HOUSATONIC REST OF RIVER MUNICIPAL COMMITTEE

January 20, 2022

Dean Tagliaferro, EPA Project Manager
GE-Pittsfield/Housatonic River Site
Boston, MA
Submitted via email to R1Housatonic@epa.gov

Re: Comments on the *Pre-Design Investigation Work Plan for the Upland Disposal Facility*

Dear Mr. Tagliaferro:

The Housatonic Rest of River Municipal Committee (the Committee) respectfully submits the following comments on the *Pre-Design Investigation Work Plan for the Upland Disposal Facility* (hereafter referred to as the Work Plan). We recognize that this Work Plan comes early in the process and there are several more documents that will require review. The attached comments are specifically related to the Work Plan and are not all inclusive. The Committee intends to submit comments throughout the process. According to the Statement of Work, the next deliverables for the UDF area will include the following.

- PDI Summary Report
- Conceptual Design Plan for the UDF
- Final Design Plan for the UDF
- O&M Plan for the UDF
- Supplemental Information Plan for UDF
- Final Cover/Closure Plan for the UDF

The Work Plan describes baseline field strategies to address habitat surveys, cultural resources, groundwater and certain geotechnical characteristics. If this Work Plan is to capture all "baseline" media and conditions to be affected by the proposed work, there are several media/parameter types that require inclusion. More baseline monitoring of air, geologic hazards, extreme groundwater levels, archeological features, and migratory species would be important to include in the proposed baseline monitoring.

In addition, it should also be made clear whether the proposed Baseline Assessment includes only the UDF footprint, both the UDF and UDF Support areas, or the entire GE parcel. As proposed, there are large gaps in the downgradient monitoring well network, and spatial gaps in the soil geotechnical data collection. Additional monitoring is needed to determine the groundwater flow pathway. The method

used for estimating groundwater elevation projections is unclear, and the proposed groundwater elevation monitoring program is not adequate to support the assessment of the potential seasonally high groundwater conditions in the UDF area.

The Committee's comments on the *Pre-Design Investigation Work Plan for the Upland Disposal Facility* are enclosed as Attachment A.

Sincerely,

The Housatonic Rest of River Municipal Committee

Enclosure: Attachment A - Housatonic Rest of River Municipal Committee Comments on GE's Pre-Design Investigation Work Plan for the Upland Disposal Facility

Enclosure: Attachment B - Technical Assistance Services for Communities Comments, December 14, 2021

ATTACHMENT A
HOUSATONIC REST OF RIVER MUNICIPAL COMMITTEE
Comments on GE's *Pre-Design Investigation Work Plan for the Upland Disposal Facility*
GE/Housatonic River - Rest of River

The *GE-Pittsfield/Housatonic River Site, Rest of River, Final Revised Rest of River Statement of Work* (SOW) provides a conceptual map of the UDF in Figure 2 "Potential Transport Routes for Reach 5C/Woods Pond Sediment to Upland Disposal Facility". This conceptual map identifies an "Approximate Limit of Hydraulic Dredging Staging Area". Management of hydraulic dredged materials will require monitoring since this process manages semi-fluid media to be disposed in the UDF. Since the location of this Hydraulic Dredging Staging Area is known, it is important to develop a groundwater monitoring program within the UDF PDI Work Plan that captures this area. EPA should require the inclusion of all necessary monitoring to address the Hydraulic Dredging Staging Area as outlined in the SOW (at a minimum, a monitoring well above gradient (to the East) and down gradient (to the West) should be installed). Piezometer wells and soil testing necessary for the engineering design of the facility also need to be gathered.

In addition, baseline air quality monitoring is notably absent within the PDI. The PDI should include measures to document the meteorological microclimate at the site. Although prevailing winds in the region tend to be west to east, this site is at the foot of the October Mountain range, which may create a site-specific or unusual wind flow during changing weather patterns and storm events. Understanding wind movement patterns at the site should be used to inform design of the UDF and identify potential mitigation measures that may be needed to contain airborne particulate matter that may be created during construction of the UDF and subsequent deposition of contaminated materials. For example, it may be necessary to install berms, vegetation, fencing or other measures to protect populations and/or properties in the area from particulates movement.

