

ORNL SITES - SUMMARY

License No.: SNM-00053 ORNL Score: 70,494
Docket No.: 070-00058
Licensee: The Martin Company Review Status: *Complete MB*
Isotopes, Inc. ~~File Reviewed~~
Site Address(es): Middle River, Maryland
110 West Timonium Road
Timonium, Maryland 21093
Site Contact: none
Telephone No.: none
SDMP Site: no
Related License(s): 19-01398-20, 19-01398-32, SNM-00011, SNM-00849, SNM-00907,
SNM-01150, SNM-01192, STB-00187
NRC Reviewer: David F. Limroth, Stephen W. Holmes
Review Abstract: License No. SNM-00053 authorized the possession of special nuclear material in Building D at Middle River, Maryland and at Timonium, Maryland. The report of a final survey of Building D in 1970 indicates that some contamination remained in drains and on surfaces. The building was demolished following that survey. In 1982 Region I staff concluded that the site met the current criteria for release for unrestricted use. The results of a NRC site visit and survey on November 3, 1994 indicate that the site is suitable for unrestricted use.

Licensee, NRC, and Maryland State surveys indicate that the Timonium site is suitable for unrestricted use.

Recommendations: NONE

Summary: License No. SNM-00053 authorized possession and use of up to 1,000 kilograms of uranium enriched in U-235 as UO₂ and metal and 160 grams of plutonium in the form of a plutonium-beryllium source. Licensed activities included fuel element development and fabrication at the Middle River facility. On September 23, 1969 License No. SNM-01150 was issued pursuant to an amendment to License No. SNM-00053 to permit the transfer and use of up to 100 grams of U-235, at any enrichment and in any chemical form, for research and development activity, and 171 grams of Pu-235 for neutron and alpha instrument calibration sources, from the Middle River facility to the Timonium facility. Concurrently, SNM-00053 was amended in its entirety to authorize the storage of U-235 in the form of contamination in Building D at Middle River. License No. SNM-00053 (Teledyne-Isotopes) was terminated May 26, 1970. There is no termination or confirmatory survey for License No. SNM-01150.

March 10, 1995

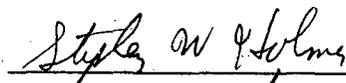
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Information from various docket files indicates that a variety of activities with large amounts of byproduct, source, and special nuclear material were authorized at Building D at the Middle River facility. Activities with licensed material at Building D ceased prior to 1970. License No. SNM-1192 was issued to Martin-Marietta on May 22, 1970 and authorized the decontamination of the Martin-Marietta, Middle River, Maryland facility. License No. SNM-1192 has the same Docket No. (70-58) as License No. SNM-53 and all records for License Nos. SNM-1192 and SNM-01150 are contained in the docket file for License No. SNM-53. Apparently only Building D was decontaminated under License No. SNM-1192. Building D was decontaminated from June to September 1970 and a final survey report provided to the AEC with a letter dated September 22, 1970. The final survey report states that a total of 29 μCi of U-235 remained in five drains which were to be sealed with concrete; one small area of fixed Sr-90 contamination (0.5 mrad/hr) also remained. The building was demolished after the survey, leaving only the concrete pad. Region I staff reviewed the available documentation in 1982 and concluded in Combined Inspection Report Nos. 40-3296/82-01 and 40-2308/82-01 that the site met NRC criteria for unrestricted use.

An NRC site visit and survey was performed on November 3, 1994 to assure that the site meets current NRC guidelines for release for unrestricted use. Buildings C and D at the Middle River facility and Buildings KJ and KC at the Martin State Airport were surveyed. The results of the surveys indicate no radiation or contamination levels above background in any of the buildings surveyed, including the concrete pad remaining from Building D. The contaminated drains discussed in the final survey report regarding Building D were not located, although a number of openings in the pad which had been filled with concrete were identified. Therefore, it seems apparent that the drains identified as contaminated during the final survey were plugged with concrete, as proposed by the licensee. Based on the fact that no radiation or contamination levels above background were detected, it seems unlikely that U-235 contamination in the drains, if present, is a significant hazard. Therefore, the site is suitable for unrestricted use.

Licensee letter dated March 25, 1975 documents a survey of the Timonium site consisting of 67 wipes and a portable instrument alpha/beta/gamma survey of "all areas that had been subject to use of radioactive materials" which identified no residual contamination. An NRC letter dated April 15, 1975 of an inspection to confirm disposition of license material under License No. SNM-0849 and an examination of the licensee's contamination survey reported that "no items of noncompliance were observed". The State of Maryland terminated License MD-05-014-01 (formerly USNRC License No. 19-01398-34) covering the whole site after performing a confirmatory survey on July 19, 1993 of the licensee's termination survey of June 8 and 9, 1993. The site is suitable for unrestricted use.

Reviewed by:



Date

10 MARCH 95

Approved by:



Date

3/10/95