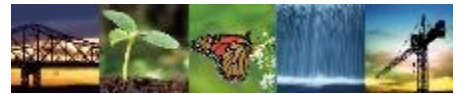




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February 17, 2023
File No. 01.0172397.10

Massachusetts Department of Environmental Protection
Northeast Regional Office
Bureau of Waste Site Cleanup
150 Presidential Way
Woburn, Massachusetts 01801

Re: Tier Classification Extension Submittal
284 Winter Street
Haverhill, Massachusetts
RTNs 3-32792 and 3-32875
ACO 00009941NT

To whom it may concern:

On behalf of Boston Gas Company d/b/a National Grid (National Grid), GZA GeoEnvironmental, Inc. (GZA) has prepared this Tier Classification Extension Submittal for the Site referenced above. Massachusetts Contingency Plan (MCP) Response Actions are being performed at the Site in compliance with Administrative Consent Order (ACO) 00009941NT issued by the Massachusetts Department of Environmental Protection (MassDEP) on October 2, 2020. The extension is being filed to allow for the continuation of Response Actions under the provisions of MCP Section 310 CMR 40.0560(7).

MassDEP transmittal forms BWSC-107 and BWSC-107B, which include the certifications required by 310 CMR 40.0560(7)(c)3-6, have been submitted electronically via the eDEP portal. Copies of these forms, and the supporting documentation required by the MCP, are attached.

Please do not hesitate to contact Mr. Lindberg at 781-278-3700 if you have any questions concerning this project.

Very truly yours,
GZA GEOENVIRONMENTAL, INC.


Vijayalakshmi Radics
Senior Technical Specialist


Charles A. Lindberg, LSP
Senior Principal


Gregg McBride
Consultant/Reviewer

cc: Jesse Edmands, National Grid

Attachments: Supporting documentation



On behalf of Boston Gas Company d/b/a National Grid (National Grid), GZA GeoEnvironmental, Inc. ("GZA") has prepared this Tier Classification (TC) Extension for the disposal site associated with the property located at 284 Winter Street, Haverhill, Massachusetts (Site). The Site is designated by the Massachusetts Department of Environment Protection (MassDEP) as Release Tracking Numbers (RTNs) 3-32792 and 3-32875. This document is being submitted in accordance with 310 CMR 40.1067(7)(a) of the Massachusetts Contingency Plan (MCP) to allow for the continuation of response actions in compliance with Administrative Consent Order (ACO) Enforcement Document 00009941NT issued by MassDEP on October 2, 2020.

BACKGROUND

The property at 284 Winter Street (Property) is currently owned by HEG 284 Winter Street LLC and is occupied by a gasoline service station and car wash facility. It is bordered to the east by a Massachusetts Bay Transportation Authority (MBTA) railroad right-of-way, and to the north by Winter Street; these property boundaries also generally coincide with the eastern and northern disposal Site boundaries. To the south and southwest of the Property lies the open channel of the Little River, parts of which lie within the Disposal Site boundary. A Locus Map is included as Figure 1, and an Exploration Location Plan with the Disposal Site Boundary is presented as Figure 2.

Between 1853 and 1970, the Property was occupied by a Manufactured Gas Plant (MGP) facility operated by the Haverhill Gas Company, which originally manufactured coal gas. On-site infrastructure associated with the coal gas manufacturing process included two holders, retorts, condensers, and purifiers, as well as auxiliary sheds and other support structures. The manufactured gas was stored in holders on the Site until 1893, when storage was moved to holders located on Hilldale Avenue. Based on historical research documented in a previous report, the MGP facility was converted to a carbureted gas manufacturing facility that used gas oil to manufacture gas sometime between 1910 and 1912. Subsequently, in 1951, the MGP began producing oil gas until production ended in 1960. Most of the aboveground MGP infrastructure was demolished in the 1970s, but remnants of brick walls associated with the facility are still present along the northwest boundary of the property along the Little River.

In November 1976, the Property was sold by the Haverhill Gas Company to Haffner Realty Trust (Haffner), which began operating a gasoline service station and car wash on the premises following underground storage tank (UST) installation in 1977. Home delivery fuel oil trucks were also refilled at the Site from 1977 until 2015 via a loading rack located east of the car wash building. HEG 284 Winter Street LLC purchased the Property from Haffner in December 2022.

According to a February 1, 2017 memorandum prepared by MassDEP personnel, MassDEP was first notified of a release to the environment on April 19, 1988, when case number N88-552 was assigned to a release of tar material seeping into the Little River at 284 Winter Street. In November 2014, volatile petroleum hydrocarbons (VPH) and polycyclic aromatic hydrocarbons (PAHs) were detected at concentrations above the relevant MCP Reportable Concentrations (RCs) in soil and groundwater samples from the property. Based on these data, Haffner submitted a Release Notification Form (RNF) to MassDEP on March 30, 2015, and RTN 3-32792 was assigned to the release.