The Rest of River Committee highlights the following Sections:

1. Section 3 (pp 5-8) – The Work Plan should include a summary of existing information such as the groundwater quality (and levels), and any available gravel mine operation information that would be useful for the design of the UDF.

2. Section 3.2.2 (pp 5-6) – The Work Plan provides a thorough description of proposed habitat surveys. However, it lacks any mention of nest inventory, which is typically a component of pre-construction surveys to determine if construction efforts need to be timed outside of nesting periods. Bird nest inventories should be included in the baseline habitat assessment.

3. Section 3.2.6 (p 7) – The mine pits occur to the northwest of the UDF and may present a hydrologic "sink" that draws groundwater movement. These pits may present an opportunity to sample pit water that likely represents groundwater. As stated in the Work

Plan, "because of the granular nature of the site soils, the pond water surface elevations are likely coincident with groundwater." EPA should consider whether sampling of the gravel mine pit water would be useful as a monitoring tool for assessing the UDF's effectiveness.

The Work Plan should describe the method that will be used for estimating groundwater elevation projections. The Work Plan states that the existing Schweitzer-Mauduit and Lee Municipal Landfill monitoring wells will be used to collect groundwater elevation data. EPA should clearly address within its Conditional Approval Letter whether it is appropriate to include the landfill groundwater wells as part of the planned UDF monitoring.

4. Section 3.2.6 (p 8) – Based on the Work Plan, it appears there is sufficient information to estimate the potential footprint of the Upland Disposal Facility (UDF), including the location of the support area(s). It may be beneficial to derive a "first draft" conceptual model of the UDF footprint prior to collection of the baseline monitoring plan. For instance, the placement and features of the conceptual UDF would better enable an appropriate suite of groundwater monitoring approaches (e.g., installation of paired wells inside and outside of UDF footprint and support areas to monitor any transport of contamination, installation of wells to identify any impacts from planned elutriate control/recycling, installation of wells to identify any flooding releases). At a minimum, there should be a commitment from GE to perform baseline soil and groundwater testing at the UDF Support Areas once the plans for these areas are better understood.

5. Section 5.2.1 (p 11) – The text states that aquatic resources "excluding the man-made ponded areas" will be subject to field verification using current federal wetland delineation criteria. These ponds may have acquired wetland values that are protected under the Clean Water Act, Section 404 program and the Massachusetts Wetlands Protection Act and should receive equitable consideration during the proposed baseline habitat surveys.

6. Section 5.2.2 (pp 11-12) – The text states that the new topographic survey will likely consist of a traditional field survey, an aerial survey using Light Detection and Ranging (LiDAR), or a combination of these methods. A combination of the field survey methods should be applied for the development of topographic maps to acquire the most accurate estimates for volumes and areas of material management.

   Figure 2 outlines "bathymetric survey areas" associated with each mine pit on the GE Parcel. These ponds are "contiguous waters" that overlap into the adjacent quarry. EPA should take the plans for the mine pits into consideration (e.g., if they will be filled in) and whether it is appropriate to collect a complete bathymetric survey of the ponds that overlap the GE Parcel and the quarry to get an accurate estimate of dredged and filled materials.

7. Section 5.2.3 (pp 12-13) – According to the Work Plan, soil geotechnical data will be gathered from 18 locations. However, there are spatial gaps in the north part of the

disposal facility area (between and to the north of B 2022-3 and PZ 2022-2), the west edge of the disposal facility area (west of PZ 2022-4, B-3, and B-5) and the southern part of the disposal facility area (south of PZ 2022-6 and B-4) of the outlined UDF footprint (refer to Figure 4). The proposed geotechnical data collection plan does not appear to be sufficient, and more sites in the northwest and west edge should be sampled due to the disturbed nature of this area due to historical mining activities. The proposed sampling in the area to the south seems spatially limited, with only one piezometer location planned.

It appears there is sufficient information to estimate the potential footprint of the Upland Disposal Facility (UDF), including the location of the support area(s). A conceptual model of the UDF footprint would enable strategic sampling of soil profile information necessary for the design of the final UDF. For example, if an area to be excavated has native materials that will be removed, it would be unnecessary to sample these removed materials for geotechnical parameters required for landfill construction. It would be more useful and cost effective to focus geotechnical boring efforts to depths below the excavated depth. In addition, the excavated materials will serve as a future cap, or serve other UDF-related purposes. Therefore, the suite of geotechnical parameters of interest for these excavated materials (soil content and type, organic carbon content) may be different from the parameters to test materials underlying the UDF (parameters to test structural integrity).

8. Section 5.2.4 (pp 14-15) – The first sentence is confusing and does not appear consistent with the third sentence or Figure 4. It appears to suggest that only 7 borings (6 permanent monitoring well locations and 1 temporary piezometer location interior to the UDF footprint) will be tested. EPA should require GE to describe the rationale for the selection of the soil sampling intervals.

9. Section 5.2.5 (pp 15-16) – The difference between monitoring wells and piezometers is unclear other than the diameter of the well material and that the piezometers are anticipated to be destroyed during the construction of the UDF. In addition, it is unclear how soil sampling will be performed at the piezometer locations that are not targeted for soil quality testing.

   EPA should require drilling at least three of the proposed monitoring well or piezometer locations to the target elevation of at least 910 feet to verify the presence of absence of any lithologic variability or potential confining or restrictive layers that may affect groundwater flow within the UDF area.

   The installation of nested monitoring wells or piezometers to verify the vertical component of groundwater flow in the UDF area would seem to be necessary to support assessing the adequacy of the proposed monitoring network for long-term groundwater quality monitoring. For example, there is concern that any potential future release from the

eastern portion of the UDF could flow under the proposed shallow/water table monitoring wells on the western side of the UDF if there is a downward flow component.

10. Section 5.2.5 and Figure 5 (pp 15-16) – There are large gaps in the downgradient monitoring well network between proposed monitoring wells MW 2022-4, MW 2022-5 and MW 2022-6. This poses a concern since this is the most likely downgradient groundwater flow direction from the UDF. Some options are suggested below.

    - One or two additional monitoring wells could be installed along the western and southwestern boundary of the UDF to address large gaps in the monitoring network in the likely downgradient flow direction (W/SW).
    - Consider shifting proposed monitoring well MW-2022-6 to the west to better capture potential flow from the UDF area to the southwest towards the Housatonic River, taking into consideration the direction of river flow and extent of the UDF area, however this does not address the gap between monitoring wells MW 2022-4 and MW 2022-5.

    There should be a contingency for the installation of additional monitoring wells based on the outcome of the PDI.

11. Section 5.2.5.2 (p 15) – The proposed permanent groundwater monitoring well installation locations (shown in Figure 6) are based on the assumed groundwater pathway from east to west. However, in the interest of planning a spatially complete sampling strategy, it would be prudent to plan on an additional monitoring well to the east until the groundwater flow pathway is more completely understood, and also to provide more substantial characterization of background conditions.

12. Section 5.2.6 (p 16) – The proposed groundwater elevation monitoring program is not adequate to support the assessment of the potential seasonally high groundwater conditions in the UDF area and can be easily modified to address this important consideration. Given the extreme variability in precipitation events and resultant groundwater recharge as a result of ongoing climate change, the four proposed manual water level measurements very likely will not be representative of the seasonal range of groundwater elevations in the UDF area.

    This program can be augmented for little to no additional cost or effort to provide significantly more certainty that the groundwater elevation data to be collected will be more representative of their seasonal and climatic variability. It is recommended that electronic dataloggers be installed in four of the proposed monitoring wells (MW-2022-1, MW-2022-2, MW-2022-4 and MW-2022-6) and allowed to collect at least daily readings for the proposed year-long (at a minimum) monitoring period. Given the importance of the minimum 15-foot separation between estimated high groundwater and the bottom of the

UDF to the Committee (and the Towns), this additional effort would be very beneficial and provide very useful site specific data.

13. Section 5.2.7 (p 16) – EPA should consider requiring the analysis of groundwater samples for PFAS to establish background conditions.

14. Section 5.2.8 (pp 16-18) – EPA should require GE to work with the Tribal Historic Preservation Manager and have a tribal specialist walk the land, including potential support areas down to Woods Pond.

15. Section 6.1 (p 20) – The Work Plan should clarify whether the results of the soil and groundwater analytical laboratory testing will be compared to any state or federal standards or risk-based thresholds to support their evaluations of existing soil and groundwater quality within the UDF area.

16. Table 1 – Adding a column for Minimum Bottom Boring Elevation (ft, NGVD 29) would be helpful in understanding the target elevations for the completion of the various borings relative to other elevations noted in the work plan.

17. Tables 2 and 3 – It is unclear why piezometers and monitoring wells are proposed to be installed with well screens straddling the water table as shown in these tables. GE should clarify whether this is necessary for the monitoring of groundwater elevations.

Technical Assistance Services *for* Communities
Comments on GE-Pittsfield/Housatonic River Site Pre-Design Investigation Work Plan for Upland Disposal Facility December 14, 2021

Contract No.: EP-W-13-015
Task Order No.: 68HE0S18F0209: OSRTI – Multi Regions & Headquarters Support
Technical Directive No.: R1 2.4.3 GE Pittsfield

Technical Assistance Services for Communities (TASC)
Comments on GE-Pittsfield/Housatonic River Site
Pre-Design Investigation Work Plan for
Upland Disposal Facility, November 2021

Introduction

This document provides TASC comments on the GE-Pittsfield/Housatonic River Site Pre-Design Investigation Work Plan for Upland Disposal Facility (UDF PDI Work Plan). This document is for the city of Pittsfield, the Berkshire Regional Planning Commission (BRPC) and municipalities to use as they develop comments to share with EPA. TASC does not make comments directly to EPA on behalf of communities. This document is funded by the U.S. Environmental Protection Agency's (EPA's) Technical Assistance Services for Communities (TASC) program. The contents do not necessarily reflect the policies, actions or positions of EPA.

Pursuant to the Revised Resource Conservation and Recovery Act (RCRA) Permit Modification (Revised Final Permit) issued by EPA to the General Electric Company (GE) on December 16, 2020, for the Rest of River portion of the GE-Pittsfield/Housatonic River site, GE is required to prepare pre-design investigation work plans for the collection of pre-design data to be used to support the remedial activities in the Rest of River. This UDF PDI Work Plan includes descriptions for conducting desktop, field, and laboratory-based activities necessary to acquire information for design of the UDF component of the Rest of River Remedial Action. The UDF will be used for disposal of sediments and soils generated as part of the Rest of River Remedial Action, and disposal only of those sediments and soils that meet certain acceptance criteria specified in Attachment E to the Revised Permit.

Summary

The November 2021 UDF PDI Work Plan has eight sections:

- Introduction
- Performance Standards for UDF
- Site Background and Historical Site Data Summary
- Preliminary Conceptual Design Summary
- Pre-Design Investigation
- Data Evaluation and PDI Reporting
- Schedule
- References

The UDF will be constructed on a 75-acre property that was once part of a sand and gravel quarry. GE acquired the property from The Land Corporation in April 2021. The consolidation area (the waste containing portion) will:

- Have a maximum footprint of 20 acres and capacity of 1.3 million cubic yards.
- Include a double bottom liner, separated by a drainage layer, and incorporate primary and secondary leachate collection systems.
- Cover the consolidation area with a low-permeability cap, including liners, drainage layers and vegetation.
- Include a stormwater management system and groundwater monitoring network.
- GE must identify any current non-community and private water supply wells within 500 feet of the UDF consolidation area. If any wells are identified, GE must pay for the installation costs to connect those users to a public water supply (unless they do not consent). If such a well owner consents at a later date or any new water users are identified within 500 feet of the UDF consolidation area, GE must pay for the installation cost of a connection to a public water supply.

The PDI data collection will start after EPA's approval of the UDF PDI Work Plan. The majority of the field work is weather dependent and cannot start until the onset of warmer weather and melting of snow and ice that may otherwise prevent site entry, obscure the ground surface and prevent direct observation of growing season conditions.

PDI data collection is anticipated to take about 15 months from approval of the UDF PDI Work Plan. At that time, the second year of the two-year semi-annual groundwater quality monitoring program will not have been completed. Within 60 days after receipt of the results from the last groundwater monitoring event, GE will submit an Addendum to the UDF PDI Summary Report to document the results from the second year of groundwater testing.

TASC Comments

The TASC review indicates that the UDF PDI Work Plan provides a fairly thorough proposed investigation plan to prepare for the UDF. TASC comments below focus on potential additional sampling needs to characterize the groundwater and soils comprehensively on the parcel where the UDF will be located.

1. The 2020 GE Revised Final Permit outlines specific performance standards pertinent to the UDF design. Based on the UDF PDI Work Plan, it appears there is sufficient information to estimate the potential footprint of the UDF, including the location of the support area(s). It may be beneficial to derive a "first draft" conceptual model of the UDF footprint prior to collection of the baseline monitoring plan. For instance, the placement and features of the conceptual UDF would better enable an appropriate suite of groundwater monitoring approaches (e.g., installation of paired wells inside and outside of UDF footprint and support areas to monitor any transport of contamination, installation of wells to identify any impacts from planned elutriate control/recycling, installation of wells to identify any flooding releases).

   In addition, a conceptual model of the UDF footprint would enable strategic sampling of soil profile information necessary for the design of the final UDF. For example, if an area to be excavated has native materials that will be removed, it would be unnecessary to sample these removed materials for geotechnical parameters required for landfill construction. It would be more useful and cost effective to focus geotechnical boring efforts to depths below the excavated depth. In addition, the excavated materials will serve as a future cap, or serve other UDF-related purposes. Therefore, the suite of geotechnical parameters of interest for these excavated materials (soil content and type, organic carbon content) may be different from the parameters to test materials underlying the UDF (parameters to test structural integrity).

   The community may want to ask EPA if there is sufficient information available for development of a draft conceptual model of the UPF to maximize the effectiveness of the design of the proposed groundwater and geotechnical baseline investigation.

2. The UDF PDI Work Plan describes baseline field strategies to address habitat surveys, cultural resources, groundwater and certain geotechnical characteristics. If this Work Plan is to capture all "baseline" media and conditions to be affected by the proposed work, there are several media/parameter types that require inclusion:

   a. Baseline air monitoring of prevailing wind directions to determine possible waste (as dust) transport and exposure to downgradient human and ecological receptors. Baseline air monitoring of wind patterns in and around the UDF will assist in determining if the waste management practices will create possible exposure and risk to downgradient human and ecological receptors. An inventory of prevailing wind patterns year-round needs to be a component of baseline monitoring.
   b. Background geotechnical data collection to characterize geologic hazards (based on the Washington State Department of Transportation's Geotechnical Design

Manual[1]). The possible impact of geologic hazards is a component of the eventual UDF design. Geotechnical parameters typically gathered for a geologic hazard evaluation include grain size distribution, Atterberg Limits, specific gravity, organic content, moisture content, unit weight, soil shear strength tests (static and cyclic), and post-cyclic volumetric strain.

c. Modeled elevated groundwater levels that predict possible groundwater flooding conditions attributable to future climate change concerns. Groundwater elevations are the most important site characterization that will define the UDF design. To capture all possible groundwater elevation conditions adequately, taking groundwater level measurements as often as possible, during all seasons of the year, is recommended. In addition, given the fact that the area is likely to see increased groundwater levels from climate changes, it would be important to model the "worst-case" groundwater elevations to ensure the UDF design addresses these conditions.
d. Baseline migratory bird, waterfowl, and threatened and endangered species that may rely on possible attractive nuisance features of the UDF. Once wastes are transported into the UDF, it is possible that water from the sediments will separate and create a surface layer in the disposal area. This ponded water could act as an attractive habitat to migratory species. It is important to understand the species living in the area as well as migrating through it to plan for the management and control of possible future exposures.

The community may want to ask EPA if more baseline monitoring of air, geologic hazards, extreme groundwater levels and migratory species would be important to include in the proposed baseline monitoring.

3. The GE Final Permit (Section 5(2)(d), page 55) states the seasonally high groundwater elevation will be projected using site-specific groundwater elevation data collected in the location of the UDF, modified by an appropriate technical method that takes into account historical groundwater level fluctuations at similarly sited off-site long-term monitoring wells in Massachusetts. The estimation will be performed pursuant to a methodology reviewed and approved by EPA. Since the work plans for all proposed Rest of River work typically describe the methods of data interpretation, the UDF PDI Work Plan should describe the method that will be used for estimating groundwater elevation projections.

The community may want to ask if EPA will be provided with the groundwater elevation projection data interpretation method as part of the document deliverable.

4. The GE Statement of Work (SOW) outlines the basic requirements for documentation of this Work Plan. As per the SOW, a "description of pertinent site background, and a summary of information currently available to support design activities" is to be provided in this document (Section 4.2.2, PDI Plan and Report for Upland Disposal Facility, Subsection 4.2.2.1, first and third bullets). The Work Plan describes some of the area groundwater well location information but does not present any of the groundwater

[1] Skeo referenced this manual because it contains a full list of soil parameters used for geologic hazard evaluation.

quality results since the information "is relatively outdated" (Section 3.2.7, Groundwater Quality, first paragraph). Regardless of the dates for this information, describing baseline conditions remains beneficial. In addition, review of the adjacent gravel mine operation reclamation permit, which may provide useful information regarding the mined pit areas, volumes and water quality, is recommended.

The community may want to ask EPA if the UDF PDI Work Plan should include a summary of existing information such as the groundwater quality (and levels), and any available gravel mine operation information that would be useful for the design of the UDF.

5. The GE Parcel was "formerly part of an active sand and gravel quarry." The quarry area includes several open pits that appear to contain water, as shown in the aerial imagery in the Work Plan. The close proximity of the GE Parcel to the quarry raises two concerns:

   - If the quarry is temporarily closed and becomes active and will continue to manage mined materials (removal and storage) and water storage in the future, it is unclear if these practices will conflict with the UDF, or affect the groundwater flow pathway.
   - If the quarry has ceased operation and requires reclamation, it is unclear how reclamation efforts, including pit closure, may alter groundwater flow pathways.

   The community may want to ask EPA if due diligence regarding the former quarry operations and potential future plans has been done to ensure the compatibility of the property uses.

6. The document states clearly that the UDF support area has yet to be designed and that the UDF support area requirements and related facilities are not known at this time. The UDF support area may include sediment dewatering and material handling areas that can yield liquid wastes of potential concern. In addition, the UDF area would likely include hydraulic transport features associated with the wet sediments removed from the river.

The community may want to ask EPA if the community can review future documents related to the investigations for the UDF support area. The community may also want to ask EPA if it would be prudent to include proactively lining parts of the UDF support area in the design of the UDF support area to capture spilled materials in this work area.

7. A standard component of baseline ecological surveys is an assessment of migratory bird habitat and nests. This document provides a thorough description of proposed habitat surveys. However, it lacks any mention of nest inventory. In addition, the survey of nest sites is typically a component of pre-construction surveys to determine if construction efforts need to be timed outside of nesting periods.

The community may want to ask EPA if requesting bird nest inventories is a required element of the baseline habitat assessment.

8. The text states that aquatic resources "excluding the man-made ponded areas" will be subject to field verification using current federal wetland delineation criteria (Section 5.2.1, Baseline Habitat Assessment, third bullet). If these ponds are historic, they may have acquired wetland values that are protected under the Clean Water Act, Section 404 program.

   The community may want to ask EPA if the ponds should receive equitable consideration during the proposed baseline habitat surveys.

9. The text states that the new topographic survey will likely consist of a traditional field survey, an aerial survey using Light Detection and Ranging (LiDAR), or a combination of these methods.

   The community may want to ask if a combination of the field survey methods can be applied for the development of topographic maps to acquire the most accurate estimates for volumes and areas of material management.

10. The proposed permanent groundwater monitoring well installation locations (shown in Figure 6) are based on the assumed groundwater pathway from east to west. This assumption was based on existing area well information (landfill wells to the south). This assumption also fits the hydrodynamic groundwater flow path that would be expected to move to the west, toward the Housatonic River and the gravel mine pits. However, in the interest of planning a spatially complete sampling strategy, it may be prudent to plan on an additional monitoring well to the east until the groundwater flow pathway is more completely understood, and also to provide more substantial characterization of background conditions.

    The community may want to ask EPA if an additional groundwater monitoring well to the east would be useful for long-term monitoring of background water quality conditions as well as the groundwater flow pathway.

11. The completeness of the sampling strategies in the Work Plan was reviewed. Two potential spatial gaps and sampling recommendations were identified:

    - Soil geotechnical data will be gathered from 18 locations. However, there are spatial gaps in the north part of the disposal facility area (between and to the north of B 2022-3 and PZ 2022-2), the west edge of the disposal facility area (west of PZ 2022-4, B-3, and B-5) and the southern part of the disposal facility area (south of PZ 2022-6 and B-4) of the outlined UDF footprint (refer to Figure 4). It may be useful to sample more sites in the northwest and west edge due to the disturbed nature of this area due to historical mining activities. The proposed sampling in the area to the south seems spatially limited, with only one piezometer location planned.

      The community may want to ask EPA if the proposed geotechnical data collection plan is sufficient, or if there are gaps in the northeast, the east edge and south of the proposed UDF area.

- Section 3.2.5 (Groundwater Elevations) of the PDI UDF Work Plan states that the existing Schweitzer-Mauduit and Lee Municipal Landfill monitoring wells will be used to collect groundwater elevation data.

The community may want to ask EPA if it is appropriate to include the landfill groundwater wells as part of the planned UDF monitoring.

12. The mine pits occur to the northwest of the UDF and may present a hydrologic "sink" that draws groundwater movement. These pits may present an opportunity to sample pit water that likely represents groundwater. As stated in the Work Plan (Section 3.2.6, Groundwater Elevations, first paragraph, fifth sentence), "because of the granular nature of the site soils, the pond water surface elevations are likely coincident with groundwater."

The community may want to ask EPA if sampling of the gravel mine pit water would be useful as a monitoring tool for assessing the UDF's effectiveness.

13. Figure 2 outlines "bathymetric survey areas" associated with each mine pit on the GE Parcel. These ponds are "contiguous waters" that overlap into the adjacent quarry.

The community may want to ask EPA about the plans for the mine pits (e.g., if they will be filled in) and whether it is appropriate to collect a complete bathymetric survey of the ponds that overlap the GE Parcel and the quarry to get an accurate estimate of dredged and filled materials.

Resources

State of Washington, Department of Transportation: Geotechnical Design Manual. https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/manuals/geotechnical-design-manual (Chapter 6.: Seismic Design Guidelines. Guidelines: https://www.wsdot.wa.gov/publications/manuals/fulltext/M46-03/Chapter6.pdf).

TASC Contact Information

Technical Advisor
Karmen King
970-852-0036
kking@skeo.com

Technical Advisor
Kirby Webster
802-227-7290
kwebster@skeo.com

Task Order Manager
Emily Chi
541-238-7516
echi@skeo.com

Project Manager/Senior Program Manager
Eric Marsh
817-752-3485
emarsh@skeo.com

Skeo Vice President, Director of Finance
and Contracts
Briana Branham
434-226-4284
bbranham@skeo.com

TASC Quality Control Monitor
Bruce Engelbert
703-953-6675
bengelbert@skeo.com