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GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
REMEDATION AND REDEVELOPMENT DIVISION



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DIRECTOR

May 23, 2025

SUBJECT: AECOM Technical Memorandum (memo); Results Collected between 2021 and 2023; for the Former Wurtsmith Air Force Base, Oscoda, Michigan

Michigan Department of Environment, Great Lakes, and Energy (EGLE) staff has tasked the engineering and consulting agency, namely, AECOM to perform Quality Assurance (QA) split sampling during the United States Air Force (Air Force) led Per- and Polyfluoroalkyl Substances (PFAS) Remedial Investigation (RI) phase at the Former Wurtsmith Air Force Base (WAFB). QA samples were collected between 2021 and 2023 during field activities related to the PFAS RI.

Certain state activities, such as QA sampling, are eligible for reimbursement from the federal government through the Defense and State Memorandum of Agreement (DSMOA). Within the DSMOA program, a Joint Execution Plan is developed every two years for sites with active and/or future projects. Air Force allows EGLE to collect and be reimbursed for QA samples up to ten percent of the total samples collected by the Air Force. EGLE can utilize state funds to collect additional QA samples when necessary. Beyond the allowed activities under DSMOA, EGLE does utilize state funds to complete additional field oversight with an assigned contractor, that being AECOM at the time of these activities. This ensures that the Air Force contractors are performing work that aligns with the work plan.

The purpose of collecting QA samples for WAFB is to verify that sample results over the project action levels are consistent between Air Force samples and EGLE samples collected by AECOM. This allows EGLE to determine if there are quality concerns as a result of differences between the selected laboratories, and to verify the reliability of the field sampling protocol and representativeness by measuring variability between samples.

The data presented in this memo is organized by media type: surface water, groundwater, soil, and biota (fish), with colored cells in the data tables highlighting data differences. Green cells indicate Relative Percent Difference (RPD) values within the acceptable range, signifying comparable data points with the Air Force's data and requiring no further review. Conversely, red cells denote RPDs exceeding the acceptable range, indicating differences that necessitate additional review to understand the inconsistency between data points. This review may involve examining field notes and laboratory reports to pinpoint potential sources of variation, such as laboratory sample preparation. It's important to also consider that some elevated RPD values might be an artifact of analyzing samples with low concentrations near the limit of quantification, where lower precision between analytical results is inherently more common.

When samples exceed the RPD, but there is no obvious explanation as to why the difference occurred, an additional review of data and laboratory procedures would be performed, and the data would be discussed between EGLE and Air Force staff.

This information is not used to make final decisions or to change the approach of the investigation, rather it is done to verify that sampling methods, both in the field and at the laboratory, are accurate and are reproducible. When there are large differences between data sets, a review of the sampling methods and analytical practices should be performed to avoid any future differences, and to verify if the data should be considered acceptable.

Based on the data presented and following the review of available laboratory and sampling information to evaluate values exceeding the RPD, EGLE has not found any differences that warrant additional review. Additional QA sampling can take place during the data gap investigation, as needed, and will follow this same process of comparison and review.

If you have any questions or concerns, please contact Amy Handley, Project Manager, Superfund Section, Remediation and Redevelopment Division (RRD), at HandleyA@Michigan.gov; 517-898-3356; or EGLE, RRD, P.O. Box 30473, Lansing, Michigan 78909-7973.

Sincerely,

A handwritten signature in cursive script that reads "Amy Handley".

Amy Handley, Project Manager
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Defense and State Memorandum of
Agreement Unit
517-898-3356