On May 12, 2015, while conducting Response Actions on behalf of Haffner under RTN 3-32792, Ramboll US Corporation of Westford, Massachusetts (Ramboll) observed a sheen in the Little River emanating from the base of the retaining wall along the western edge of the Property. Upon oral notification of this 2-hour reporting condition, MassDEP assigned RTN 3-32875 to the release and approved an Immediate Response Action (IRA). In April 2016, Ramboll filed a Phase I Initial Site Investigation and Tier Classification Report, based on which the Site was classified as Tier I, and linked RTN 3-32875



to the primary Site RTN 3-32792¹. Ramboll on behalf of Haffner subsequently submitted a series of IRA status reports between September 2015 and September 2019.

Between October 18 and November 1, 2016, GZA on behalf of National Grid collected soil, groundwater, light non-aqueous phase liquid (LNAPL), and soil vapor samples from the Site for laboratory analysis. The results were provided to Haffner for incorporation into the Conceptual Site Model (CSM). On November 29, 2016, MassDEP issued a Notice of Responsibility (NOR) to National Grid under RTN 3-32875, noting that the responsibility was joint and several with Haffner.

On October 11, 2019, MassDEP issued a Notice of Noncompliance (NON) to Haffner for failure to submit a Phase II Comprehensive Site Assessment (CSA) within three years of the Phase I/TC submittal. The NON established an April 6, 2020, deadline for submittal of a Phase II report and, if applicable a Phase III Remedial Action (RAP) and Phase IV Remedy Implementation Plan (RIP). On November 7, 2019, Haffner's LSP-of-Record submitted a Notification of Delay accompanied by a letter of resignation in anticipation of the transfer of responsibility from Haffner to National Grid, the successor company to a former owner of the property.

On November 26, 2019, GZA on behalf of National Grid submitted a TC transfer that took effect on December 26, 2019. In response, MassDEP issued an NOR to National Grid under RTN 3-32792, which was followed on March 13, 2020, by a notice re-establishing response action deadlines for the Site. The re-established deadlines required submittal of a Phase II CSA, and if necessary, a Phase III RAP and a Phase IV RIP, by August 4, 2020, and a Permanent Solution Statement (PSS)/Temporary Solution Statement (TSS)/Remedy Operation Status (ROS) by April 6, 2021. MassDEP and National Grid subsequently negotiated an ACO that established a deadline of September 12, 2025, for the filing of a PSS, TSS, or ROS for the Site. The ACO also established a series of interim deadlines for IRA status reports, MCP Phase reports, and a TC Extension as further discussed in the following section.

TIER CLASSIFICATION EXTENSION DOCUMENTATION

The following sections address the MCP requirements for TC Extensions as outlined in 310 CMR 40.0560(7)(c).

TRANSMITTAL FORM AND REASON FOR EXTENSION (310 CMR 40.040.0560(7)(C)(1))

A TC Transmittal Form (BWSC-107) with appended TC Compliance History Form (BWSC107B) was submitted electronically in accordance with the current MassDEP policy; copies are included as Attachment A.

The deadlines established by the ACO for the Site included submittal of the following documents: (i) a TC Extension by February 20, 2021; (ii) a Phase II report by April 6, 2022; (iii) a Phase III report by July 15, 2022; (iv) a Phase IV report by June 15, 2023, and (v) a Permanent or Temporary Solution by September 12, 2025. As documented in the following sections of this submittal, National Grid complied with the first three deadlines and is on track to submit a Phase IV report by June 15, 2023. However, since the February 2021 TC Extension is only valid for 2 years and will expire in February 2023, a new extension is required to allow for the continuation of Response Actions under the MCP until a PSS or TSS can be achieved.

¹A third RTN (3-34906) was issued in May 2018 for a 72-hour reporting condition associated with the removal of a diesel UST. As documented in previous submittals, a PSS for RTN 3-34906 was submitted to MassDEP on July 2, 2018 by Ramboll on behalf of Haffner.



STATUS OF RESPONSE ACTIONS AND PROPOSED SCHEDULE (310 CMR 40.0560(7)(C)(2))

On behalf of National Grid, GZA initiated Phase II CSA efforts in January 2020. Upland field efforts included the drilling and sampling of nine additional borings (B101 through B104, and B106 through B110) and the installation of monitoring wells B102, B106 and B107 to further delineate the nature and extent of impact at the Property. This subsurface investigation program was complemented by the February 2020 collection of soil gas samples SG-1 through SG-3, and was followed by the installation of three additional monitoring wells GZA-1, GZA-1A, and GZA-2 at 191 and 221 Essex Street to evaluate the potential for impacts to properties on the western side of the river (Figure 2). GZA also completed an evaluation of the feasibility of continuing NAPL recovery at the Site, conducted falling-head hydraulic conductivity (K) tests at four wells to estimate the hydraulic properties of the subsurface materials, and oversaw a series of shallow vacuum excavation probes in the central portion of the Site with the objective of assessing the condition of the wall of a former relief holder.

