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Via Electronic Mail

December 20, 2024

Mr. Richard Fisher
Office of Site Remediation and Restoration
U.S. Environmental Protection Agency, Region I
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Boston, MA 02109-3912

**Re: GE-Pittsfield/Housatonic River Site
Rest of River (GECD850)
Upland Disposal Facility Revised Operation, Monitoring, and Maintenance Plan**

Dear Mr. Fisher:

In accordance with Section 4.3.2.3 of the Final Revised Rest of River Statement of Work and an EPA conditional approval letter dated September 12, 2024, enclosed for EPA's review and approval is the *Upland Disposal Facility Revised Operation, Monitoring, and Maintenance Plan*. A complete hard copy of this revised plan will also be sent to you. (Note that an addendum to this plan addressing the on-site dewatering and water treatment systems proposed for the Upland Disposal Facility area is being submitted under separate cover.)

Please let me know if you have any questions about the enclosed revised plan.

Very truly yours,

Matthew Calacone /amm

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General Electric Company

**Upland Disposal Facility
Revised Operation,
Monitoring, and Maintenance
Plan**

GE-Pittsfield/Housatonic River Site

December 2024

Upland Disposal Facility Revised Operation, Monitoring, and Maintenance Plan

GE-Pittsfield/Housatonic River Site

December 2024

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Addendum (separately submitted)

Sediment Dewatering and Water Treatment Systems Conceptual Operation, Monitoring, and Maintenance Plan

Abbreviations

AAMP	Ambient Air Monitoring Plan
BMP	best management practice
CMP	Construction Monitoring Plan
CPG	Construction General Permit
CQA	construction quality assurance
CQAP	Construction Quality Assurance Plan
EPA	United States Environmental Protection Agency
Eversource	Eversource Energy
Final Revised SOW	Final Revised Rest of River Statement of Work
FSP/QAPP	Field Sampling Plan/Quality Assurance Project Plan
GDC	geosynthetic drainage composite
GE	General Electric Company
HDPE	high-density polyethylene
MSGP	Multi-Sector General Permit
NPDES	National Pollutant Discharge Elimination System
OMM Plan	Operation, Monitoring, and Maintenance Plan
PCB	polychlorinated biphenyls
PDI	pre-design investigation
PM ₁₀	particulates with a diameter less than 10 micrometers
POP	Project Operations Plan
QA/QC	quality assurance/quality control
QOL Plan	Quality of Life Compliance Plan
Revised Permit	Revised Final Permit Modification to GE's Resource Conservation and Recovery Act Corrective Action Permit
ROR	Rest of River
SMP	Site Management Plan
SOW	Statement of Work
SIP	Supplemental Information Package
SWPPP	Stormwater Pollution Prevention Plan
T&D Plan	Transportation and Disposal Plan
UDF	Upland Disposal Facility
UDF Post-Closure	UDF Post-Closure Monitoring and Maintenance Plan
M&M Plan	

1 Introduction

1.1 Purpose and Scope

On December 16, 2020, pursuant to the 2000 Consent Decree (CD) for the GE-Pittsfield/Housatonic River Site, the U.S. Environmental Protection Agency (EPA) issued to the General Electric Company (GE) a Revised Final Permit Modification to GE's Resource Conservation and Recovery Act Corrective Action Permit (Revised Permit) specifying a Remedial Action for the ROR (EPA 2020). The ROR consists of the portion of the Housatonic River and its backwaters and floodplain (excluding portions of certain residential properties) downstream of the confluence of the East and West Branches of the Housatonic River, which is located approximately two miles downstream from GE's former manufacturing facility in Pittsfield, Massachusetts. The selected ROR Remedial Action includes a provision for GE to construct and utilize an Upland Disposal Facility (UDF) on a 75-acre property (the GE Parcel) that was formerly part of an active sand and gravel quarry and that GE acquired from The Lane Construction Corporation in April 2021. The UDF is to be used for the disposal of certain of the sediments, soils, and associated debris to be removed as part of the ROR Remedial Action, subject to criteria specified in the Revised Permit.

In accordance with the requirements of the Revised Permit, GE submitted to EPA a Final Revised Rest of River Statement of Work (SOW) specifying the deliverables and activities that GE will conduct to design and implement the ROR Remedial Action (Anchor QEA et al. 2021). That Final Revised SOW was approved by EPA on September 16, 2021. On February 28, 2024, GE submitted a Final Design Plan for the UDF and an associated Operation, Monitoring, and Maintenance (OMM) Plan for the UDF. EPA issued conditional approval letters for those plans on September 12, 2024, requiring that the conditions therein be addressed in revised plans.

In response, GE has prepared a UDF Revised Final Design Plan (Arcadis 2024a) and this Revised OMM Plan for the UDF area (UDF Revised OMM Plan), which is based on the components and provisions included in the UDF Revised Final Design Plan and the conditions included in EPA's conditional approval letter for the prior UDF OMM Plan. These revised plans are being submitted concurrently on December 20, 2024.

This UDF Revised OMM Plan describes the operation, monitoring, and maintenance activities to be implemented during the construction and operation of the UDF. The primary components of this UDF Revised OMM Plan consist of the following:

- Construction-phase controls and monitoring, including construction oversight, implementation of Quality Assurance/Quality Control (QA/QC) measures, routine site controls, air and noise monitoring, road use, inspections and maintenance, and documentation and reporting;
- Operations-phase controls and monitoring, including oversight, routine site controls, environmental monitoring (including air, groundwater, meteorological, noise, and odor monitoring), road use, inspections and maintenance, and documentation and reporting;
- Consolidation material filling and management operations, including consolidation material placement and monitoring, fill progression and capacity monitoring, daily and temporary consolidation material covering and inspections, and stormwater management system inspections; and
- Facility operations, including leachate management and leachate generation tracking and inclement weather operations.

This Revised OMM Plan covers activities occurring through completed consolidation material filling operations. It does not cover monitoring and maintenance activities that will be implemented during the UDF closure phase, including final cover construction. Those activities will be described in the UDF Final Cover/Closure Plan in accordance with Section 4.3.2.5 of the Final Revised SOW and the UDF Revised Final Design Plan. Following the final cover construction, post-closure monitoring and maintenance activities will be conducted under a Post-Closure Monitoring and Maintenance (M&M) Plan that will be prepared and submitted prior to closure of the UDF in accordance with Section 5.2 of the Final Revised SOW.

1.2 UDF Layout

The UDF will be constructed on a 75-acre property that was formerly part of an active sand and gravel quarry and that is referred to as the GE Parcel (Figure 1). As shown on Figure 1, the parcel area designated for consolidation material placement is located generally within the southern portion of the GE Parcel (the consolidation area). The UDF will be accessed from Woodland Road at the southern end of the parcel, with additional access available from the north of the UDF. An existing overhead transmission line operated by Eversource Energy and its associated rights of way are located along the western side of the GE Parcel property, which is outside of the UDF consolidation area limits. The UDF also includes associated operational areas, as also shown on Figure 1. In addition, the GE Parcel will contain site areas designated for support of UDF operations. These support areas will include access points to the operational area, material and equipment staging areas, and areas for contractor use. Other UDF support areas may be needed in the future for UDF operations associated with hydraulic dredging and pumping if performed, such as sediment conveyance, dewatering, and water treatment facilities. The sediment dewatering and water treatment areas and facilities are described in an Addendum to the UDF Revised Final Design Plan, entitled *Conceptual Sediment Dewatering and Water Treatment Evaluation* (UDF Dewatering/Treatment Design Addendum; Arcadis 2024b).

1.3 UDF Construction and Operation

1.3.1 Construction

Construction of the UDF will be implemented in accordance with the UDF construction documents (e.g., technical specifications, design drawings, Construction Quality Assurance Plan [CQAP], contractor-supplied documents), as described in the UDF Revised Final Design Plan. The primary activities associated with construction of the UDF will include the following:

- Establishment of access points to the UDF operational areas necessary for material and equipment deliveries, as well as for daily use by the construction contractors;
- Installation of erosion and sediment controls measures;
- Maintenance of security fencing and initiation of related site controls;
- Mobilization of temporary contractor facilities (e.g., office trailers, sanitary facilities), earth-moving equipment, construction materials;
- Vegetation clearing, management of existing debris materials necessary to facilitate construction work;
- Mass excavation and filling needed to achieve the grade configurations shown on the UDF design drawings;
- Construction of the stormwater management features, baseliner and leachate collection systems, and leachate storage facilities shown on the UDF design drawings.

Construction of the UDF is likely to span at least two construction seasons. Certain construction activities, such as site clearing, general earthwork, and utilities installation (i.e., activities that are not temperature-dependent), can be performed at any time during the calendar year. Other construction work and related activities that are temperature-dependent (e.g., soil clay liner and geomembrane installation) will be conducted during times in the calendar year when weather conditions are more favorable.

Further description of the UDF construction-phase OMM activities is provided in Section 2. Information pertaining to the implementation schedule for construction of the on-site UDF sediment dewatering and water treatment systems and the timing for when those systems will be needed is provided in the UDF Dewatering/Treatment Design Addendum and in an addendum to this Revised UDF OMM Plan entitled *Sediment Dewatering and Water Treatment Systems Conceptual Operations, Monitoring, and Maintenance Plan* (UDF Dewatering/Treatment OMM Addendum; Arcadis 2024c). As noted there, construction of the on-site dewatering and water treatment facilities will be completed before remediation activities begin for Reach 6 of the ROR in accordance with the schedule in the Final Remedial Design/Remedial Action Work Plan or Supplemental Information Package (SIP) for Reach 6.

1.3.2 Operation

The operations of the UDF, also described in the UDF Revised Final Design Plan, will include the receiving and placement of excavated soils, sediments, and associated debris (consolidation materials) in UDF cells 1 and 2; collection, conveyance, and temporary storage of leachate in on-site storage tanks; inspection and maintenance of site controls and facilities; and environmental monitoring. Operations-phase OMM requirements will begin at the time that the UDF cells begin to receive consolidation materials and will continue through commencement of, but not including, final cover construction on the UDF cells.

UDF operations associated with receiving and placement of soils and sediments in the UDF cells will coincide with the remediation activities being conducted at the various ROR Remediation Units (RUs). These operations are anticipated to occur over a nine-month period during the calendar year (likely March through November). UDF operations associated with UDF cell leachate collection, treatment, and disposition of treated water or collected leachate (i.e., treated water discharge back to the Housatonic River or shipment of leachate for off-site treatment-disposal), which will function independently from the river-based work, will be performed year-round.

Further description of the UDF operations-phase OMM activities is provided in Sections 3 and 4. Information pertaining to the implementation schedule for commencing operation of the on-site UDF sediment dewatering and water treatment systems and the timing for when those systems will be needed is provided in the UDF Dewatering/Treatment Design Addendum and the UDF Dewatering/Treatment OMM Addendum. As noted there, the on-site dewatering and water treatment facilities will be operational before remediation activities begin for Reach 6.

1.4 OMM Plan Organization

The remainder of this OMM Plan is organized to describe the separate OMM requirements that will be implemented during the construction of the UDF and during operation of the UDF. Specifically, Section 2 presents the OMM requirements during the construction-phase relating to oversight, construction quality assurance (CQA), routine site controls, air and noise monitoring, road use, inspections and maintenance, and documentation and reporting. Section 3 describes the OMM requirements for the UDF operations, which generally include oversight, routine site controls, environmental monitoring, road use, inspections and maintenance, and documentation and

Upland Disposal Facility Revised Operation, Monitoring, and Maintenance Plan

reporting. Section 4 covers operations-phase OMM activities associated with consolidation material filling, including consolidation material placement and tracking, leachate management, and inspections and maintenance; and it also discusses inclement weather operations. These sections refer, where applicable, to GE's Revised Quality of Life Compliance Plan (Revised QOL Plan: Anchor QEA and Arcadis 2024), submitted on November 22, 2024.

2 UDF Construction-Phase Controls and Monitoring

2.1 Oversight

GE will provide oversight of activities and work conducted by contractors during construction of the UDF to confirm that construction of the UDF is being completed in conformance with the UDF Revised Final Design Plan, the UDF SIP (described in Section 4.3.2.4 of the Final Revised SOW), and related specifications and requirements, as well as applicable QA/QC measures. Oversight will be performed on all activities, including site earthwork, infrastructure installation, and baseliner and leachate management systems construction. Oversight will be performed by qualified, third-party services on behalf of GE and will involve observation of contractor activities, monitoring and inspection of the progress and quality of completed work, documentation, and communications with GE.

