 88-19: DB was reviewed relative to inclusion of 10 CFR 61.55 and 10 CFR 61.56 requirements. Also, licensee management review of that audit was reviewed. No problems were identified.

4.2 Radioactive Material Shipper QC/QA

Under the licensee's Operational QA Program, annual audits of technical specifications, biennial audits of the process control program and periodic audits and surveillance of the packaging and transport of radioactive materials are performed. The licensee has assumed responsibility for fabrication, assembly, testing, procurement, maintenance, repair, modification and use of packages used in transporting radioactive materials with activities in excess of Type A quantities. The licensee made two shipments of radioactive wastes using NRC licensed packaging during the inspection period. Audit 88-19:DB included applicable sections of the 10 CFR 71 Subpart H QA aspects, receipt and final QC inspections and package monitoring. For the nine shipments reviewed, the inspector verified that activities were monitored throughout the shipping process and for the two of the nine utilizing NRC licensed packagings, that the additional cask handling attributes were likewise monitored in the additional details required.

Within the scope of this review, no violations were noted.

5.0 Radwaste Generator Requirements

5.1 The inspector reviewed the nine shipments against each of the following requirements:

- Waste Manifests under 10 CFR 20.311 (d)(4) and 10 CFR 20.311(b) and (c);
- Waste Classification Under 10 CFR 20.311 (d)(3) and 10 CFR 61.55;

- Waste Form and Characterization under 10 CFR 20.311 (d)(3) and 10 CFR 61.56;
- Waste Shipment labeling under 10 CFR 20.311 (d)(2) and 10 CFR 61.55;
- Tracking of waste shipments under 10 CFR 20.311 (d), (e), (f) and (h); and
- Disposal site license requirements under 10 CFR 30.41.

The basis for determining waste class through sampling and analysis and dose to curie calculations were reviewed and discussed with the Health Physicist-Radwaste.

Within the scope of this review, no violations were noted.

5.2 Procurement and Selection of Packages

The licensee's selection of packages for the nine shipments was reviewed relative to requirements in 49 CFR 173 and 10 CFR 71.12 and review of documents, procedures and shipping records. Dry active waste (DAW) is sent to a supercompacting facility in Sea-Land Trailers which are designated as Strong-Tight-Containers (STC) for the LSA contents. Solidified evaporator bottoms are sent to a burial site in DOT 17H drums and resins are sent in liners inside of NRC approved casks.

Within the scope of this review, no violations are found.

5.3 Preparation of Packages for Shipment

The licensee's preparation of packages for shipment, pursuant to the requirements of 49 CFR 172 and 173 10 CFR 71.87 was reviewed. The licensee's performance relative to these criteria was determined by interviews with the Health Physics staff and review of procedures, shipping records and other records.

Within the scope of this review, no violations were noted.

5.4 Delivery of Packages to Carriers

The licensee's delivery of packages to carriers was reviewed against criteria in:

- 10 CFR 71.5 (a)(1)(iii), "Placarding";
- 10 CFR 71.5 (a)(1)(vi), "Shipping Papers";
- 10 CFR 71.5 (a)(2)(iv), "Public Highway"
- 49 CFR 177; and
- Procedural requirements

The licensee's performance relative to these was evaluated by review of shipping records and discussions with personnel.

Within the scope of this review, no violations were found.

7.0 Exit Interview

The inspector met with licensee representatives denoted in Section 1.0 at the conclusion of the inspection on August 25, 1988. The inspector summarized the scope of the inspection and the inspection findings. At no time during the inspection were any written materials provided to the licensee by the inspector.