

ORNL SITES - SUMMARY

License No.: 19-01398-32 ORNL Score: 1,061
Docket No.: none
Licensee: Martin-Marietta Isotopes, Inc. Review Status: **Complete**
Site Address(es): Middle River, Maryland
Site Contact: none
Telephone No.: none
SDMP Site: no
Related License(s) 19-01398-20, SNM-00011, SNM-00053, SNM-00849, SNM-00907, SNM-01150, SNM-01192, STB-00187
NRC Reviewer: David F. Limroth, Stephen W. Holmes
Review Abstract: License No. 19-01389-32 authorized research and development work with unsealed byproduct material in Building D at Middle River, 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.

Recommendations: None.

Summary: License No. 19-01398-32 was issued on December 9, 1964 authorizing research and development work with a variety of unsealed byproduct materials in Building D at the Martin Company's Middle River, Maryland facility. On September 4, 1968, License No. 19-01398-32 was transferred to Isotopes, Incorporated. The license was terminated on March 20, 1969; however, no record of a termination or confirmatory survey, transfer of material, etc., could be located. It appears that Building D was returned to Martin-Marietta at that time.

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 No. SNM-1192 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

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be were 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.

Reviewed by: Stephan W. Huber Date 01/23/95
Approved by: [Signature] Date 1/23/95