2.2 Quality Assurance/Quality Control

Site preparation work, excavation and grading, construction of the baseliner and leachate management systems, and construction of other engineered components of the UDF will require specific materials, controls, and procedures to ensure proper installation. QA/QC measures will be implemented during construction of the UDF and will generally include inspections, field and laboratory testing, evaluations, and documentation of ongoing and completed work. A CQAP has been prepared for the activities that will be conducted by GE as a part of the ROR Remedial Action, including construction of the UDF. The CQAP has been revised and is included as Attachment E of the revised updated Project Operations Plan (POP), submitted on November 22, 2024 (Arcadis 2024d). Sections 3 and 4 of that CQAP describe QA/QC measures that apply to pre-construction activities, construction activities, documentation, and site inspections for construction of the UDF.

2.3 Routine Site Controls

Site controls for routine activities during construction of the UDF will be established, maintained, and inspected by the UDF construction contractor. These site controls will be implemented at the beginning of the UDF construction and will continue up to commencement of the UDF operations, at which time, they will be discontinued, or if applicable, continued as part of the OMM activities during UDF operations. A description of the routine site controls and required OMM during the construction-phase is provided in the following sections.

2.3.1 Site Access Control

The UDF area, which includes the consolidation, operations, and associated support areas, is enclosed by a seven-foot-high chain-link security fence. The location of this security fence is shown on Figure 2 and includes several personnel and vehicle access gates. During the UDF construction, these gates will be closed and secured with locks to prevent unauthorized entry to the UDF area. During construction hours, only those gates necessary for construction-related access (e.g., entry of construction and oversight personal, material and equipment deliveries) will be unlocked and open. During these periods, vehicle access gates will remain open for the duration of the workday and then closed and locked by designated site personnel. Use of personnel gates is anticipated primarily for monitoring and inspection tasks and will likely be open only for the period of time needed to complete a required task. Otherwise, these personnel gates will be closed and locked. Signs stating “No Trespassing” will be posted on the security fence at designated locations and on the access gates.

As shown on the Figure 2, primary access to the UDF area will be from Woodland Road at the southeastern corner of the UDF site. Secondary access to the UDF area will be from a gravel road located in the northern portion of the GE Parcel that connects to Woodland Road near Woods Pond. Two additional gated access points will be located at the perimeter of the UDF area but are provided mainly for Eversource use and emergency access purposes.

The UDF perimeter security fence, access gates, and posted signage will be inspected on a routine basis during construction. Maintenance of the fencing, access gates, and signs will be performed as needed to maintain secure enclosure of the UDF area and proper functioning of the access gates. A form identifying the aspects of the UDF area access control components subject to inspection will be developed before construction in coordination with the construction contractor.

2.3.2 Stormwater and Erosion Control Measures and BMPs

Temporary and permanent stormwater and erosion control measures and best management practices (BMPs) will be implemented during UDF construction. Temporary measures to be used during construction are shown on UDF Revised Final Design Plan Drawings 3A and 3B and include silt fencing, straw wattles, and a stabilized construction entrance. Permanent measures are shown on UDF Revised Final Design Plan Drawing 9 and include features such as ditches, culverts, basins, and stone check dams. The objective of stormwater management at the UDF during construction will be to collect and convey stormwater runoff away from the work areas in a manner that minimizes the potential for flooding, erosion, and the migration of on-site sediments into the surrounding areas. Until construction of the stormwater management features specified in the UDF Revised Final Design Plan are complete, runoff from site construction areas will be managed using appropriate temporary control measures and BMPs. These temporary controls and BMPs will remain in service and be inspected and maintained until the final stormwater management features (excluding those constructed on the UDF final cover system) are fully established and functional.

Both the temporary and permanent stormwater and erosion control measures that are established during the UDF construction will be subject to periodic inspections. The components to be inspected and the frequency of inspections are defined in UDF Revised Final Design Plan technical specification Section 31 25 00 – Erosion & Sediment Controls. In general, inspections will include observation of on-site stormwater controls (e.g., ditches, check dams, culverts, sediment barriers, basins and depressions, runoff areas) and areas where off-site drainage occurs. Those inspections will document the apparent conditions, functionality, and effectiveness of stormwater controls and BMPs in controlling construction-related runoff. OMM requirements for the permanent stormwater management features will be included in GE's Stormwater Pollution Prevention Plan (SWPPP) to be provided in the UDF SIP₁ as discussed in Section 4.6 of the Revised Final Design Plan and technical specification Section 31 25 00, and will be revised (if necessary) in the UDF Post-Closure M&M Plan. OMM requirements for the management of permanent stormwater controls associated with the UDF final cover will be included in the UDF Final Cover/Closure Plan and the UDF Post-Closure M&M Plan.

The inspection, sampling, and monitoring requirements for the stormwater and erosion control measures to be implemented during UDF construction will be described in the SWPPP and will be consistent with the design specifications. These requirements will include the applicable substantive requirements specified in the National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP).

2.3.3 Dust Control Measures and BMPs

The quality-of-life standards for airborne particulate matter are set forth in Section 4.3 of GE's Revised QOL Plan. During construction of the UDF, particulate matter, also referred to as dust, will be controlled through various BMPs, including the application of water on site roads and the use of temporary surface coverings (e.g., mulch, vegetation, polyethylene liners) on dust-prone areas that may be dormant for a period of time. Other BMPs to control dust will include managing vehicle speeds (since lower speeds can reduce dust generation from tires), assessing wind conditions to determine if vehicle routes could be adjusted to minimize dust generation, and the possible use of certain road surface materials such as aggregates or pavement in high-traffic areas prone to dust generation. These dust controls and BMPs for the UDF construction are specified in UDF Revised Final Design Plan technical specification Section 01 57 00 – Temporary Controls. Should air monitoring indicate elevated levels of particulate matter above the quality-of-life particulate standards, measures will be taken to reduce the elevated dust conditions, as discussed in Section 4.3 of the Revised QOL Plan. Further information pertaining to monitoring of airborne particulate matter is provided in Section 2.4.

2.3.4 Noise Control Measures and BMPs

During the UDF construction, construction equipment, sitework activities, and truck movement at the UDF area will create noise typical of a construction site and possibly similar to that currently occurring on the properties that border the UDF site to the west and east. Noise levels will vary based on the activity being performed and the type of equipment being operated.

Quality-of-life standards for noise have been established for the ROR Remedial Action, as described in Section 4.4 of the Revised QOL Plan, to limit the potential impacts of noise generated by construction and other activities on the surrounding communities. These standards consist of numerical thresholds, including a residential daytime noise standard (which is applicable from 7:00 a.m. to 9:00 p.m. and includes both Notification and Action Levels), a residential nighttime noise standard, and a non-residential noise standard (applicable at any time), measured as maximum hourly average decibel levels. Routine control measures and BMPs employed during the UDF construction to minimize noise impacts will include, as appropriate, the use of properly muffled motorized equipment, scheduling of sitework activities to minimize heavy concentrations of equipment use that might result in prolonged or excessive elevated noise levels to avoid early morning or nighttime hours, the use of sound-attenuating barriers around stationary equipment, controlling the speed at which equipment is operated, and using quieter backup alarms on certain construction equipment that frequently operates in reverse (e.g., front-end loaders and dump trucks). These noise control measures and BMPs are specified in UDF Revised Final Design Plan technical specification Section 01 57 00 – Temporary Controls.

2.3.5 Lighting Control Measures and BMPs

During construction of the UDF, the performance of work activities may be necessary before dawn or after dusk. During times of low light or poor visibility, artificial lighting will be used to illuminate work areas and improve worker safety. Lighting will also be needed on equipment and vehicles to ensure their safe passage within UDF areas during low-light conditions.

Quality-of-life standards for lighting have been established for the ROR Remedial Action, as described in Section 4.6 of the Revised QOL Plan, to limit the potential impacts of lighting generated by construction and other activities on the surrounding communities. The lighting standard will be to mitigate nuisance project-related lighting impacts based on any complaints from nearby receptors. For the UDF, sufficient lighting will be supplied to provide safe conditions during low-light and nighttime operations, including compliance with applicable

regulations of the Occupational Safety and Health Administration. Fixed lighting will be used to provide safe illumination of certain work areas within the UDF area (e.g., equipment and material staging areas, access ways, contractor facilities). Measures to minimize or limit the potential off-site nuisance impacts generated by lighting during construction activities will include, as appropriate, those identified in Section 4.6.2 of the Revised QOL Plan – i.e., proper positioning of lights; adjusting the brightness of lights used, beam direction for fixed lighting, and height of light masts; and shielding of lights to reduce the potential for off-site impacts. These lighting control measures and BMPs are also specified in UDF Revised Final Design Plan technical specification Section 01 57 00 – Temporary Controls.

2.3.6 Project Area Security Measures

Security measures will be established and implemented during UDF construction in accordance with the revised Site Management Plan (SMP), included as Attachment C of the revised POP, and with Section 5.1 of the UDF Revised Final Design Plan and will consider site-specific conditions. These measures will include provisions designed to limit and control access to the UDF area, and to manage the increased potential for interactions with unauthorized visitors. As described in Section 2.3.1, a security fence with access control gates has been installed at the perimeter of the UDF area, with No Trespassing signs at designated locations and on the access gates. The primary entry point to the UDF area will be from Woodland Road located at the southeastern corner of the UDF area. Construction personnel, material delivery drivers, and expected visitors will be required to check in at a site control location operated by a GE designee. All other gated access points will be closed and locked unless those gates are being used for construction or monitoring-related purposes. In the latter instances, those gates will be opened for use and monitored by GE-designated personnel to control entry. Additional security measures will be developed by the construction contractor and included in the UDF SIP.

2.4 Air Monitoring

Air monitoring for particulate matter smaller than 10 micrometers in diameter (PM₁₀) will be conducted during construction of the UDF to assess potential impacts on air quality due to dust generation resulting from construction equipment and activities. The air monitoring equipment for particulate matter is described in Section 4 of the revised Ambient Air Monitoring Plan (AAMP), which is Attachment G of the revised POP; and the procedures for particulate matter air sampling are provided in Appendix G to GE's Field Sampling Plan/Quality Assurance Project Plan (FSP/QAPP; Arcadis 2023). During construction of the UDF, such monitoring will be conducted at five locations on the GE Parcel, shown on Figure 3, for a minimum of 10 hours (7 a.m. to 5 p.m.) throughout the duration of daily active construction activities. If construction activities are ongoing for longer than 10 hours in a given day, particulate monitoring will continue until daily activities are complete. The quality-of-life standards for airborne particulate matter, which include Notification and Action Levels, and the actions to be taken in responses to exceedances of those levels (including notifications and contingency measures) are described in Section 4.3 of the Revised QOL Plan and in the revised AAMP.

In addition to real-time particulate monitoring, as stated in Section 6 of the revised AAMP, qualitative visual observations of dust-related conditions in the work area will be employed at least once daily or as conditions warrant, along with real-time instrument readings and/or sample results, to assess conditions and the effectiveness of the routine controls and BMPs. Visual observations will include the presence or absence of dusty conditions or dust-producing activities. Under the qualitative QOL standard for visible dust described in Section 4.3.1.3 of the Revised QOL Plan, if visible dust caused by UDF construction activities is observed leaving the immediate work area, GE will investigate the cause of the visible dust, and the appropriate monitors will be checked as soon as possible after the dust has been observed. If warranted based on investigation of the cause

of the visible dust and the particulate monitoring data, GE will implement appropriate measures to mitigate the visible dust leaving the work area.

2.5 Noise Monitoring

Noise levels will be periodically monitored during UDF construction to verify that levels are compliant with the noise quality-of-life standards presented in Section 4.4.1 of the Revised QOL Plan. The noise monitoring to be conducted during the ROR Remedial Action is described in detail in Section 3.7 of the revised Construction Monitoring Plan (CMP), which is Attachment G of the revised POP. In general, the point of compliance for these standards will be at the closest receptor location, but noise monitoring may be performed closer to the source(s) for ease of implementation and to conservatively demonstrate compliance. During UDF construction, noise monitoring will be performed at the beginning of active construction and then monthly during construction, as well as in response to noise complaints (if any). The noise monitoring will be conducted at the same five locations specified for air monitoring, as shown on Figure 3, or if conducted in response to a noise complaint, at a location situated to evaluate that complaint. The noise monitoring setup and procedures are described in Section 3.7 of the CMP. Details on the noise standards and responses to exceedances of those standards (including notifications and contingency measures) are included in Section 4.4 of the Revised QOL Plan.