Concurrent with these upland response actions, GZA collected and analyzed sediment samples from hand-augered locations at multiple transects across the Little River adjacent to the Property. Subsequently, National Grid contracted Anchor QEA LLC (AQEA) of Amesbury, Massachusetts to complete an assessment of impacts to the Little River within the disposal Site boundary. AQEA's investigation included the collection of twenty-two vibracores to assess the nature and extent of visible oil and/or tar (VOT) in sediment, with selected samples submitted for chemical analysis. Two additional cores were collected for ultraviolet (UV) photography and NAPL mobility testing.

The Phase II CSA findings were documented in an April 2022 Phase II CSA report for RTN 3-32792, with a Phase II CSA report for the Little River prepared by AQEA included as Appendix C. The report presented the following conclusions:

- Groundwater flow at the Site is generally toward the west/southwest, with the Little River as the main discharge point. The historical relief holder wall remains intact at depths below 3 feet below ground surface (bgs), resulting in a "perched" groundwater condition within the footprint of holder in the central portion of the Site.
- Petroleum and MGP-related constituents are present in soils throughout the Property, with the most significant impacts found at the 5-to-20-foot depth range. Constituent of concern (COC) concentrations in soil exceeded the MCP Method 1 cleanup standards at a number of locations but were generally below the Upper Concentration Limit (UCLs).
- The primary COCs detected in groundwater samples at levels above the Method 1 standards included naphthalene, C₉-C₁₀ aromatics and benzene, with the highest concentrations reported in the central, western, and southern portions of the property. Significant impacts to groundwater were found to extend from the eastern portion of the Property to the Little River. Wells installed on the western side of the river to the southwest of the 284 Winter Street property did not indicate detectable levels of the primary Site COCs, indicating that the downgradient extent of the disposal Site has been defined.
- Concentrations of constituents detected in soil gas at the Site appeared to be primarily related to incidental emissions and spills associated with the active fuel storage and dispensing operations. GZA's evaluation concluded that the reported concentrations did not indicate significant potential for vapor intrusion into occupied structures at the Site.
- NAPL was observed at several locations across the western, central, and southern portions of the Site, but significant accumulations of separate-phase materials were only observed at two locations in the upland area, one of which is within the historical relief gas holder. Evaluations of NAPL mobility and recoverability completed under MassDEP guidance concluded that these materials are not feasible to recover.
- A Method 3 Risk Characterization indicated that quantitative human health risk estimates were below the relevant MCP criteria except for one receptor group/exposure scenario (construction/utility workers excavating below the water table within the former holder area). The risk estimate for the one scenario which exceeded the limits were



driven by benzene and naphthalene concentrations in the perched groundwater within the historical holder, where an active electrical line is present.

- NAPL from the former MGP has historically migrated to the Little River and has been observed seeping from the retaining wall at the edge of the Site under certain conditions.
- Significant impacts were observed to the sediments beneath the Little River adjacent to the Site, including elevated concentrations of Site COCs and the presence of VOT over a substantial area. AQEA reported that VOT attributable to the former MGP was observed in 25 of the 36 vibracore and hand auger samples, resulting in a condition of Readily Apparent Harm (RAH) because the VOT extended over an area greater than 1,000 square feet in the upper 12 inches of sediment.
- AQEA concluded that the lateral extent of impacted shallow sediment in the in-river portion of the site had been defined based on a comparison of Site samples to Local Conditions, and that additional Comprehensive Response Actions were needed to achieve a PSS for the in-water portion of the Site.

In July 2022, GZA and AQEA filed a Phase III RAP that selected the following Remedial Action Alternatives toward a PSS for the Site:

- Relocation of the electrical line that presently runs through the former relief holder;
- Implementation of an activity and use limitation (AUL) that prohibits installation of new underground utility lines within the footprint of the relief holder and restricts residential and certain other future uses of the Site;
- Sealing/removal of historical piping and penetrations in the retaining wall that separates the upland portion of the Site from the Little River; and
- Focused dredging and capping of the sediments within the Little River adjacent to the Site.

Concurrent with Phase II through Phase IV response actions, National Grid continues to conduct IRA Response Actions at the Site, and to document that work in IRA status reports, the most recent of which was submitted in September 2022. The next IRA status report will be submitted by March 12, 2023, and at subsequent six-month intervals until the IRA is completed.

In compliance with the ACO, a Phase IV RIP will be submitted by June 15, 2023. Implementation of the Site remediation plan will be largely dependent on the permitting process and property owner access negotiations and approvals, but National Grid intends to continue ongoing efforts to achieve a TSS, PSS, or ROS filing by the ACO deadline of September 12, 2025.

CERTIFICATIONS REQUIRED BY 310 CMR 40.0009 AND 310 CMR 40.0540(1) (310 CMR 40.0560(7)(C)(3) AND (4))

The required certifications are provided on the attached form BWSC-107.

UPDATED COMPLIANCE HISTORY (310 CMR 40.0560(7)(C)(5))

This section provides an updated compliance history since the filing of the February 2021 Tier Classification Extension. The submittal dates listed below are based on records for RTNs 3-32792 and 3-32875 at the MassDEP Waste Site/Reportable Release file viewer website.



- March 10, 2021 – GZA submitted IRA Status Report No. 12 describing boom inspections and the replacement of a temporary double-boom system in the Little River, immediately downstream of an existing semi-permanent boom structure installed by Ramboll. The report also documented the recovery of approximately 1.85 gallons of LNAPL from well NFSB-02(MW) via peristaltic pumping, and the removal of approximately 0.5 gallons of dense non-aqueous phase liquid (DNAPL) from well B107 using a bailer and absorbent pads.
- September 10, 2021 – GZA submitted IRA Status Report No. 13 describing boom inspections and noting that the temporary double-boom system had detached from its anchor, but that replacement and repairs had to be deferred due to safety concerns associated with high water levels in the Little River. NAPL blossoms, less than 1 foot in diameter, were observed near the center of the river, emanating from the river bottom. The report also documented the recovery of approximately 1.4 gallons of LNAPL from well NFSB-02(MW) via peristaltic pumping, and the removal of approximately 0.3 gallons of DNAPL from well B107 using a bailer and absorbent pads.
- March 11, 2022 - GZA submitted IRA Status Report No. 14 describing boom inspections and noting that the repairs to temporary double-boom system were still pending due to water levels. Consistent with previous reports, NAPL blossoms were observed emanating from the river bottom. The report also documented the recovery of approximately 1.07 gallons of LNAPL from well NFSB-02(MW) via peristaltic pumping.
- April 5, 2022 – GZA and AQEA filed a Phase II CSA report, the findings of which were described more extensively in an earlier section of this submittal.
- July 14, 2022 – GZA and AQEA filed a Phase III RAP, as summarized in an earlier section of this submittal.
- September 9, 2022 – GZA submitted IRA Status Report No. 15 describing the replacement of the main semi-permanent boom and the installation of two additional downstream booms in June 2022. The report noted that the booms remained intact and functional throughout the reporting period. The report also documented the recovery of approximately 0.95 gallons of LNAPL from well NFSB-02(MW) via peristaltic pumping, supporting previous observations that the product recovery rate at this location is generally stable.

LSP OPINION (310 CMR 40.0560(7)(C)(6))

The required LSP Opinion is provided on the attached form BWSC-107.

ATTACHMENTS

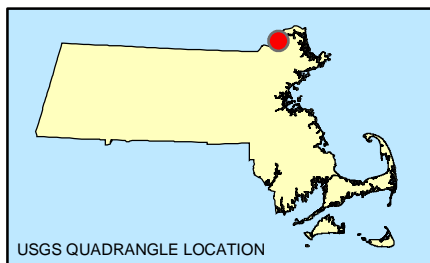
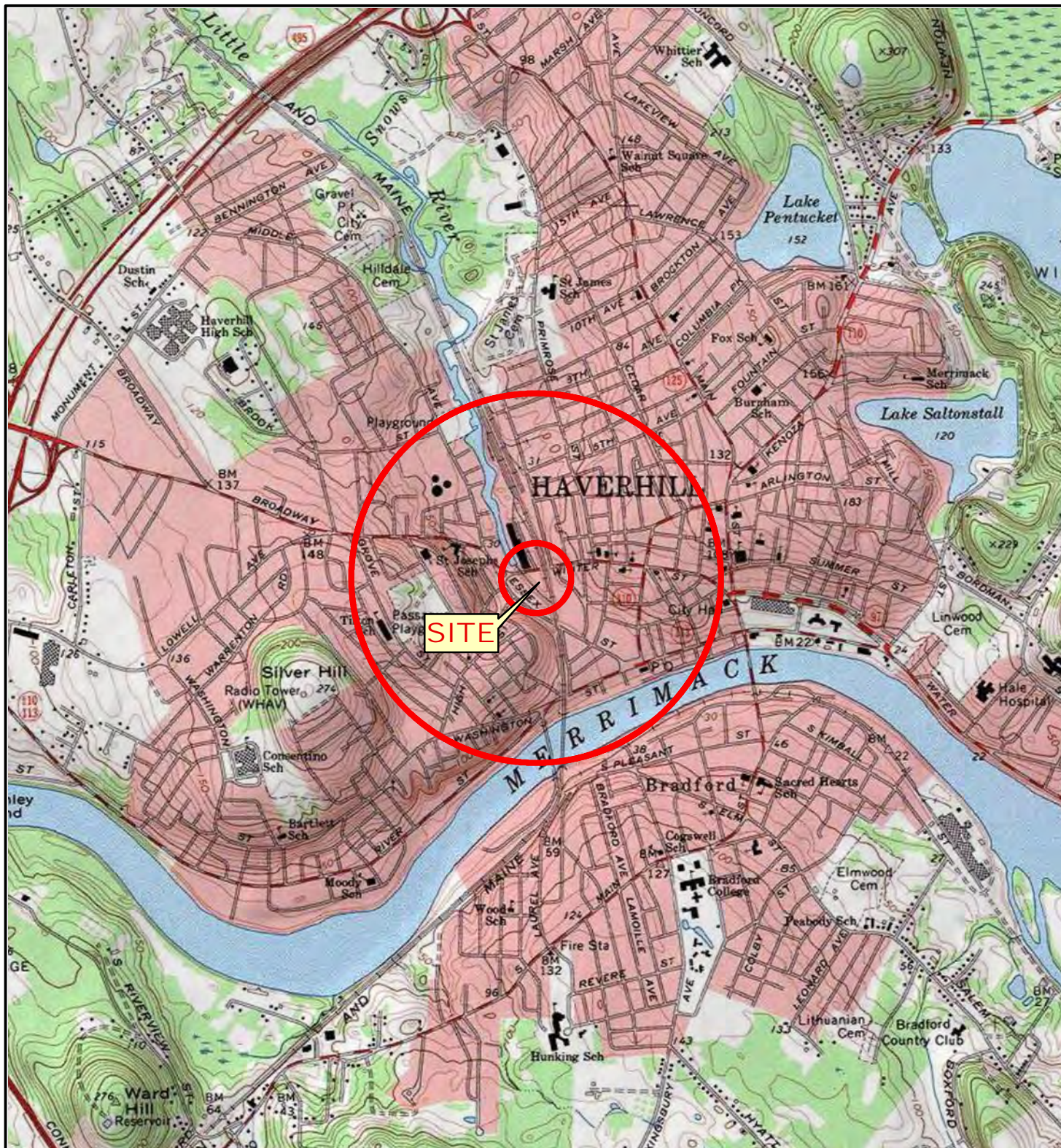
Figure 1: Locus Map

Figure 2: Exploration Location Plan

Attachment A: BWSC Forms 107 and 107B



Figures



SOURCE : THIS MAP CONTAINS THE ESRI ARCGIS ONLINE USA TOPOGRAPHIC MAP SERVICE, PUBLISHED JUNE 19, 2019 BY ESRI ARCGIS SERVICES AND UPDATED AS NEEDED. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.

Data Supplied by :



PROJ. MGR.: KFM
DESIGNED BY: KFM
REVIEWED BY: CAL
OPERATOR: SMW/EMD
DATE: 04-01-2022

LOCUS PLAN
SHOWING 500 FOOT & 1/2 MILE RADII
PHASE II COMPREHENSIVE SITE ASSESSMENT
284 WINTER STREET
HAVERHILL, MASSACHUSETTS

JOB NO.
01.0172397.10
FIGURE NO.
1



LEGEND

- AQSS-04** ○ APPROXIMATE SEDIMENT CORE LOCATION (ANCHOR QEA - 2021)
- VE-1** ✕ VACUUM EXCAVATION PROBE PERFORMED BY GEOSearch AUGUST 11, 2021
- GZ-1** ⊕ MONITORING WELL INSTALLED BY GEOSearch AUGUST 31 - SEPTEMBER 1, 2020
- 1A** □ SEDIMENT SAMPLE COLLECTED BY GZA ON JUNE 8-10,
- P1** ✕ PIPE OR SEEP LOCATION
- SG-1** ⊕ SOIL GAS POINT PERFORMED BY GZA ON FEBRUARY 5,
- B102** ⊕ MONITORING WELL INSTALLED BY GEOSearch JANUARY 21-23, 2020 AND OBSERVED BY GZA
- B101** ⊕ SOIL BORING PERFORMED BY GEOSearch (2020) AND OBSERVED BY
- NFNP-01** ▲ NAPL SAMPLE COLLECTED BY GZA PERSONNEL NOVEMBER 1,
- NFSB-01 (MW)** ⊕ MONITORING WELL INSTALLED BY TECHNICAL DRILLING SERVICES OCTOBER 20-25, 2016 AND OBSERVED BY GZA
- NFSB-05** ⊕ SOIL BORING PERFORMED BY TECHNICAL DRILLING SERVICES OCTOBER 20-25, 2016 AND OBSERVED BY GZA
- NFAA-01** ⊕ AMBIENT AIR SAMPLE COLLECTED BY GZA PERSONNEL OCTOBER 19,
- NFSV-01** ▼ SOIL VAPOR SAMPLE COLLECTED BY GZA PERSONNEL OCTOBER 18-19,
- NFCB-01** □ CATCH BASIN SEDIMENT SAMPLE COLLECTED BY GZA PERSONNEL OCTOBER 18-19, 2016
- ENV-1MW** ⊕ MONITORING WELL INSTALLED BY RAMBOLL ENVIRON APRIL 27-28,
- ENV-2B(A)** ⊕ SOIL BORING COMPLETED BY RAMBOLL ENVIRON APRIL 27-28,
- MW-1** ⊕ MONITORING WELL INSTALLED BY LESSARD
- DISPOSAL SITE BOUNDARY** - - - - -
- 284 WINTER STREET PROPERTY BOUNDARY** AS RECORDED ON ALTA/ACSM LAND TITLE SURVEY PLAN PERFORMED BY MHF DESIGN CONSULTANTS (STAMPED FEBRUARY 12, 2015) NOTE: THIS BOUNDARY DIFFERS FROM THE MASSGIS ASSESSORS PARCEL DATA. ASSESSORS PARCEL DATA PROVIDED BY MASSGIS ON SEPTEMBER 1, 2020

SOURCE

- THIS MAP CONTAINS THE ESRI ArcGIS ONLINE BING MAPS AERIAL LAYER PACKAGE, PUBLISHED APRIL 13, 2020 BY ESRI ARCSIMS SERVICES AND UPDATED MONTHLY. THIS SERVICE USES UNIFORM NATIONALLY RECOGNIZED DATUM AND CARTOGRAPHY STANDARDS AND A VARIETY OF AVAILABLE SOURCES FROM SEVERAL DATA PROVIDERS.
- THE LOCATIONS OF THE MONITORING WELLS INSTALLED BY GEOSearch AUGUST 31 - SEPTEMBER 1, 2020 WERE LOCATED FROM A SURVEY PERFORMED BY THE MORIN-CAMERON GROUP, INC. ON SEPTEMBER 29, 2020. THE LOCATIONS OF THE SEDIMENT SAMPLES COLLECTED BY GZA IN JUNE 2020 AND THE PIPE LOCATIONS WERE APPROXIMATELY DETERMINED USING A TRIMBLE GEO-7X HAND-HELD GPS ON 06-10-2020. THE LOCATIONS OF THE MONITORING WELLS AND SOIL BORINGS PERFORMED BY GEOSearch IN JANUARY 2020 WERE APPROXIMATELY DETERMINED USING A TRIMBLE GEO-7X HAND-HELD GPS ON 05-07-2020. THE LOCATIONS OF THE NF SERIES OF EXPLORATIONS AND SAMPLING LOCATIONS WERE APPROXIMATELY DETERMINED USING A TRIMBLE GEO-XH HAND-HELD GPS ON 10-18-2016. THE LOCATIONS OF THE SOIL GAS POINTS INSTALLED BY GZA IN FEBRUARY 2020, SOIL BORING INSTALLED BY GEOSearch AUGUST 31, 2021 (GZA-2A), AND THE VACUUM EXCAVATION PROBES PERFORMED BY GEOSearch AUGUST 11, 2021 WERE APPROXIMATELY DETERMINED BY LINE OF SIGHT FROM EXISTING TOPOGRAPHIC AND MAN-MADE FEATURES. THESE DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.
- THE LOCATIONS OF THE SOIL BORINGS AND MONITORING WELLS PERFORMED BY RAMBOLL AND THE MONITORING WELLS PERFORMED BY LESSARD WERE APPROXIMATELY DETERMINED FROM A PLAN PREPARED BY RAMBOLL ENTITLED: "SITE LAYOUT", FIGURE 2, DATED: 02-10-2017, PROJECT: 169005598.
- THE LOCATIONS OF THE APPROXIMATE SEDIMENT CORE LOCATIONS PERFORMED BY ANCHOR QEA IN 2021 WERE DETERMINED FROM A GEODATABASE FILE PROVIDED BY ANCHOR QEA ON MARCH 29, 2022, FILE: AQ SAMPLE LOCATIONS 20220329.GDB.
- THE HISTORIC RELIEF GAS HOLDER WAS APPROXIMATELY LOCATED FROM AN "UNDATED HISTORICAL PLAN" IN THE RAMBOLL ENVIRON PHASE I INITIAL SITE INVESTIGATION REPORT, DATED APRIL 2016.

0 25 50 100
SCALE IN FEET

UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR THE USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

PHASE II COMPREHENSIVE SITE ASSESSMENT
284 WINTER STREET
HAVERHILL, MASSACHUSETTS

EXPLORATION LOCATION PLAN

PREPARED BY:
 GZA GeoEnvironmental, Inc.
Engineers and Scientists
www.gza.com

PREPARED FOR:
 nationalgrid

PROJ MGR: KFM
DESIGNED BY: KFM
DATE: 04/01/2022

REVIEWED BY: CAL
DRAWN BY: SMW/EMD
PROJECT NO: 01.0172397.10

CHECKED BY: KFM
SCALE: 1" = 50 FEET
REVISION NO:

FIGURE
2



Attachment A – Copies of BWSC Transmittal Forms



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 107

TIER CLASSIFICATION TRANSMITTAL FORM

Pursuant to 310 CMR 40.0500 (Subpart E)

Release Tracking Number

3

- 32792

A. DISPOSAL SITE LOCATION:

1. Disposal Site Name: HAFFNER'S

2. Street Address: 284 WINTER STREET

3. City/Town: HAVERHILL 4. ZIP Code: 018300000

5. Coordinates: Latitude: N 42.77723 Longitude: W 71.08760

B. THIS FORM IS BEING USED TO: (check all that apply)

- ☐ 1. Submit a new **Tier Classification Submittal**, including a **Tier Classification Compliance History** (BWSC107B).
Check the tier classification category:
- ☐ a. Tier I ☐ b. Tier II
- c. Check all Tier I criteria that apply, pursuant to 310 CMR 40.0520(2):
- ☐ i. Groundwater is located within an Interim Wellhead Protection Area, Zone II, or within 500 feet of a Private Water Supply Well, and there is evidence of groundwater contamination by an Oil or Hazardous Material at the time of Tier Classification at concentrations equal to or exceeding the applicable RCGW-1 Reportable Concentration set forth in 310 CMR 40.0360.
- ☐ ii. An Imminent Hazard is present at the time of Tier Classification.
- ☐ iii. One or more remedial actions are required as part of an Immediate Response Action pursuant to 310 CMR 40.0414(2).
- ☐ iv. One or more response actions are required as part of an Immediate Response Action to eliminate or mitigate a Critical Exposure Pathway pursuant to 310 CMR 40.0414(3).
- ☐ d. Check here if including an **Eligible Person, Eligible Tenant, or Other Person Certification** (BWSC107D)
- ☐ 2. Submit a **Phase I Completion Statement** as per 310 CMR 40.0480.
If previously submitted, provide date _____
mm/dd/yyyy
- ☐ 3. Submit a **Phase II Scope of Work** as per 310 CMR 40.0834.
If previously submitted, provide date _____
mm/dd/yyyy
- ☐ 4. Submit a **Phase II Conceptual Scope of Work supporting a Tier Classification Submittal**.
- ☒ 5. Submit a **Tier Classification Extension Submittal** for Response Actions at a Tier Classified Site including the **Tier Classification Compliance History** (BWSC107B).
- ☐ 6. Submit a **Tier Classification Transfer Submittal** for a change in person(s) undertaking Response Actions at a Tier Classified Site including the **Tier Classification Compliance History** (BWSC107B) and the **Tier Classification Transferor Certification** (BWSC107C).
Proposed effective date of transfer : _____
mm/dd/yyyy

TIER CLASSIFICATION TRANSMITTAL FORM

Pursuant to 310 CMR 40.0500 (Subpart E)

Release Tracking Number

3 - 32792

B. THIS FORM IS BEING USED TO: (cont.)

☐ 7. Submit a **Revised Tier Classification Submittal**.

Check the revised Tier Classification Category. If the Tier Classification Category is not changing, indicate the current classification.

☐ a. Tier I ☐ b. Tier II

c. Check all Tier I criteria that apply, pursuant to 310 CMR 40.0520(2):

- ☐ i. Groundwater is located within an Interim Wellhead Protection Area, Zone II, or within 500 feet of a Private Water Supply Well, and there is evidence of groundwater contamination by an Oil or Hazardous Material at the time of Tier Classification at concentrations equal to or exceeding the applicable RCGW-1 Reportable Concentration set forth in 310 CMR 40.0360.
- ☐ ii. An Imminent Hazard is present at the time of Tier Classification.
- ☐ iii. One or more remedial actions are required as part of an Immediate Response Action pursuant to 310 CMR 40.0414(2).
- ☐ iv. One or more response actions are required as part of an Immediate Response Action to eliminate or mitigate a Critical Exposure Pathway pursuant to 310 CMR 40.0414(3).

☐ d. Check here if including an **Eligible Person, Eligible Tenant, or Other Person Certification** (BWSC107D)

☐ 8. Provide a **Notice that an additional Release Tracking Number(s) is (are) being linked to this Tier Classified Site** (Primary RTN). Future response actions addressing the Release or Threat of Release notification condition associated with additional Release Tracking Numbers (RTNs) will be conducted as part of the Response Actions planned or ongoing at the Primary Site listed above. For a previously Tier Classified Primary Site, if there is a reasonable likelihood that the addition of the new secondary RTN(s) would change the classification of the site, a **Revised Tier Classification Submittal** must also be made.

