

ORNL SITES - SUMMARY

License No.: SNM-00141 ORNL Score: 11
Docket No.: 070-00107
Licensee: General Telephone and Electronics Laboratories, Inc. (GTE)
(formerly Sylvania Electric Products, Inc.)
Review Status: Complete
Site Address(es): 208-20 Willits Point Boulevard
Bayside, New York
Site Contact: Alexander Williams
Telephone No.: (301) 903-8149
SDMP Site: no
Related License(s): 31-02374-01, SNM-00082
NRC Reviewer: Andrew J. Schwartz
Review Abstract: License was issued November 1957 for up to 110 g of uranium-235 in the fabrication of compacts and for chemical analysis of uranium-aluminum alloy. Sylvania Electric Products, Incorporated (SEP) documents state that scrap and compacts will be sent to Oak Ridge or the customer and uranium resulting from chemical analysis is returned to Hicksville in the form of chemical solutions. SEP authorized transfer of license responsibility to GTE August 1962. The license expired June 1963. A document from GTE states that they no longer possess special nuclear material authorized by the license. The facility was decontaminated in the early-1970's and demolished. Several soil samples were collected and analyzed in the early-1980's and found to be free from contamination.
Recommendations: None.

Summary: License No. SNM-00141 was issued to SEP November 22, 1957 for up to 110 g of uranium-235 in the fabrication of compacts and for chemical analysis of uranium in uranium-aluminum alloy. The work involved mixing, pressing, heating, machining, and acetone washing. A document from SEP dated November 15, 1957 states that scrap and compacts will be sent to Oak Ridge or the customer. A document from SEP dated September 12, 1958 states that uranium from chemical analysis is returned to Hicksville in the form of chemical solutions.

A document from SEP dated August 3, 1962 authorizes transfer of license responsibility to GTE. A letter from GTE dated August 6, 1962 states that work will be conducted in the former SEP engineering unit of the Metallurgical Building. The license expired June 1, 1963. A document from GTE dated June 17, 1963 states that they no longer possess special nuclear material authorized by the license.

A letter from GTE dated May 18, 1973 states that an initial survey was made by Teledyne Isotopes and all contaminated areas were disposed of or decontaminated. Survey reports are in the file for the neutron generator building, hoods, ducts, and

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laboratories. It is unclear what sections of the survey reports are relevant to the authorized activities. A survey was conducted by the New York Department of Labor July 1973 and the report is almost completely illegible.

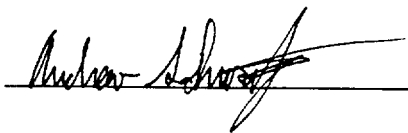
ORNL conducted a "Preliminary Survey of Sylvania-Corning Nuclear Corporation Metallurgical Laboratory Bayside, New York" dated March 1980. The report states that all facilities except for a garage and a boiler house have been demolished. The survey consisted of gamma exposure rate measurements at 1 m above the surface and beta-gamma dose rate measurements at 1 cm above the surface. Two soil samples were collected, analyzed, and found to contain background concentrations of radium-226, thorium-232, and uranium-238. Gamma rates ranged from 6 to 8 microroentgens per hour at all locations on the site and beta-gamma dose rates ranged from 0.03 to 0.05 millirads per hour.

Fifteen soil samples were collected by the New York City Department of Health on October 10, 1980 and analyzed by ORNL. The concentrations of uranium-238 were at the background concentration of approximately 1 picocurie per gram (pCi/g). Seventeen soil samples were collected by the Department of Energy between October 13, 1980 and February 23, 1983 and analyzed by ORNL. The concentrations of radium-226, thorium-232, and uranium-238 were approximately background. It appears from an ORNL document dated February 28, 1983 that uranium-238 concentrations were analyzed using neutron activation and radium-226 and thorium-232 concentrations were analyzed using gamma spectrometry. Neutron activation and gamma spectrometry would have identified elevated concentrations of uranium-235 if present.

Further action is unnecessary by the ORNL-Identified Sites Program because:

1. The facility has been demolished.
2. Soil samples were collected and found to be free from uranium contamination.
3. The licensee stated that the uranium will be sent to the Hicksville facility, Oak Ridge, or their customers.

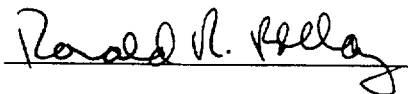
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Date

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Approved by:



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