RIII VALUE ADDED FINDING

VAF NUMBER: 2021-02	SITE: General Motors LLC	Accession NUMBER: ML21043A295	ISSUE DATE: 6/14/21

Title: **Disposal of Liquid Waste Retention Tanks**

SUMMARY: During a review of the final status survey of the Warren radiometric laboratory facility submitted from General Motors LLC on November 2, 2020, to support removal of the facility from the license, the reviewer identified that there was insufficient information regarding the buried outdoor liquid waste holding tanks and the surrounding soil to justify the release for unrestricted use.

The liquid waste holding tanks had been used to process and dispose of the wastes generated from the radiometric laboratories. Based on the analytical sampling results, the liquid wastes contained radioactive materials, VOCs, PCBs, mercury, lead, etc. The licensee had proposed leaving the bottom portion of the tanks in place and dispose of the top portion above the grade level. The licensee had not performed a sufficient survey of the inner surface of the tanks and/or surrounding soil to ascertain whether the 25 mrem/year dose criteria for release for unrestricted use had been met. Further, the licensee had not considered the fact that the residual mixed waste contamination likely made the tanks unsuitable for release (Resource Conservation and Recovery Act, Atomic Energy Act).

As a result of the inspector's technical discussions with the licensee regarding the short-and long-term risks and potential public health and safety impacts associated with leaving the bottom portion of the tanks in the ground, the licensee decided to dispose of the tanks and associated piping as waste instead of conducting additional remediation and surveying inside the tanks to justify the requested release for unrestricted use. In addition, the licensee agreed to provide a survey of the tanks' excavated area and surrounding soil once the tanks had been removed.

This issue illustrates the importance of evaluating site-specific circumstances through a broad lens and ensuring short-term and long-term impacts on public health and safety through the use of dose estimates. It also highlights the importance of a risk-informed technical position that helps the licensee to make a reasonable decision (as in this case) that assures public health and safety. With this in mind, the reviewer may need to consider safety aspects beyond NUREG-1575, Rev. 1, "Multi-agency Radiation Survey and Site Investigation Manual (MARSSIM)" provisions applicable to building surface and surface soil final status surveys.

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ADAMS Accession Number: ML21161A307

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