



Memorandum

November 22, 2017

To: Amanda Armbruster (MDEQ)

Ref. No.: 007878

J.E.P.

From: John-eric Pardys/jp/172

CC: Dave Favero (RACER)

Subject: Sampling Plan for Berm Soil

GHD Services Inc. (GHD) has prepared the following memorandum at the request of RACER as a Sampling Plan for the leftover berm soil from the former buffer basin at RACER's Saginaw Malleable Industrial Land (Site) in Saginaw, Michigan. The purpose of the proposed sampling is to demonstrate that the soil is suitable for use as fill or cover material at the Site. The pile consists of approximately 6,100 cubic yards of sand.

The buffer basin was a component of the Recycle Water Treatment Facility (RWTF) that was constructed in 1996. The RWTF was a closed loop mechanically operated system that replaced the Former Water Recirculation System (WRS), which involved the use of a series of settling ponds for treatment of process water from various processes in the plant. The RWTF treatment process consisted of continuous flocculation, sedimentation, and filtration of approximately 6.5 to 7.5 million gallons of process water per day (5 to 6 days per week) while it operated. Treated water was either directed back to the Plant for use as non-contact cooling water, stored in the buffer basin (which had a capacity of 11 million gallons), or blown down to the City of Saginaw POTW, as needed (permitted to discharge 450,000 gallons per day). If the Plant needed additional water, water was pumped to the buffer basin from the secondary pond.

The berms of the buffer basin were constructed of virgin sand with an HDPE liner placed over top.

To characterize the berm soil for potential re-use as fill or cover on-Site, GHD proposes collection of 9 discrete samples (plus 1 additional sample for QA/QC) of the berm soil. Samples would be collected utilizing a hand auger with locations spread out evenly around the pile. The samples would be submitted to an accredited laboratory for analysis of TAL metals, VOCs, SVOCs, and PCBs. The sample results will be compared to the 2017 Proposed Non-Residential MDEQ Part 201 criteria (Direct Contact, Groundwater Surface Water Interface Protection Criteria, Particulate Soil Inhalation Criteria, and Infinite Source Volatile Soil Inhalation Criteria).

The samples will be packaged and shipped in accordance with GHD standard procedures. Samples will be submitted to the laboratory on a standard 2-week turn.

Upon completion of the sampling event and receipt of the results, GHD will prepare a memorandum summarizing the results, along with copies of the analytical reports, and will recommend whether the soil is suitable for future use as fill or cover material at the Site.