2.6 Roads and Traffic

As previously discussed in Section 2.3.1, the UDF area will be accessed by two entrance roads – a primary entrance road located at the southeastern corner of the area off Woodland Road and a secondary entrance road located at the northern end of the UDF area that connects to an existing gravel road leading to Woodland Road near Woods Pond. During the UDF construction, these entrance roads will provide access to the UDF area for transport of construction equipment, delivery of materials and supplies, and daily use by contractors and CQA personnel. The entrance roads will connect to temporary construction roads and eventually to permanent UDF access roads. The entrance roads and permanent UDF access roads are shown on Figure 2. The location and duration for use of temporary access roads will be determined by the site earthwork contractor at the time of construction. All access roads are anticipated to be constructed with compacted gravel surfaces, except for the primary site entrance road located at the southeastern corner of the site. This entrance road will include a short section of asphalt pavement that will extend into the site approximately 75 feet from the exiting pavement edge along Woodland Road. This paved section will provide a smooth turning point for vehicles entering and exiting the UDF area and will allow for more effective cleaning (i.e., sweeping) during the UDF operations.

During the initial phase of construction, the entrance roads will be used primarily for equipment mobilization to the UDF area, and to a lesser degree, for material deliveries. In the later stages of construction, material deliveries will increase until construction of the UDF is completed.

Local public roads that are anticipated for use in accessing the UDF during construction include (starting from State Route 20) Walker Street, Mill Street, Willow Hill Road, and finally Woodland Road. Prior to construction of the UDF, the condition of the existing local roads that will be used in accessing the UDF area will be evaluated, as described in Section 6.1 of the Revised QOL Plan, to determine the need for and type of reconditioning and upgrading of the roads and associated infrastructure to make them suitable for truck traffic. In addition, these paved municipal roads and other paved municipal roads that may be identified for construction use (if any) will be subject to the assessments described in Section 6.2 of the Revised QOL Plan. These assessments are intended to establish the road conditions prior to construction (i.e., baseline condition), during the construction period, and at the end of the construction. These assessments will be used to identify the need for repair either

during and/or following completed UDF construction. Scheduling of these assessments will be determined before the start of construction in coordination with the selected contractor.

2.7 Inspections and Maintenance

Regular inspections and maintenance of temporary and permanent UDF features will be conducted to ensure that construction is in conformance with the applicable UDF Revised Final Design Plan and UDF SIP requirements and specifications. Periodic and daily inspections will be conducted during UDF construction activities to assess and document conditions of completed and ongoing sitework and to identify the need for maintenance or repair of construction features. Below are elements of the UDF construction for which inspections and maintenance will be required. Further descriptions of CQA activities to be performed during the UDF construction are provided in Section 4 of the CQAP.

2.7.1 Construction Components

Construction oversight personnel will perform daily inspections of all active construction zones. Oversight personnel will generate daily construction reports detailing aspects of the project, including work completed, any deficiencies or maintenance needed, and whether the completed work was performed appears to be progressing in accordance with the project documents and UDF Revised Final Design and SIP requirements and specifications.

2.7.2 Erosion and Sedimentation Controls

Erosion and sedimentation controls will be installed before performing any land-disturbing activities. Installed erosion and sedimentation control devices will be maintained throughout the duration of the UDF construction. Regular site inspections will be conducted to observe the status of installed devices, as well as the possible need for additional controls. If the need for repairs/maintenance work is determined, that work will be implemented as soon as practicable. Further information on erosion and sedimentation control installation, inspection frequency, and corrective actions is provided in UDF Revised Final Design Plan technical specification 31 25 00 - Erosion & Sediment Controls.

2.7.3 UDF Area Security Measures

Site security measures to be implemented during the construction of the UDF include, but are not limited to, vehicle and personnel access control gates, security fencing and signs installed at the perimeter of the UDF area, check-in procedures for vehicle and personal entering the UDF site, and lighting in certain UDF areas. Access to the UDF area will be controlled by the UDF construction contractor. The UDF construction contractor will be responsible for the inspection of all security features, which will be conducted on a weekly basis. If the need for repairs/maintenance activities is determined, those activities will be implemented as soon as practicable.

2.7.4 Monitoring Equipment

The airborne particulate and noise monitoring equipment will be inspected on a regular basis (weekly for the air monitoring equipment and monthly for the noise monitoring equipment) for signs of wear, as well as after a weather event of significant magnitude where equipment could have been damaged, and whenever data collected from equipment appear inaccurate. Any recommended corrective actions will be performed as soon as

practicable. This equipment will be serviced and maintained in accordance with the equipment manufacturers' recommendations and specifications.

2.7.5 Roads

UDF access roads and access points to the public rights-of-way, as described in Section 2.3.1, will be inspected routinely for unsafe conditions and/or signs of erosion or damage. Any corrective actions identified as a result of routine inspections (e.g., resurfacing, filling, widening, additional signs) will be implemented as soon as practicable based on the severity of the deficiency noted. Inspections of paved municipal roads and potential corrective actions applicable to such roads will be performed as described in Section 6.2 of the Revised QOL Plan.

2.7.6 Wetland Enhancement Project

As discussed in the UDF Revised Final Design Plan, GE is proposing to implement a vernal pool/wetland enhancement project at the UDF area as mitigation for wetlands impacts from the UDF construction. That project is described in Appendix H (Habitat Restoration and Mitigation Assessment Report and Plan for the Upland Disposal Facility) of the UDF Revised Final Design Plan. That Appendix includes a proposed monitoring plan for this enhancement project for five years after completion of implementation, with additional details regarding that monitoring plan, including inspection and reporting frequency and schedule, in Attachment I to that appendix.

2.8 Documentation and Reporting

The controls and monitoring activities performed during UDF construction will be documented for record purposes. This documentation will be maintained on-site by the construction contractor and/or by GE for review and reference purposes.

During UDF construction, the required reporting relating to air and noise monitoring results, as described in Sections 4.3 and 4.4 of the Revised QOL Plan, will be made as necessary. In addition, following the completion of the UDF construction work and prior to UDF operations, a UDF construction completion report will be prepared and submitted to EPA. That report will include the following items:

- Background information and a description of pre-construction activities;
- A description of the construction activities performed;
- A description of any deviations from the design submittals approved by EPA and any other difficulties and problems encountered;
- Results of QA/QC testing performed during construction;
- As-built record construction drawings signed and stamped by a professional engineer, including:
 - Baseline subgrade and top of baseline liner system survey drawings showing elevation contours, grade changes, constructed limits, and features; and
 - Final elevation survey drawings showing limits, grade changes, and constructed features associated access roads, drainage components, leachate systems, etc.;
- Representative project photographs; and
- Demonstration of achievement of the applicable Performance Standards in the Revised Permit for the construction of the UDF.

3 UDF Operation-Phase Controls and Monitoring

3.1 Oversight

Once UDF construction is complete, GE will provide oversight and engineering support for the duration of UDF operations until the installation of the final cover is completed. This oversight will be provided for all phases of operation, placement of consolidation material, removal/treatment of collected leachate, and installation of daily and intermediate cover systems. Field oversight personnel will work closely with the office-based support staff to observe the progress and quality of the UDF-related work and to make determinations as to whether the work is proceeding in conformance with the UDF Revised Final Design Plan and SIP requirements and specifications.

3.2 Routine Site Controls

The UDF has been designed to facilitate the placement and containment of remediation-derived soils, sediments, and associated debris within the consolidation area. Routine site controls to be implemented during the operation of the UDF are described below. The controls and monitoring specific to consolidation material placement are discussed separately in Section 4.

3.2.1 Access Controls and Site Security Measures

Measures will be implemented to limit access onto the UDF area to authorized personnel only. Access controls to be implemented during UDF construction (discussed in Section 2.3.1) will be retained throughout the UDF operations. Specifically, security fencing and associated No Trespassing signs will continue to be located around the entire perimeter of the UDF operations area. As noted above, there will be two secure entry gates designed for vehicle access – one at the northern access road and one at the primary site entrance road off Woodland Road. Several other gates (two vehicle gates and two personnel gates) will exist along the security fence perimeter. These other gates, as well as the northern vehicle access gate, will be locked at all times to restrict access to authorized personnel only. For the duration of operation activities, a log sheet will be maintained for on-site personnel and any site visitors. Site security measures are described in greater detail in the SMP.

Buildings and structures will be equipped with locking doors with access provided by keyed door entry. Confined spaces and other similar infrastructure, such as leachate riser vaults and leachate loadout facility controls, will be secured with access controls to prevent unauthorized entry.

3.2.2 Stormwater and Erosion Controls and BMPs

Once consolidation material is placed in the UDF and before installation of the final cover system, stormwater will be managed either as contact water (defined as water that has had the potential to contact the consolidation material) or non-contact water (defined as water that has not contacted the consolidation material). Contact water will be captured and managed as leachate, which is water that has percolated through the consolidation material. Further discussion of contact water (leachate) management is provided in Section 4.3.

Non-contact stormwater will be managed during UDF operation as described herein and in Section 5.3 of the UDF Revised Final Design Plan. The objective of the stormwater management system is to provide conveyance (in the case of channels and culverts) and storage/infiltration capacity (in the case of stormwater management areas [SMAs] or stormwater ponds) for events up to and including the 100-year, 24-hour design storm event. As

discussed in the UDF Revised Final Design Plan, the UDF stormwater management system will account for the effect of climate change by increasing the severity of design storms using available predictive methods. Stormwater conveyance features are designed to convey the peak flows from the design storm while maintaining non-erosive conditions and controlling the rate and volume of stormwater runoff to abutting properties to no greater than existing conditions. During the UDF operations, only the stormwater and erosion controls outside of the consolidation area limits will be in service. These controls include stormwater basins, SMAs, ditches, and culverts around the UDF perimeter and are shown on Figure 2.

OMM requirements for the permanent stormwater management features during the UDF operation phase will be included in GE's SWPPP to be provided in the SIP, as stated in Section 4.6 of the UDF Revised Final Design Plan and relevant aspects of technical specification Section 31 25 00. See also Sections 3.3.7 and 3.5.1 of this Revised UDF OMM Plan.

3.2.3 Air Emissions Control Measures and BMPs

The primary objective of the air emission controls to be implemented during the UDF operations is to minimize adverse impacts on ambient air quality. Until the placement of consolidation material commences, air emissions controls will focus on particulate matter due to wind-blown dust from exposed soil and aggregate surfaces within and around the perimeter of the UDF. Once consolidation material placement begins, air emissions controls will also include polychlorinated biphenyls (PCBs).

Air emissions resulting from the generation of dust will be controlled through various BMPs similar to those described in Section 2.3.3. These will include the application of water on site roads, the use of temporary surface coverings (e.g., tarps, spray applied coverings) on dust-prone areas that may be dormant for a period of time, managing vehicle speeds, assessing wind conditions to determine whether vehicle routes could be adjusted to minimize dust generation, and the possible use of road surface materials such as aggregates in high-traffic areas prone to dust generation. These dust control measures and BMPs for the UDF operations are specified in UDF Revised Final Design Plan technical specification Section 01 57 00 – Temporary Controls.

3.2.4 Noise Control Measures and BMPs

During operation of the UDF, the operating contractors and personnel will be responsible for implementing routine control measures and BMPs to mitigate noise impacts to the maximum extent practicable. Control measures and BMPs employed during the UDF operations to minimize noise impacts will be similar to those listed in Section 2.3.4. These will include, as appropriate, the use of properly muffled motorized equipment, scheduling of sitework activities to minimize heavy concentrations of equipment use that might result in prolonged or excessive elevated noise levels to avoid early morning or nighttime hours, the use of sound-attenuating barriers around stationary equipment, controlling the speed at which equipment is operated, and using quieter backup alarms on certain construction equipment that frequently operates in reverse (e.g., front-end loaders and dump trucks). These noise control measures and BMPs are specified in UDF Revised Final Design Plan technical specification Section 01 57 00 – Temporary Controls.

3.2.5 Odor Control Measures and BMPs

The material that will be delivered to and consolidated in the UDF will consist primarily of excavated soil and sediments from the ROR. The placement of these materials in the UDF is not anticipated to produce odors sufficient to be noticeable outside of the immediate work area. However, if consolidation material is brought to the UDF that is anticipated to be exceptionally odorous, it will be placed within the UDF and covered as soon as

possible with daily cover, as discussed in Section 4.5.1. The quality-of-life odor standard for the ROR Remedial Action is described in Section 4.5 of the Revised QOL Plan. Additional information pertaining to odor control measures is provided in UDF Revised Final Design Plan technical specification Section 01 57 00 – Temporary Controls.

3.2.6 Lighting Control Measures and BMPs

During operation of the UDF, the performance of work activities may be necessary before dawn or after dusk. During times of low light or poor visibility, artificial lighting will be used to illuminate work areas and improve worker safety. Lighting will also be needed on equipment and vehicles to ensure their safe passage within UDF area during low-light conditions. Fixed lighting will be used to provide safe illumination of certain work areas within the UDF area (e.g., equipment and material staging areas, access ways, contractor facilities). As previously noted, a quality-of-life standard for lighting impacts has been established, as described in Section 4.6 of the Revised QOL Plan. That standard includes, in Section 4.6.2, routine control measures to minimize or limit the potential off-site nuisance impacts from project-related lighting. Those relevant to UDF operations include, as appropriate, the same measures identified in Section 2.3.5 for application during UDF construction. These lighting control measures are also specified in UDF Revised Final Design Plan technical specification Section 01 57 00 – Temporary Controls.

3.2.7 UDF Containment Cell Contamination Controls and BMPs

Measures will be employed to control incidental releases of contaminated materials (i.e., sediments, soils, debris, and contact water) outside of the UDF consolidation area during consolidation material placement operations. These measures will include the perimeter (containment) berm surrounding the UDF cells, temporary interior cell drainage ditches provided to manage contact stormwater runoff from consolidated material, aggregate vehicle tracking pads located at exit points within the cells, and BMPs implemented to remove soil material from construction vehicle tires and tracks prior to exiting the cells. They will also include the use of temporary clean access roads into and out of the UDF cells and the use of designated dumping areas within the cells composed of clean soils for consolidation material delivery truck operations. Aggregate vehicle tracking pads will be placed at exit points from the clean access roads out of the cells as appropriate to mitigate the spread of contamination out of the UDF containment cells. Construction equipment that is dedicated to long-term use within the cells and that tracks over and/or handles impacted materials will be subject to decontamination and wipe sample verification prior to being removed from the containment cells.

3.3 Environmental Monitoring

To verify that the operation of the UDF meets the applicable quantitative standards set forth in the Revised Permit and the Revised QOL Plan, several monitoring activities will be conducted throughout the course of UDF operations. These environmental monitoring activities are described in the following sections.

3.3.1 Air Monitoring for Particulate Matter

Air monitoring for particulate matter as PM₁₀ will be conducted throughout the operation of the UDF. Air monitoring stations will be located strategically around the UDF area to monitor for particulate matter. Specifically, the air monitoring for particulate matter at the GE Parcel will be performed at the five locations shown on Figure 3. Specifics relating to the air sampling procedures for particulate matter are provided in Appendix G of the

FSP/QAPP. The quality-of life standards for airborne particulate matter, which include Notification and Action Levels, and the actions to be taken in responses to exceedance of those levels (including notifications and contingency measures) are described in Section 4.3 of the Revised QOL Plan and in the AAMP.

In addition to real-time particulate monitoring, as stated in Section 6 of the AAMP, qualitative visual observations of dust-related conditions in the UDF area will be employed at least once daily or as conditions warrant, along with real-time instrument readings and/or sample results, to assess conditions and the effectiveness of the routine controls and BMPs during UDF operations. Visual observations will include the presence or absence of dusty conditions or dust-producing activities. Under the qualitative QOL standard for visible dust described in Section 4.3.1.3 of the Revised QOL Plan, if visible dust caused by UDF operations is observed leaving the immediate work area, GE will investigate the cause of the visible dust, and the appropriate monitors will be checked as soon as possible after the dust has been observed. If warranted based on investigation of the cause of the visible dust and the particulate monitoring data, GE will implement appropriate measures to mitigate the visible dust leaving the work area.

3.3.2 Air Monitoring for PCBs

Air monitoring will also be conducted for airborne PCBs during operation of the UDF. The PCB air monitoring stations to be used at the UDF area will consist of low-volume samplers, which are battery-powered units that do not require a fixed power source and will be positioned at the same five locations shown on Figure 3. Prior to the start of UDF consolidation operations, GE will conduct up to four rounds (two per year) of baseline air sampling at three of the five locations shown in Figure 3. The selected locations for this baseline air sampling will be weighted towards proximity to potential receptors (e.g., toward the October Mountain State Forest campground), during the months of July and September.

At the beginning of UDF operations, PCB air monitoring will be conducted for two sequential 24-hour periods (i.e., two back-to-back daily events) to confirm that representative airborne concentrations for PCBs do not exceed the designated air quality standards for PCBs, set forth in Section 4.3 of the Revised QOL Plan and the revised AAMP. If this PCB monitoring indicates that air levels are acceptable (i.e., are below the PCB Notification Level), the monitoring frequency will be reduced to one 24-hour monitoring event weekly for the remainder of UDF operations. The procedures for collection and analysis of air samples for PCB analysis using low-volume samplers are provided in Appendix G of the FSP/QAPP. The PCB Notification and Action Levels and the actions to be taken in responses to exceedances of those levels (including notifications and contingency measures) are described in Section 4.3 of the Revised QOL Plan and in the revised AAMP.

3.3.3 Groundwater Monitoring

3.3.3.1 Groundwater Level Gauging

During the UDF operations, the following nine monitoring wells previously installed as part of the UDF pre-design investigation (PDI) will be maintained and gauged on a semi-annual basis (i.e., every six months). These nine monitoring wells are shown on Figure 4 and are identified as follows:

- MW 2022-1
- MW 2022-1SR
- MW 2022-2
- MW 2022-3

- MW 2022-4
- MW 2022-4S
- MW 2022-5
- MW 2022-6
- MW 2022-7

Based on previous gauging events, the seasonal high and low groundwater levels occur in mid-spring and mid-fall, respectively. Based on the results of the PDI, monitoring well water level gauging will be conducted in May and November of each year, which are generally the months when the highest and lowest water levels occur, respectively. For each gauging event, a groundwater contour map will be prepared.

3.3.3.2 Groundwater Quality Sampling

Groundwater testing for environmental quality will be performed semi-annually (in the spring and fall) at the nine groundwater monitoring wells identified in Section 3.3.3.1 and shown on Figure 4. Groundwater testing for environmental quality will serve to determine the presence and concentration of chemical constituents in the groundwater and to compare those findings to data collected previously as part of the UDF PDI and reported in GE's Revised Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area (Revised UDF PDI Summary Report; Arcadis and AECOM 2024). The collected groundwater samples will be analyzed for the full list of analytes presented in the PDI test result summary tables in that report, which include data for PCBs, volatile organic compounds, semi-volatile organic compounds, inorganics, dioxins/furans, pesticides, and herbicides, as well as per- and polyfluoroalkyl substances.

3.3.3.3 Groundwater Sampling Results

Laboratory analytical results obtained from the groundwater sampling described in Section 3.3.3.2 will be compared to the Method 1 GW-3 groundwater standards set forth in the Massachusetts Contingency Plan (MCP), which are based on potential discharges to surface water and are applicable to any area of the Commonwealth. The GW-1 standards in the MCP are based on the potential use of groundwater as drinking water, either currently or in the foreseeable future. There is no current or reasonably foreseeable future use of groundwater as drinking water at the GE Parcel, and there are no active drinking water wells within 500 feet of the UDF consolidation area. The GW-2 standards in the MCP are based on groundwater that is a potential source of hazardous vapors to indoor air. Groundwater is classified as GW-2 if it is located within 30 feet of an occupied building and the average annual depth to groundwater is 15 feet or less. While the UDF area will include a building associated with the water treatment system, the seasonal high groundwater table in the UDF area will be more than 30 feet below the surface. Accordingly, the GW-2 standards do not apply.

The groundwater analytical data and the results of the comparison to the GW-3 standards will be presented in a summary report to be submitted to EPA as soon as practicable following receipt of the validated data but no later than before the next groundwater sampling event. In the case of an exceedance of an MCP Method 1 GW-3 groundwater standard, GE will evaluate the exceedance by first reviewing past groundwater quality data obtained during the UDF pre-design investigation work, as presented in the Revised UDF PDI Summary Report, to determine whether the noted exceedance is consistent with the baseline PDI data from the UDF area. If not, GE will review and assess UDF activities to identify whether those activities could have contributed to the noted exceedance. At a minimum, GE will continue to monitor the constituent subject to the noted exceedance in the

next round of groundwater sampling. Should this exceedance condition persist in the next sampling event, GE will coordinate with EPA to discuss possible actions for further monitoring and/or investigation.

3.3.4 Meteorological Monitoring

The weather station installed in October 2022 at the UDF area as required by EPA will be used during UDF operations, but at a different location to avoid the UDF construction footprint. Specifically, the location planned for installation of the weather station is shown on Figure 5. The weather station records year-round weather data, including rainfall, temperature, windspeed and direction, and barometric pressure, and is solar-powered and web-enabled, allowing for telemetric upload of collected data for desktop (dashboard) weather monitoring. The collected weather data will be used to monitor, among other parameters, wind speed and direction that will be useful in planning and managing UDF consolidation activities. These data will also be used to support understanding and evaluation of the air monitoring results for particulates and/or PCBs (discussed in Section 3.3.2), as well as noise monitoring results (discussed in Section 3.3.5).

3.3.5 Noise Monitoring

Noise levels will be periodically monitored during the UDF operations to verify that levels are compliant with the noise standards presented in Section 4.4.1 of the Revised QOL Plan. As noted in Section 2.5, the noise monitoring to be conducted during the ROR Remedial Action is described in detail in Section 3.7 of the revised CMP (Attachment G of the revised POP). In general, as during UDF construction, the point of compliance for these standards will be at the closest receptor location, but noise monitoring may be performed closer to the source(s) for ease of implementation and to conservatively demonstrate compliance. During UDF operations, noise monitoring will be performed at the beginning of regular daily operations and then monthly for the remainder of the operations, as well as in response to noise complaints (if any). The noise monitoring will be conducted at the same five locations specified for air monitoring, as shown on Figure 3, or if conducted in response to a noise complaint, at a location situated to evaluate that complaint. The noise monitoring setup and procedures are described in Section 3.7 of the revised CMP. Details on the noise standards and responses to exceedances of those standards (including notifications and contingency measures) are included in Section 4.4 of the Revised QOL Plan.

3.3.6 Odor Monitoring

During operation of the UDF, the operating contractors and personnel will be responsible for implementing routine measures and BMPs to control objectionable odors to the extent practicable. As noted in Section 3.2.5, and based on experience from other PCB remediation projects, odors are not expected to be a significant concern during the operation of the UDF because PCBs are odorless. In any case, a quality-of-life odor standard has been established, as described in Section 4.5 of the Revised QOL Plan, to mitigate the presence of objectionable project-related odors identified by project workers, GE, or EPA or via an odor complaint from the public. One component of that standard relates to hydrogen sulfide (H₂S), which has a distinct rotten-egg smell. That component specifies that, if an odor complaint or report is received that relates to the distinct rotten-egg smell of H₂S, GE will conduct H₂S monitoring at the work area perimeter to assess compliance with the numerical QOL standard for H₂S established in the Revised QOL Plan. The hydrogen sulfide monitoring locations, equipment, and procedures are described in Section 3.8 of the revised CMP that is Appendix G of the revised POP.

3.3.7 Stormwater Monitoring

Stormwater monitoring during UDF operations will be conducted in accordance with the operations SWPPP to be provided in the SIP, which will include the applicable substantive requirements specified by Sector L of the NPDES Multi-Sector General Permit (MSGP).

3.4 Roads and Traffic

As described in previous sections, the UDF area will be accessed by two entrance roads – a primary entrance road located at the southeastern corner of the area off Woodland Road and a secondary entrance road located at the northern end of the area. The primary site entrance road will connect to internal site roads that provide access to the UDF for delivery of consolidation materials to the UDF cells, loadout and trucking of leachate for off-site treatment, and for daily use by the operations contractors and CQA personnel. These entrance roads and the internal site access roads are shown on Figure 2.

The methods and procedures for transportation of removed material to the UDF are described in GE's Revised On-Site and Off-Site Transportation and Disposal Plan (T&D Plan) (Arcadis 2024e), submitted on October 15, 2024. Monitoring, assessment, and measures to mitigate traffic and associated impacts within the areas neighboring the UDF area are discussed in Section 6 of the Revised QOL Plan. In particular, as noted in Section 2.6 of this UDF Revised OMM Plan, local paved municipal roads will be subject to the assessments described in Section 6.2 of the Revised QOL Plan before, during, and after their use in connection with the UDF.

