



ARM Group LLC

Engineers and Scientists

January 20, 2021

Ms. Barbara Brown
Project Coordinator
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Re: Supplemental Comment Response Letter:
Response and Development Work Plan (Rev. 2)
Area A: Sub-Parcel A10-1
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

On behalf of Tradepoint Atlantic (TPA), ARM Group LLC (ARM) is pleased to provide the enclosed responses to comments received from the Maryland Department of the Environment (MDE) on January 15, 2021 regarding the recent Response and Development Work Plan (RADWP) for the portion of the TPA property designated as Area A: Sub-Parcel A10-1 (the Site). The RADWP (Revision 2 dated December 31, 2021) was submitted to the MDE and United States Environmental Protection Agency (USEPA) to present the current development plan.

The MDE's email on January 15, 2021 indicated the Sub-Parcel A10-1 RADWP is approved with the contingencies outlined in their comments. Further, a full revision to the RADWP is not necessary, although this Comment Response Letter will serve as an Addendum to the RADWP. Responses to the specific MDE comments are given below; the original comments are included in italics with the responses following.

1. *All water encountered during development activities must be treated and sampled prior to disposal per TPA's email on this issue. The details of this treatment, sampling, and disposal plan must be submitted in an addendum letter, including figures relevant to the plan.*

As described in an email from Matthew Newman (TPA) to Barbara Brown (MDE) sent on January 11, 2021, the following system components are proposed:

Accumulated water from dewatering will be pumped into an inlet "collection tank." The collection tank will be a frac tank which will provide settling time for solids. The water will then be pumped through bag filters and granular activated carbon (GAC) vessels prior to discharge into the Tin Mill Canal (TMC). Water discharged into the TMC will then flow to the Humphrey Creek Wastewater Treatment Plant (HCWWTP) for final treatment.

The pre-treated water will be tested upon startup and then weekly thereafter for volatile organic compounds (VOCs) until the completion of the water treatment portion of the Sub-Parcel A10-1 project. Samples will be collected at the inlet after the filter bags (influent), between the first and second carbon vessels (midfluent), and after the last carbon vessel (effluent). Please note that this is a deviation from the original proposal within the RADWP (which had specified one sample per 20,000 gallons); however, this sampling plan is consistent with the previously approved sampling protocol used on Sub-Parcel A11-1, provides a more consistent sampling schedule, and is equally protective of the environment. A conceptual flow diagram showing the general layout of the proposed system is provided as **Attachment 1**.

2. *The [MDE] requires monthly progress reports be submitted for review for this development parcel.*

Monthly progress reports will continue to be submitted by TPA.

3. *Contact the HCWWTP operator and determine a threshold for acceptable handling of DRO/GRO contaminated water. This threshold level must be included in the relevant section of the RADWP for groundwater management. This table can be updated and submitted in an addendum letter. A revision to the whole RADWP is not necessary.*

The proposed water treatment system outlined in Comment #1 will remove total petroleum hydrocarbons (TPH-DRO/GRO) prior to discharge into the TMC. Breakthrough of TPH-DRO/GRO through the GAC vessels is not anticipated. Early detection of potential breakthrough will be achieved via the weekly midfluent VOC samples.

TPA confirmed that the proposed GAC vessels have an estimated treatment lifetime exceeding several weeks of operation at TPH-DRO/GRO concentrations greater than 10 mg/L (10,000 µg/L). Concentrations of TPH-DRO/GRO on Sub-Parcel A10-1 are significantly (order of magnitude and greater) below this threshold (per **Figure GW3** and **Table 3** of the RADWP), indicating that the GAC vessels will have high treatment efficacy on this sub-parcel. The threshold table is being updated and will be submitted under a separate cover.

If you have any questions, or if we can provide any additional information at this time, please do not hesitate to contact ARM Group LLC at 410-290-7775.

Respectfully Submitted,
ARM Group LLC



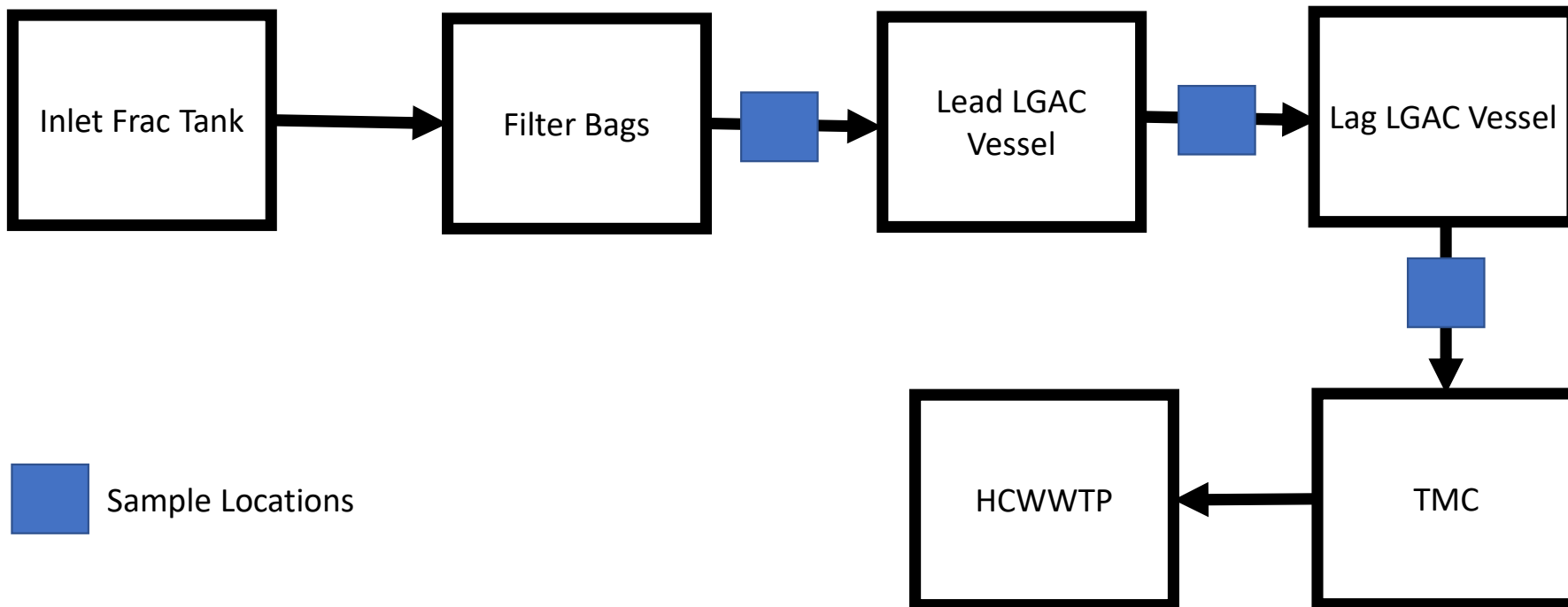
Taylor R. Smith, P.E.
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ATTACHMENT 1



Prepared by:

