



April 24, 2024

Mr. Mark Lake
Tosa Reef, LLC
1200 N. Mayfair Road, Suite 410
Milwaukee, WI 53226
Via Electronic Mail Only to: mlake@wangard.com

SUBJECT: Review of Groundwater Monitoring Work Plan and Emerging Contaminants Assessment
Former Western Metal Specialty Division (The Reef)
1215 N. 62nd Street, Wauwatosa, WI
BRRTS # 02-41-532149, 02-41-539928, 06-41-559856; FID # 241033540

Dear Mr. Lake:

On January 19, 2024, the Wisconsin Department of Natural Resources (DNR) received the *Additional Groundwater Monitoring Discussion and Work Plan, Offsite Vapor Investigation Discussion and Work Plan, and Emerging Contaminants Assessment (Report)*, prepared by The Sigma Group, Inc. (Sigma) for the site identified above. The Report contained information and plans for additional groundwater and vapor investigation of chlorinated volatile organic compounds (CVOCs) and an emerging contaminants assessment. The DNR responded to the vapor work plan in a letter to you on February 9, 2024. The DNR is providing comments on the groundwater investigation work plan and emerging contaminants assessment as they relate to applicable Wis. Admin. Code chs. NR 700 - NR 799.

Monitoring and Definition of Groundwater CVOC Plume

Two rounds of groundwater sampling are proposed for the existing monitoring wells and piezometers to evaluate trends in contaminant concentrations and determine if natural attenuation is occurring at a reasonable rate for all contaminants. The DNR concurs with this plan at this time, additional sampling may be needed depending upon the results of data collected. The current proposed sampling plan does not appear to define the areal and vertical extent of the contaminant plume on- or off-site. The DNR has the following comments:

- 1) Shallow groundwater CVOC plume definition:** The age of the off-site data presented and the width of the plume along State Street indicate that additional shallow groundwater sampling data is needed for plume definition east and west of MW-12. The identification of utilities in the State Street right-of-way and the potential of contaminant migration through those utility corridors should also be provided.
- 2) Mid-depth groundwater CVOC plume definition:** As indicated in the DNR letter of November 10, 2023, the mid-depth groundwater CVOC plume extent does not appear to be defined to the east or the west-southwest of source areas. CVOC concentrations in groundwater are still relatively high in source areas and trends unstable or increasing for several compounds in mid-depth piezometer wells.
- 3) Deep-level piezometer well CVOC plume definition:** The DNR concurs with installation of a bedrock piezometer well downgradient of PZ-16 for plume definition. If future groundwater

sampling data from the bedrock piezometer(s) does not define the plume boundaries additional piezometers may be warranted.

- 4) Documentation:** Future submittals that include groundwater data figures should clearly indicate at each well location which groundwater zone (shallow, mid, deep) the well represents, with abandoned or lost wells also indicated on each figure.

Emerging Contaminants Assessment

The DNR has determined that the emerging contaminants assessment is adequate at this time. The proposed plan of sampling groundwater from all wells for 1,4 dioxane is reasonable considering the presence of 1,1,1-trichloroethane at the site. The laboratory detection and quantitation limits used should be appropriate for the standards listed in Wis. Admin. Code ch. NR 140. As a reminder, only substances sampled for during the site investigation will be listed on the Voluntary Party Liability Exemption Certificate of Completion.

The site investigation is an iterative process. The results of the additional investigation should be evaluated to determine if additional investigation is needed to fully define the degree and extent of contamination in all affected media.

Due to the complexity of the site, the DNR requests that a workplan addendum for the additional groundwater monitoring and utility assessment be submitted for DNR review.

We appreciate your efforts to restore the environment at this site. If you have any questions concerning the site or this letter, please contact me at (414) 207-2179, or by email at adam.mcilheran@wisconsin.gov.

Sincerely,



Adam S. McIlheran
Hydrogeologist
Remediation and Redevelopment Program

cc: Steve Meer, The Sigma Group, Inc. (smeer@thesigmagroup.com)
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