3.5 Inspection and Maintenance

GE will be responsible for the regular inspection and maintenance of the numerous UDF components. Together with daily work inspections, visual inspections of the engineered components of the UDF will occur on a regular basis during UDF operations to inspect for degradation or deficiencies. The frequency of such inspections is dependent on the system as described below. Maintenance activities will be performed as a result of issues identified by inspections or as part of routine servicing.

3.5.1 Stormwater Management System

The stormwater management system used for the management of non-contact stormwater runoff, as described in Section 4.5 of the UDF Revised Final Design Plan, will be inspected on a monthly basis and after rainfall events greater than the two-year 24-hour event (equivalent to 3.84 inches of rainfall in a 24-hour period). Components of the stormwater management system to be inspected include:

- Stormwater basins;
- SMAs;
- Drainage channels; and
- Culverts and outlet aprons.

The intent of the stormwater management system inspection is to ensure that the features of that system are operating as intended. The inspections will observe whether erosion is occurring due to erosive velocities of surface water and/or sparse vegetation and detect the presence of obstructions to drainage. If it is found that erosion is occurring, maintenance will be performed to restore the degraded areas to their designed condition.

Such maintenance could include the placement of new soil, regrading of existing soil within the eroded area, seeding, and/or installation of an erosion control mat or other products to enhance the establishment and durability of site vegetation. Impediments to drainage will be addressed by removing the material creating the impediment. Additionally, the occurrence of drainage impediments may indicate erosion from upstream areas, which would be evaluated and, if necessary, repaired. For the North and South Stormwater Basins, maintenance will include the periodic scraping of the stormwater basin floors to remove volunteer vegetation so as to maintain the exposed sandy-gravelly soils as discussed in Section 4.6.5 of the UDF Revised Final Design Plan.

In addition to the inspection and maintenance requirements specified in this Section, the UDF operations-phase SWPPP to be provided in the SIP will include the applicable substantive requirements set forth in Sector L of the NPDES MSGP and in the relevant stormwater feature design specifications. The OMM requirements for the UDF permanent stormwater management system will include the more stringent of the SIP (i.e., SWPPP) requirements and the requirements in this section.

3.5.2 Leachate Management System

Inspection and required maintenance of the leachate management system, described in Section 2.6.4 of the UDF Revised Final Design Plan, will be performed annually during operation or more frequently if performance issues are detected. Components of the leachate management system to be inspected include:

- Leachate collection and removal system (both primary and secondary);
- Leachate transfer (conveyance) system; and
- Leachate storage system.

GE will perform the leachate management system inspections. Further description of inspection and maintenance of the leachate management system is provided in Section 4.6.2.

3.5.3 General Site Features

Inspection and maintenance of the general site features will be performed to document and maintain the functionality of the features. Weekly visual inspections will be performed for operations areas, access roads, staging areas, and any other general site areas susceptible to deterioration as a result of site activities. Site support equipment, as well as heavy equipment, will be available at the UDF area during operations as necessary to perform periodic maintenance of site areas and equipment without hindering operations.

3.5.3.1 Access Roads

The inspection of access roads will focus on identifying signs of degradation or deficiencies caused by erosion, tire rutting from heavy equipment, loss of top-course gravel due to snow removal and ponding due to precipitation or settling. Deficiencies will be corrected as necessary through the addition of gravel and/or regrading to prevent hinderance to site operations. Street sweeping of the asphalt pavement portion of the primary site entrance road will be performed as necessary to prevent sediment tracking onto Woodland Road and to maintain the integrity of the on-site pavement section.

3.5.3.2 Equipment and Material Staging Areas

Similar to the inspection of access roads, staging areas will be visually inspected for deficiencies or degradation caused by erosion, tire rutting, ponding, and overall degradation of the gravel surface. Deficiencies will be corrected as necessary through the addition of gravel and/or regrading to prevent hinderance to site operations.

3.5.3.3 Vegetated Areas

Any surfaces within or adjacent to the UDF footprint that have been stabilized with vegetation will be visually inspected. Inspections will investigate for evidence of erosion, surface movements, or other abnormalities, including signs of animal burrowing on slopes where such activity may pose a risk to slope stability. Inspections will also identify bare or sparsely vegetated areas. If it is found that erosion or burrowing activity is occurring, maintenance will be performed to restore the affected areas. Maintenance will include periodic mowing of vegetated surfaces, at least once annually. In the event of erosion, maintenance could include placement of new soil, regrading existing soil within the eroded area, seeding, and/or installation of an erosion control mat or other products to enhance the establishment and durability of site vegetation. Vegetated areas on the UDF final cover will be subject to weekly and monthly inspections as discussed in Section 4.5.3.

3.5.4 Project Area Security Measures

Security measures, including the perimeter fencing and warning signs and all vehicle and personnel gates, will be inspected routinely when the workers are present. Maintenance or repairs found to be necessary as a result of the inspections will be implemented as soon as practicable following discovery of the need for such action. If it becomes necessary to remove any portions of the perimeter security fence to perform repairs, complete corrective grading work, or provide access to operations areas, the following security measures will be taken: (1) only the minimum amount of fencing will be removed to carry out the necessary work; (2) the required work in the location of the removed fence will be carried out as quickly as possible to minimize the duration of fence removal; (3) additional warning signs will be placed as necessary in the location of the fence removal; and (4) temporary fencing that does not hinder the work being performed will be installed and maintained to provide a continuous secure site perimeter throughout the duration of the work being performed.

3.5.5 Monitoring Equipment

Environmental monitoring equipment located at the UDF area during the UDF operations will be subject to routine inspections and any required maintenance. This equipment, which includes, but is not limited to, the weather station and air, noise, and odor monitoring equipment, will be inspected at least weekly (or monthly for noise and odor monitoring equipment) to ensure that the equipment has not been damaged and is functioning properly. In the event of needed maintenance or repairs to the air or noise monitoring equipment that would leave the equipment inoperable for the next scheduled monitoring event, temporary or replacement equipment will be used. Maintenance will also include periodic calibration of monitoring equipment per manufacturers' recommendations or generally accepted industry best practices.

3.6 Documentation and Reporting

The controls and monitoring activities performed during UDF operations will be documented for record purposes. This documentation will be maintained on-site by the operations contractor and/or by GE for review and reference purposes. Additionally, monitoring data obtained during UDF operations for particulate and PCB air monitoring,

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noise monitoring, and odor monitoring (if any), as well as other appropriate monitoring data as determined by EPA and GE, will be made available to the public via posting of those data to GE's project website, as described in Section 7.1.2 of the Revised QOL Plan. As noted here, posting of monitoring data to GE's project website (including any exceedances of Notification and Action Levels) will be done within 72 hours after receipt of the data.

During UDF operations, the reporting required by QOL Plan related to the air, noise, odor, and lighting standards will be made as necessary. In addition, during the UDF operations period, GE will prepare and submit to EPA an annual report that summarizes the results of the air monitoring, groundwater level gauging, groundwater quality sampling, meteorological monitoring, noise monitoring, and any other monitoring conducted at the UDF area.

4 UDF Operation-Phase Consolidation

This section describes the procedures associated with the placement of consolidation material within the UDF, such as cell filling, fill progression surveying, tracking and reporting of consolidated material placement, use of cover material, and management of leachate generated at the UDF. The handling of consolidation material at the UDF will prioritize mitigation of potential risks or hazards to the health and safety of workers, the general public, and the environment. To achieve this standard, various site controls will be implemented and maintained. In addition, this section discusses inclement weather operations.

4.1 Consolidation Material Placement

Materials will be placed within the UDF using methods that are protective of the UDF baseliner system, reduce the daily working area, and maximize utilization of the consolidation capacity. The specific methods for managing and placing material within the UDF are dependent on the means of delivery of the material from the remedial areas. This section assumes that trucks will be used to transport consolidation material into the UDF, and that conventional earthwork equipment (dozers, loaders, excavators, and compactors) will be used to handle and place the material. The initial filling and the anticipated progression of consolidation material placement within the UDF cells are also discussed in Section 4.2 of the UDF Revised Final Design Plan.

4.1.1 Initial Cell Filling

Consolidation material will generally be placed in horizontal layers, commonly referred to as lifts, which will then be compacted using steel drum rollers. The thickness of each lift can be varied depending on the compaction characteristics of the consolidation material, the size of the particles in the consolidation material (larger particles requiring thicker lifts), and the effectiveness of the compaction equipment being used (given that larger equipment that produces greater compaction energy allows for compaction of thicker lifts). The maximum lift thickness will be determined during material placement by conducting test fills with differing lift thicknesses to evaluate compaction throughout the lift thickness. Considering that the consolidation material will consist of soils and sediments, lift thickness may be on the order of one to two feet. Thinner lifts will result in greater compaction, which is advantageous for effective use of the UDF's capacity but increases the time to place the consolidation material. Requirements for placement of the consolidation material are provided in UDF Revised Final Design Plan technical specification Section 31 22 00 – Grading, and Section 31 23 00.10 – Consolidation Material.

As part of the UDF design, the baseliner system was evaluated for damage potential due to the operation of over-the-road trucks (e.g., dump trucks, semi-trailer trucks, and similar heavy trucks) directly on top of the uppermost aggregate layer and before placement of consolidation material. This analysis determined that the geosynthetic components of the baseliner system will be adequately protected from damage by the overlying two-foot-thick aggregate layer and that no additional aggregate or consolidation material layers are needed to permit operation of heavy truck traffic. A similar analysis for the leachate collection pipes and side-slope riser pipes was performed and reached the same conclusion. However, maneuvering of tracked equipment directly on top of the uppermost aggregate layer of the baseliner system will disturb the aggregate surface and has the potential to disturb the buried geosynthetics. Consequently, maneuvering of tracked equipment on the aggregate layer of the baseliner system will be limited to the extent practicable.

Precautions will be taken during placement of the initial lift of consolidation materials within the UDF. The first lift of materials will consist of a minimum of 12 inches of selected soils or sediments that are free of objects greater than three inches in any dimension, any sharp objects, or any other deleterious materials that could potentially

damage geosynthetics within the underlying baseliner system. During placement of the initial lift, a spotter will be stationed on top of the baseliner system and to the side of the spreading equipment to observe the placement of the material. If objects are spotted that could possibly damage the baseliner system, the spotter will signal the equipment operator to stop operation to allow the objectionable material to be removed from the material being spread.

After placement of the initial lift, materials will then be placed in lifts of an equal thickness continuing, in sequence, across the extent of the limits of consolidation starting at the cell floor and progressing upgradient. A specified number of passes will be made with an appropriately sized steel drum roller on the entirety of each lift. As noted above, the requirements for placement of the consolidation materials are provided in UDF Revised Final Design Plan technical specification Section 31 22 00 – Grading, and Section 31 23 00.10 – Consolidation Material.

The conceptual phasing of the consolidated material placement and final cover construction sequencing can be seen on Drawing 10 of the UDF Revised Final Design Plan Drawings.

4.1.2 Final Cell Filling

Material will be placed in lifts until the maximum proposed consolidation material grades are achieved or until consolidation material is no longer being generated. The maximum grades of consolidation material can be seen on Drawing 7 of the UDF Revised Final Design Plan Drawings.

4.2 Fill Progression Surveying

In order to monitor and document the progress of the placement and compaction of consolidation materials within the UDF consolidation area, fill progression surveys will be conducted annually throughout the operational phase of the UDF. The survey data collected will be used to compute the volume of material placed and the remaining air space. Surveying will also verify that maximum slopes are not exceeded along the perimeter of the limits of consolidation area and that the maximum top of consolidation materials do not exceed the design grades. The survey data will be used to create fill progression plans as required in order to evaluate the rate of material placement, identify potential areas that require additional material placement, and monitor overall conformance with Drawing 7 of the UDF Revised Final Design Plan Drawings. The annual fill progression survey will be completed at the end of consolidation material placement for the year and prior to significant snow accumulation.

4.3 Contact and Non-Contact Water Management

Any waters from the UDF, including surface water runoff generated by precipitation or snowmelt, that comes into contact with, or that has had the potential for contact with, consolidation material will be considered contact water and will be managed as leachate. Provisions such as the use of impermeable heavy-duty plastic sheeting will be employed as a daily cover on UDF cell areas that have reached grades. Such sheeting will allow for gravity drainage of non-contact runoff generated from sheeted areas to drain directly to the perimeter of the UDF cells, where this non-contact water will be properly collected and conveyed in the UDF berm perimeter ditch to the North Stormwater Basin. Runoff generated from sheeted daily cover areas within the UDF cells that cannot drain by gravity to the UDF berm perimeter ditch will be collected and managed as contact water. Further description for the use of plastic sheeting for daily cover as it relates management of contact and non-contact stormwater runoff will be included in GE's SWPPP to be provided in the SIP.

All surface water that collects within a cell that does not yet contain any consolidation material will be considered non-contact water and will be removed by pumps and discharged to stormwater management features such as

the perimeter ditch, which will drain to the North Stormwater Basin. Once placement of consolidation material commences within a UDF cell, any water that is generated within that cell will be collected and managed as contact water. However, after installation of the geomembrane layer of the final cover has been completed, runoff from that area will be assumed to be non-contact in nature. Maintaining separation between contact and non-contact waters is necessary for proper management of UDF waters throughout operation.

Treated water from the on-site water treatment system that is suitable for surface water discharge may be used for dust control within the UDF cell area, but only where it is applied directly to consolidation material to control dust. The use of such treated water for dust control will be dependent on the amount water needed for that purpose and the timing for its use. Other areas within the UDF cells that are being used for clean access roads and dumping areas will utilize water obtained from a Town of Lee water supply source.

As discussed in Section 2.6.3 of the UDF Revised Final Design Plan, during initial UDF operations, collected contact water (leachate) will be temporarily stored in on-site storage tanks until it is removed and transferred by tanker truck for treatment and disposal at GE's Building 64G water treatment facility at its Pittsfield facility or another approved treatment facility outside the UDF property. Additional details regarding such off-site treatment and disposal, including the identification of an approved off-site treatment facility other than Building 64G if such a facility is planned to be used, will be provided in the UDF SIP. During later UDF operations associated with hydraulic dredging and pumping, collected leachate will be treated at an on-site treatment facility at the UDF area and discharged to the Housatonic River. As previously noted, the conceptual design for that on-site treatment facility is provided in the UDF Dewatering/Treatment Design Addendum.

4.4 Consolidated Material Tracking

Accurate record keeping of the consolidated materials brought into and placed within the UDF is critical to ensure that air space within the consolidation footprint is utilized efficiently. The methods and procedures for transport of material to the UDF are described in GE's Revised T&D Plan.

4.4.1 Delivery Receipt and Routing

Upon entering the UDF, vehicles transporting consolidation material will be directed to the check-in area where they will be logged and visually inspected. An operator will be stationed at the UDF area entry point who will be responsible for verification of material being accepted at the UDF and to ensure that all materials have been properly transported. The vehicle will then be directed to the appropriate portion of the consolidation area for disposal of the consolidation material. After disposal, vehicles will be directed back to the UDF areas entrance.

4.4.2 Consolidated Material Placement Quantity

To monitor the quantity of consolidated material being placed in the UDF cells, surveying will be performed periodically. Surveying/tracking the material placed involves verifying that maximum slopes of consolidated material are achieved but not exceeded along the perimeter and that the maximum top of consolidation material grades are not exceeded. Consolidated material placement quantity surveys will be performed at least annually. Annual placement quantities will be recorded, and the end-of-year survey will be completed at the end of the consolidation material placement for the respective year and prior to significant snow accumulation.

4.4.3 Fill Capacity Monitoring

Similar to the tracking of the consolidated material placement quantity, the maximum slopes of consolidated material along the perimeter and the maximum grades along the top of consolidation material will be monitored. As previously discussed in Section 4.2, achievement of the maximum grades and/or maximum slopes will indicate that the consolidation area is approaching or has reached the maximum capacity allowable. Fill progression surveying will be performed annually, and an analysis of fill capacity as it compares to the maximum consolidation material grades will be performed.

4.5 Cover Material Management

As the placement of consolidation material progresses from initial lift to the closure of the UDF, several types of covers will be used to secure the consolidation material and to minimize infiltration of precipitation into the consolidation materials and underlying UDF leachate collection system.

4.5.1 Daily Cover

A daily cover will be installed over the active portions of the consolidation area at the end of each working day. The cover will consist of a minimum of six inches of soil, heavy-duty plastic sheeting, spray-applied coatings, or similar materials. The requirements for soil daily cover soil are provided in technical specification Section 31 05 13 – Soils for Earthwork. In the event that plastic sheeting is used, sand bags, soil piles, or other heavy weighted materials will be installed along the perimeter to secure the sheeting against wind uplift. The primary purpose of the daily cover is to minimize exposure of the consolidation materials and to reduce the potential for migration of consolidation material via airborne dust. Stormwater runoff resulting from soil-type daily cover will be managed as contact water. Stormwater runoff generated from areas covered by plastic sheeting will be managed as discussed in Section 4.3.

Depending on the type of daily cover used, the material may be removed prior to continued overlying placement of consolidation material on the next working day or may remain in place and be filled over. Plastic sheeting will be removed prior to successive consolidation material placement. Unless otherwise proposed by the operations contractor, soils used for daily cover will be obtained from on-site sources (i.e., surplus excavated soils generated during construction of the UDF). Other possible daily cover materials, such as plastic sheeting and spray-applied coatings that may be considered for use, will be described in the SIP. The daily cover will be allowed to remain in place on temporarily inactive consolidation areas for no longer than 180 days from when the daily cover was initially placed in the inactive areas. Daily cover used on areas that may remain inactive beyond 180 days will be recovered with the interim cover material as discussed in Section 4.5.2. In all cases, daily cover applications will be maintained to ensure its effectiveness during use.

As noted in Section 4.3, treated water from the on-site water treatment system that is suitable for surface water discharge may be used for dust control within the UDF cell areas, but only where it is applied directly to soil-type daily cover material to control dust. The use of such treated water for daily cover dust control will be dependent on the amount water needed for that purpose and the timing for its use.

4.5.2 Interim Cover

If a portion of the consolidation area reaches the final design height but the completed area is not large enough to warrant installation of final cover, an interim cover will be installed. An interim cover will also be installed on areas

that have not reached final consolidation grade but that have been idle or are expected to remain unworked for a period of 180 days or greater. The interim cover will consist of a minimum of 12 inches of clean soil capable of supporting vegetation. The requirements for interim cover soil are provided in technical specification Section 31 05 13 – Soils for Earthwork. Depending on the season in which the interim cover is installed, the cover may be seeded with a quickly germinating rye grass to establish an erosion resistant vegetative cover. The interim cover will provide cover for the underlying consolidation materials and potentially serve as a subbase for the future final cover system. The interim cover may remain in place or may be removed prior to future consolidation activities in that area, if any.

4.5.3 Final Cover

Following completed placement of consolidation materials, the completed area will be covered with a multi-layered geosynthetic final cover system to isolate the consolidated material from direct contact with the environment, minimize leachate generation, and support the establishment of vegetation. The final cover system has been designed to minimize precipitation infiltration through the final cover system liner, manage potential gas accumulation, and remain stable for the design conditions analyzed. The final cover design is described in detail in Section 4.5 of the UDF Revised Final Design Plan, the final grading of the top of the final cover system is shown on UDF Revised Final Design Plan Drawing 8, and details of the final cover are shown on Drawing 25 in that plan. More details pertaining to the UDF final cover will be included in the UDF Final Cover/Closure Plan, as described in Section 4.3.2.5 of the Final Revised SOW and the UDF Revised Final Design Plan.

Newly completed final cover areas will be inspected weekly until the vegetative cover is established and monthly thereafter. The final cover inspections will be performed to assess the overall integrity of the constructed system. Visual inspections will investigate for evidence of erosion, damage to components of the final cover system, uneven settlement of the final cover, or other abnormalities, including signs of animal burrowing. Inspections will also call attention to bare or sparsely vegetated areas of the final cover system that will need repair or revegetation. Details on monitoring of the UDF final cover system after closure will be provided in the UDF Post-Closure M&M Plan in accordance with Section 5.2 of the Final Revised SOW.

4.6 Leachate Management

Leachate generated within the UDF cells will be managed using on-site leachate collection, conveyance, and storage systems. The design of the leachate collection system is described in Section 3.3.6 of the UDF Revised Final Design Plan. This section describes the operation and maintenance of the leachate collection, conveyance, and storage systems.

4.6.1 Leachate Management System Operation

The UDF will include two individual cells, each with its own primary and secondary leachate collection and removal systems. Generated leachate will be removed from both cells and conveyed by a buried force main to a leachate storage facility located at the southern end of UDF prior to treatment or off-site disposal. The components of the UDF leachate system are described in Section 3.3.6 of the UDF Revised Final Design Plan and shown on Drawing 6 of that plan.

4.6.1.1 Cell Leachate Collection and Removal

The UDF baseliner will include both a primary and a secondary leachate collection system, each of which will consist of a granular drainage and a geosynthetic drainage composite (GDC) in the baseliner floor areas. In the baseliner side-slope areas, the primary and secondary leachate collection systems will not include the granular drainage layer and will only consist of the GDC. Leachate that reaches the baseliner system will flow downgradient through the GDC. Leachate collection pipes will be used to remove collected leachate from the GDC and convey the liquid to the leachate collection sumps within each cell. Leachate collection piping is included in both the primary and secondary leachate collection systems of each cell. The leachate collection sump will be located at the lowest elevation point in each cell and will be designed to collect and accumulate leachate from both the upgradient primary and secondary leachate collection systems as well as from baseliner areas immediately surrounding the sumps.

4.6.1.2 Leachate Conveyance to Storage Tanks

The leachate conveyance system to the storage tanks will include a submersible pump within each cell and piping from the pumps to the leachate storage tanks. The cells will have both primary and secondary leachate collection systems, including dedicated pumps in each cell. The flow from primary and secondary pumps will be directed into either or both of the two identical parallel leachate force mains buried in the perimeter berm of the UDF. Prior to the force main in the perimeter berm, flow in the primary and secondary riser pipes from the cell sumps will enter into a riser vault and pass through a series of check valves and flow meters, installed on both the primary and secondary pipes. Routine monitoring of the riser components will detect whether the system is operating as intended. Leak detection sensors will be utilized in the riser vault to monitor for potential pipe leakages. Any pipe leakage will be contained within the vault liner system.

Leachate conveyance piping outside of the UDF riser vault structure (in the perimeter berm) will consist of dual contained high-density polyethylene (HDPE) with an inner carrier pipe and an outer containment pipe to provide for containment and detection of leaks within the inner carrier pipe. Leachate force mains will be monitored to ensure that no blockage or buildup in the force main piping is occurring.

The primary and secondary leachate force mains will pipe leachate along the UDF perimeter berm and utilize several leak detection manholes for leak monitoring and access to the piping for maintenance purposes. The force mains in the UDF perimeter berm will tie into a valve house that will be constructed adjacent to the storage tanks (south of the consolidation area). The valve house will allow for monitoring and access before leachate in the force mains is piped into the leachate storage tanks.

4.6.1.3 Leachate Storage Tanks

A leachate storage facility will be constructed at the flat southern portion of the UDF area to temporarily store leachate until it is transferred for treatment. Two leachate storage tanks will be installed with each having an operating capacity of approximately 166,500 gallons (333,000 gallons combined) to hold the leachate flow from the primary and secondary force mains. The leachate tanks have been sized to temporarily store one week of leachate generation from the month with the largest estimated leachate production value.

Each tank will be dual-contained with a 42-foot-diameter outer tank to provide backup in the case of leakage in an interior tank. An equalization pipe will be installed between the two tanks to allow for equalization of leachate storage volumes in each tank. The equalization pipe will be equipped with manual valves to allow each tank to be isolated if necessary for servicing and inspection.

4.6.1.4 Leachate Loadout for Off-Site Disposal

Leachate in the storage tanks will be loaded into tanker trucks for off-site transport and treatment on an as-needed basis. The frequency of leachate loadout and trucking will be determined based on monitoring of leachate accumulation rates. As shown in Figure 2, the flat area adjacent to the leachate tanks has space for tanker trucks to pull up. There will be a discharge pipe from the storage tanks to the truck loading area so that trucks can easily connect to the tanks for pumping of leachate to the tanker trucks staged in the loadout area.

GE may truck leachate off-site for treatment, including to the Groundwater Treatment Facility at Building 64G in GE's Pittsfield Plant, on an interim basis until GE installs an on-site water treatment facility for UDF-derived leachate, as described in the UDF Dewatering/Treatment Design Addendum.¹ Following the construction of the on-site water treatment facility, GE may truck leachate for off-site treatment to Building 64G only if necessary for planned or unplanned maintenance purposes associated with the on-site treatment facility. For such planned maintenance events, GE will notify EPA in advance of the event. In the case of an unplanned event where the maintenance need is immediate, GE will notify EPA as soon as possible either during or following the event.

4.6.1.5 Leachate Management System Controls

As discussed in Section 3.3.6.5 of the UDF Revised Final Design Plan, the leachate management system will include components that monitor, detect, and control how leachate collected in the UDF cells is removed from the cells, conveyed in forcemains, and temporarily stored in tanks. Interconnected sensors and controls will be incorporated into the leachate collection, conveyance, and storage systems. The pumps within the primary and secondary leachate collection systems will operate in an automated fashion, depending on liquid levels measured in the sump of each system. The level sensors in the cell primary and secondary collection sumps will detect and measure liquid levels in the sump and will control the on-off pump operation (pump "on" will be triggered when liquid level is no more than 12 inches above the top of the sump geomembrane liner crest elevation). Totalizing flow meters will be provided on the primary and secondary piping systems in each riser vault to measure and record the flow rates, volume pumped, and run times of each pump.

Liquid level sensors will also be provided in the leachate storage tanks to monitor levels in the tanks and trigger the automated shutdown of the leachate pumps in the cells in the event that the tanks reach capacity. Leak detection sensors will be included in each HDPE manhole of the leachate collection system. The outer (containment) pipes of the double-walled force mains will terminate at each HDPE manhole to allow leaks in the inner (carrier) pipes to be contained and readily detected in the manholes.

The detection of liquid in any of the HDPE manholes will trigger an alarm and shut down the leachate pumps in both cells. A high-level alarm in the valve house containment manhole will also shut down the leachate storage tank transfer/loadout pump. A high-level alarm in the leachate storage tanks will also automatically shut down the leachate pumps in the cells. Once the cause for the alarm has been determined and rectified, the alarm can be cleared and the system restarted. A high-level alarm in the leachate storage tank requires removal of leachate from the tanks to an acceptable level before the system can be restarted. In the event of a power outage, the leachate conveyance system will shut down. The system can be powered by auxiliary means (e.g., generators) if deemed necessary during an extended power outage.

¹ The OMM activities for the on-site UDF water treatment facility are described in the UDF Dewatering/Treatment OMM Addendum to this UDF Revised OMM Plan.

4.6.2 Leachate Management System Maintenance

Inspections and maintenance of the leachate collection, conveyance, and storage systems will be performed by GE throughout the UDF operations. Inspection activities will consist of inspecting all mechanical parts accessible in the cell, riser structures, and the valve house that includes pumps, piping, flow meters, and leak detection features.

4.6.2.1 Leachate Collection and Removal System

The leachate collection and removal systems will be cleaned and maintained regularly as required for optimal performance. To ensure that the collection and removal systems are performing as expected, the following maintenance and cleaning tasks will be conducted:

- High-pressure jet cleaning of leachate collection pipes;
- Jet cleaning of riser pipes following the same schedule as for the leachate collection pipes;
- Manual operation of the submersible pumps at least weekly if they have not run in response to accumulating leachate levels; and
- Maintenance of each submersible pump by taking out the riser pipe and other collection system components to access the submersible pumps at a frequency recommended by the pump manufacturer.

4.6.2.2 Leachate Transfer System

Leachate force mains will be visually inspected and pressure tested after installation and once every five years thereafter. Similar to the leachate collection and removal systems, high-pressure jet cleaning of leachate conveyance pipes will be implemented for maintenance. Pressure gauges on the leachate piping within the riser vaults will be monitored periodically since increasing pressures may indicate the presence of blockages or fouling of the force main.

4.6.2.3 Leachate Storage Tank System

Routine loadout of leachate from the storage tanks to tanker trucks and tank level monitoring will take place to ensure that the storage tanks maintain sufficient storage capacity to manage leachate volumes generated in the UDF cells. In addition, the discharge pipes into the tanks and the equalization pipe between the storage tanks will undergo jet-cleaning as required to maintain proper flow conveyance into and between the tanks. Tank level sensor systems will be used to monitor liquid levels in each tank and to avoid flooding and/or overtopping of the leachate tanks.

4.6.3 Leachate Generation Quantity

The leachate generation volumes from the UDF cells for both the primary and secondary collection systems will be monitored on a continuous basis while pumps are operating. Generated leachate volumes will be tracked to ensure that the storage tanks are not receiving excessive flow and to allow for management of leachate tank loadout schedules.

4.6.3.1 Primary Leachate Collection

Primary leachate generation and collection will be monitored in both cells in the UDF. A flow meter installed in the riser vault structure will record and monitor the amount of leachate collected in its respective cell and will therefore reflect the amount of leachate leaving the cells that will be stored temporarily in the leachate storage tanks. The flow meter will report out the amount of leachate collected for a given time period. This volume data will be compiled into a leachate generation report for record keeping and documentation purposes.

4.6.3.2 Secondary Leachate Collection

As with the primary leachate collection system, the secondary leachate generation and collection will be monitored in both cells in the UDF. As in the primary system, a flow meter installed in the riser vault structure will record and monitor the amount of leachate collected in its respective cell and will therefore reflect the amount of leachate leaving the cells that will be stored temporarily in the leachate storage tanks. As in the primary system, the flow meter will report the amount of leachate collected for a given time period, which will be compiled into a leachate generation report for record keeping and documentation purposes.

4.6.4 Leachate Loadout Quantity for Off-Site Treatment

As noted in Section 4.6.1.3, leachate storage tanks will be sized to hold the estimated amount of leachate generation in one week. To avoid overtopping, the leachate storage tanks will be periodically emptied into tanker trucks to be taken for off-site treatment. The loadout quantity will be quantified by the capacity of the tanker truck(s) and the number of trips by each truck. The loadout quantity will also be quantified by measuring the volume of leachate in the storage tanks prior to and after discharging into the trucks. Leachate loadout into tanker trucks for off-site disposal will continue until the startup of the UDF on-site water treatment system, at which time routine trucking of leachate off-site will be discontinued. Once the UDF on-site water treatment system is operating, trucking of leachate for off-site treatment and disposal will be conducted only in the conditions described in Section 4.6.1.4.

4.6.5 Leachate Tracking

Leachate that is transported off-site in tanker trucks for treatment will be tracked by GE on an inventory form. The inventory form will identify the shipper's name, date and time of pickup, truck identification number, quantity taken off-site, and the receiving facility's name and address. The inventory form will also include leachate levels in the tanks before and after loadout to verify the volume removed by the tanker. Leachate tracking associated with the on-site water treatment system will be conducted as described in the UDF Dewatering/Treatment OMM Addendum.

4.7 Inclement Weather Operations

The UDF will have specific procedures in place to be implemented during unusual or severe weather conditions.

4.7.1 High Wind Conditions

In the event that wind conditions become excessive, consolidation operations will be moved to a more sheltered, downwind side of the consolidation area to the extent practicable. In the case of very severe winds in which consolidation material may be blown during placement, the operating personnel will have the authority to suspend

operations until weather conditions improve and operations can safely resume. Weather conditions and forecasts will be monitored to determine the need to suspend operations in advance of high winds. Cover materials and equipment will be available within the cell areas to facilitate immediate cover activities in the event of unexpected high wind conditions. In the event of a prolonged power outage that might occur due to high wind conditions, portable power generators may be brought to the UDF area for temporary use if deemed necessary to maintain certain site operations.

4.7.2 Storm Event Precipitation

During heavy or prolonged periods of precipitation, if access roads and operations areas become too muddy for equipment and truck operations, the addition of gravel and frequent grading of road surfaces will be used to the maximum extent practicable to improve road conditions and control ponding and drainage. Other materials, such as wood chips, may be used as a stabilizer/bulking agent on inundated roadways to improve drivability. In the event of an electrical storm, operations will be suspended, and all personnel will take shelter until the storm subsides. In the event of a prolonged power outage due precipitation events, portable power generators may be brought to the UDF area for temporary use if necessary to maintain certain site operations.

GE will perform routine inspections and periodic maintenance to assess and minimize the potential for site access roads to become inaccessible due to precipitation events up to and exceeding the 100-year storm event. Where road conditions exhibit repeated degradation due to precipitation, GE will institute measures, including design enhancements if necessary, to further minimize the potential for reoccurrence of such conditions affecting the accessibility of the site access roads.

4.7.3 Frost and Snow

Snow accumulated at the UDF area will be plowed and removed from the working area prior to the continuation of consolidation operations. Snow can be plowed and removed with the variety of equipment available on-site. If the severity of the snowfall is such that visibility becomes impaired, the operating personnel will have the authority to suspend operations until site conditions improve and operations can be safely resumed.


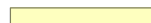


5 References

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- Arcadis. 2024d. Project Operations Plan. Prepared for General Electric Company, Pittsfield, Massachusetts. Revised November.
- Arcadis. 2024e. Revised On-Site and Off-Site Transportation and Disposal Plan. Prepared for General Electric Company, Pittsfield, Massachusetts. October.
- Arcadis and AECOM. 2024. Revised Final Pre-Design Investigation Summary Report for Upland Disposal Facility Area. Prepared for General Electric Company, Pittsfield, Massachusetts. Revised January 29.
- EPA. 2020. Revised Final Permit Modification to the 2016 Reissued RCRA Permit and Selection of CERCLA Remedial Action and Operation & Maintenance for Rest of River. December 16.

Figures

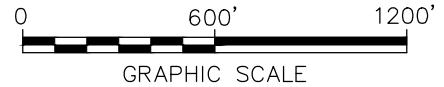


LEGEND:

-  GE PARCEL BOUNDARY
-  UPLAND DISPOSAL FACILITY LIMITS OF CONSOLIDATED MATERIAL
-  UPLAND DISPOSAL FACILITY OPERATIONAL AREA
-  EXISTING OVERHEAD TRANSMISSION EASEMENT

NOTES:

1. SITE FEATURES OBTAINED FROM DRAWING ENTITLED "PLAN OF LAND SURVEYED FOR THE LANE CONSTRUCTION CORPORATION" PREPARED BY SK DESIGN GROUP, INC., DATED JUNE 4, 2010.
2. AERIAL IMAGERY: © MICROSOFT CORPORATION © 2022 MAXAR © CNES (2022) DISTRIBUTION AIRBUS DS.
3. UPLAND DISPOSAL FACILITY LIMITS OF CONSOLIDATED MATERIAL, OPERATIONAL AREA, AND SUPPORT AREAS SHOWN ARE CONCEPTUAL ONLY.



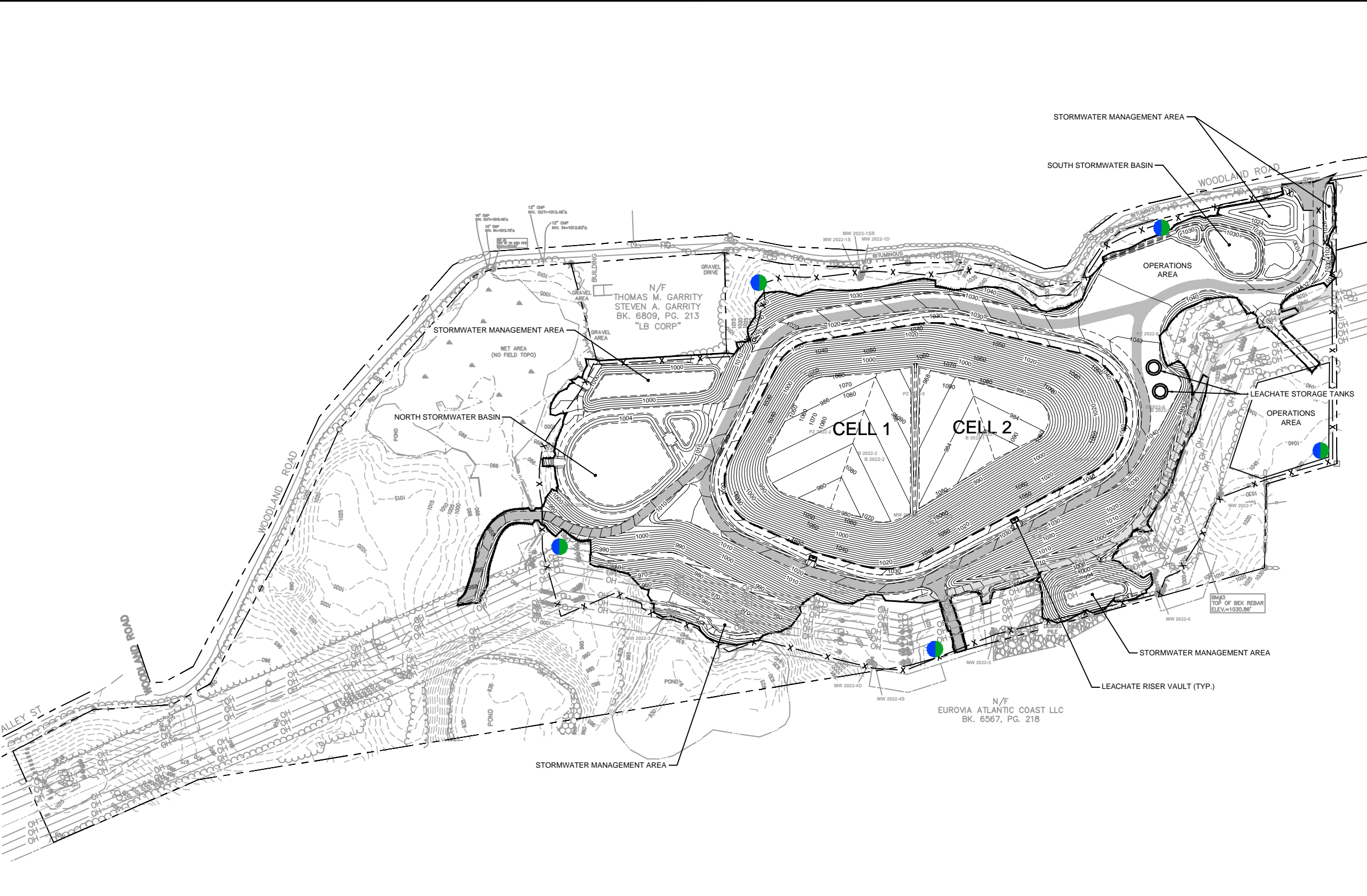
GENERAL ELECTRIC COMPANY
 PITTSFIELD, MASSACHUSETTS
GE-PITTSFIELD/HOUSATONIC RIVER SITE

GE PARCEL



FIGURE
1

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- EXISTING FEATURES LEGEND**
- REBAR FOUND
 - IRON PIN FOUND
 - CONCRETE BOUND FOUND
 - ◆ GRANITE BOUND FOUND
 - ◆ BENCH MARK
 - ☆ LAMP POST
 - UTILITY POLE
 - GUY WIRE
 - MW 2022-2 MONITORING WELL
 - PZ-2022-8 PIEZOMETER
 - B 2022-8 SOIL BORING
 - ▲ WET AREA
 - APPROXIMATE PROPERTY BOUNDARY
 - - - EDGE OF GRAVEL
 - - - EDGE OF BITUMINOUS
 - - - EDGE OF WATER
 - - - EDGE OF WETLAND
 - - - STONEWALL
 - - - OH OVERHEAD WIRES
 - - - EDGE OF TREE/BRUSH LINE
 - ▨ PHRAGMITES
 - ▨ CONCRETE DEBRIS PILE
 - ▨ GRAVEL PILE
 - - - -1010- ELEVATION CONTOUR (5-FOOT INTERVAL)
 - - - OVERHEAD LINE EASEMENT
- DESIGN FEATURES LEGEND**
- - - UDF LIMITS OF CONSOLIDATION MATERIAL
 - - - ELEVATION GRADE BREAK
 - - - 1010 INDEX ELEVATION CONTOURS (2-FOOT INTERVAL, SEE NOTE 1)
 - - - INTERMEDIATE ELEVATION CONTOURS (2-FOOT INTERVAL, SEE NOTE 1)
 - - - APPROXIMATE LIMITS OF GRADING
 - - - X X UDF SECURITY FENCE AND GATE
 - ▬ UDF ACCESS ROAD
 - ▬ UTILITY RIGHT OF WAY ACCESS ROAD
- AIR MONITORING STATION**
- CONSTRUCTION-PHASE
 - OPERATIONS-PHASE



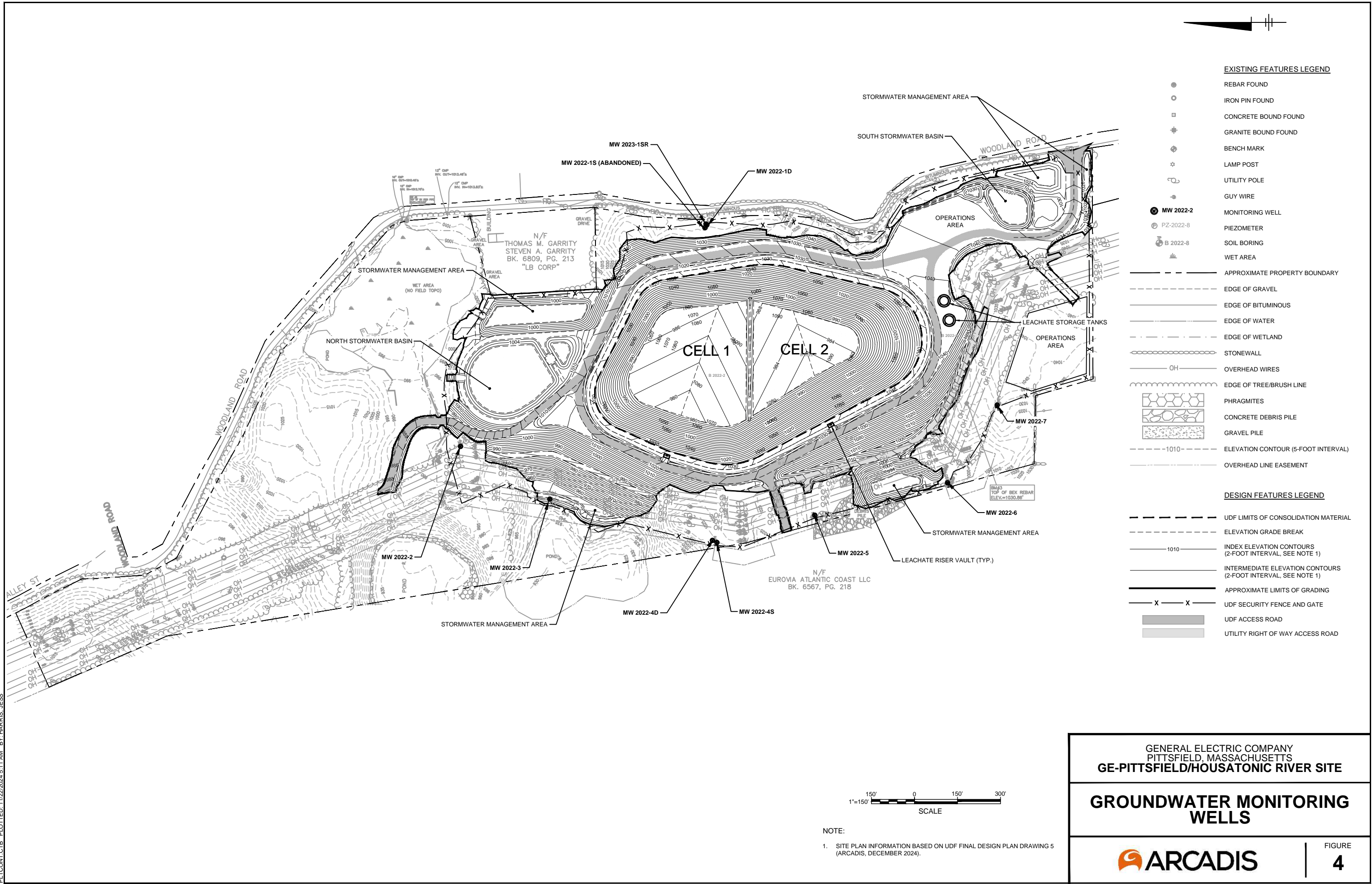
NOTE:
1. SITE PLAN INFORMATION BASED ON UDF FINAL DESIGN PLAN DRAWING 5 (ARCADIS, DECEMBER 2024).

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AIR MONITORING STATIONS

ARCADIS

FIGURE
3



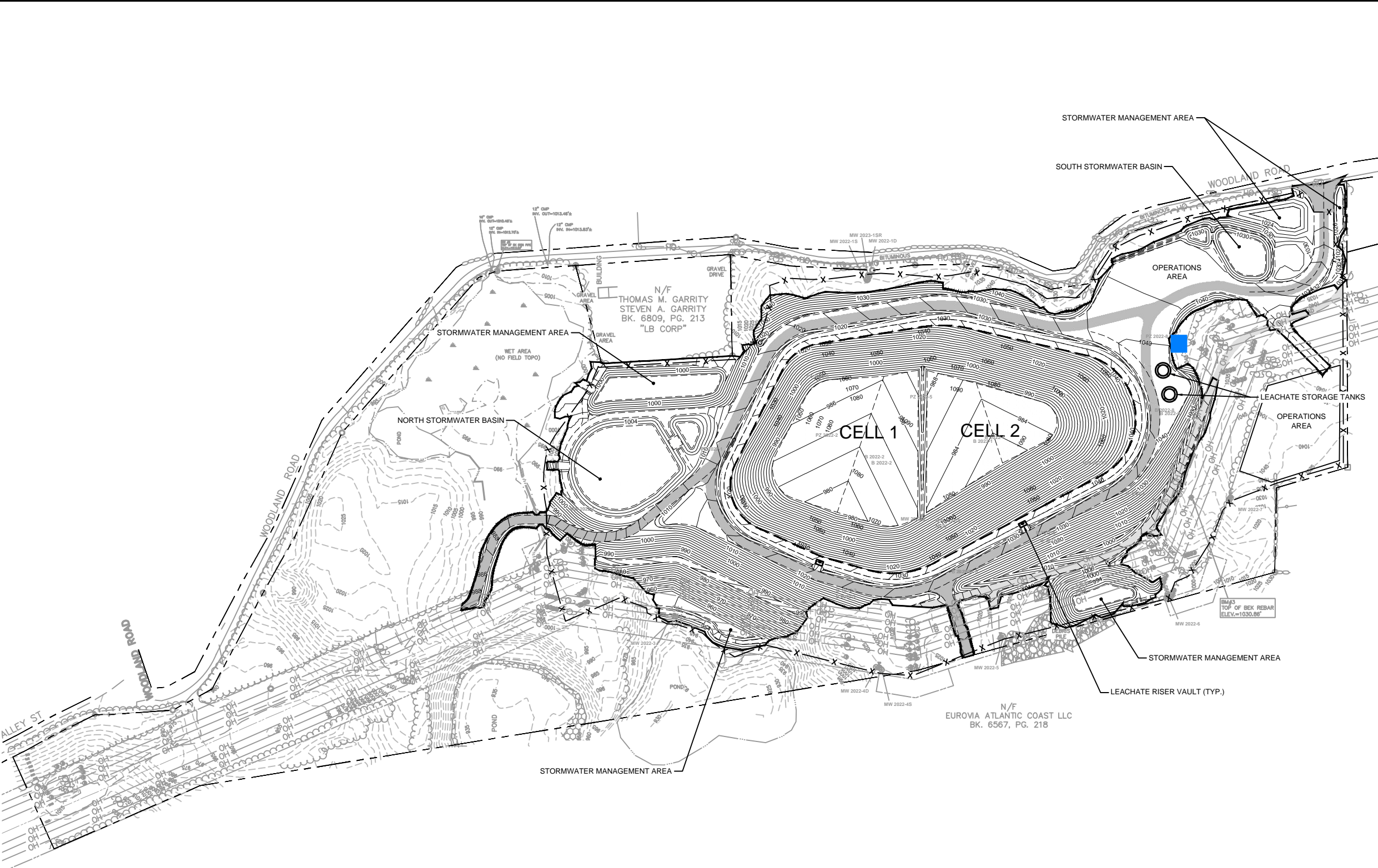
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GROUNDWATER MONITORING WELLS

ARCADIS

FIGURE
4

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- EXISTING FEATURES LEGEND**
- REBAR FOUND
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 - ▨ UTILITY RIGHT OF WAY ACCESS ROAD
 - WEATHER STATION



NOTE:
 1. SITE PLAN INFORMATION BASED ON UDF FINAL DESIGN PLAN DRAWING 5 (ARCADIS, DECEMBER 2024).

GENERAL ELECTRIC COMPANY
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WEATHER STATION

ARCADIS

FIGURE
5

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