Provide Release Tracking Number(s): a. - b. -

All future Response Actions must occur according to the deadlines applicable to the Primary RTN. Use only the Primary RTN when making future submittals for this site unless specifically relating to response actions started before the linking occurred.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 107

TIER CLASSIFICATION TRANSMITTAL FORM

Pursuant to 310 CMR 40.0500 (Subpart E)

Release Tracking Number

3 - 32792

C. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that a **Tier Classification Submittal** is being submitted, this Tier Classification Submittal has been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Phase I Completion Statement** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Phase II Scope of Work** is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that a **Tier Classification Extension Submittal** or a **Tier Classification Transfer Submittal** is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

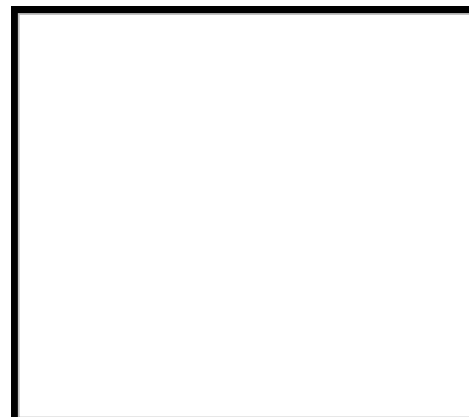
1. LSP#: 6891

2. First Name: CHARLES A 3. Last Name: LINDBERG

4. Telephone: 781-278-3830 5. Ext.: 6. Email: CHARLES.LINDBERG@GZA.COM

7. Signature:

8. Date: mm/dd/yyyy 9. LSP Stamp:



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

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D. PERSON MAKING SUBMITTAL:

1. Check all that apply: ☐ a. change in contact name ☒ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: BOSTON GAS COMPANY

3. Contact First Name: JESSE 4. Last Name: EDMANDS

5. Street: 170 DATA DRIVE 6. Title: PROGRAM MANAGER

7. City/Town: WALTHAM 8. State: MA 9. ZIP Code: 024512222

10. Telephone: 781-906-3987 11. Ext.: 12. Email: jesse.edmands@nationalgrid.com

E. RELATIONSHIP OF PERSON MAKING SUBMITTAL TO DISPOSAL SITE: ☐ Check here to change relationship

- ☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
- ☒ e. Other RP or PRP Specify: OTHER PRPS
- ☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- ☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- ☐ 4. Any Other Person Making Submittal Specify Relationship:

F. REQUIRED ATTACHMENT AND SUBMITTALS:

- ☒ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- ☐ 2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of any Phase Reports to DEP.
- ☐ 3. Check here to certify that a copy of the Legal Notice of a Tier Classification or Re-classification Submittal is attached, and a cover letter and a copy of the notice is sent to the Chief Municipal Officer and the Local Board of Health pursuant to 310 CMR 40.0510(3) and 40.1403.
- ☐ 4. Check here to certify that the owner of a Public Water Supply has been provided written notice pursuant to 310 CMR 40.0510(3).
- ☒ 5. For a Tier Classification Extension Submittal, check here to certify that a statement summarizing why a Permanent or Temporary Solution has not been achieved at the Disposal Site is attached.
- ☐ 6. For a Tier Classification Transfer Submittal, check here to certify that a statement summarizing the reasons for the proposed change in person(s) undertaking the Response Actions is attached. All Response Actions must be completed by the deadline applicable to the person who first filed a Tier Classification Submittal for the Disposal Site.
- ☐ 7. Check here if any non-updatable information provided on this form is incorrect, e.g., Release Address/Location Aid. Send corrections to bwsc.edep@state.ma.us.
- ☒ 8. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

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G. CERTIFICATION OF PERSON MAKING SUBMITTAL:

1. I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

If submitting a Tier II Classification, Extension or Transfer, I also attest under the pains and penalties of perjury that (i) I/the person(s) or entity(ies) on whose behalf this submittal is made has/have personally examined and am/is familiar with the requirements of M.G.L. c. 21E and 310 CMR 40.0000; (ii) based upon my inquiry of the/those Licensed Site Professional(s) employed or engaged to render Professional Services for the disposal site which is the subject of this Transmittal Form and of the person(s) or entity(ies) on whose behalf this submittal is made, and my/those person's(s') or entity's(ies') understanding as to the estimated costs of necessary response actions, that/those person(s) or entity(ies) has/have the technical, financial and legal ability to proceed with response actions for such site in accordance with M.G.L. c. 21E, 310 CMR 40.0000 and other applicable requirements; and (iii) that I am fully authorized to make this attestation on behalf of the person(s) or entity(ies) legally responsible for this submittal. I/the person(s) or entity(ies) on whose behalf this submittal is made is aware of the requirements in 310 CMR 40.0172 for notifying the Department in the event that I/the person(s) or entity(ies) on whose behalf this submittal is made learn(s) that it/they is/are unable to proceed with the necessary response actions.

2. By: _____ 3. Title: PROGRAM MANAGER
Signature

4. For: BOSTON GAS COMPANY 5. Date: _____
(Name of person or entity recorded in Section D) mm/dd/yyyy

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. Email: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY):





TIER CLASSIFICATION COMPLIANCE HISTORY

Pursuant to 310 CMR 40.0540 (Subpart E)

Release Tracking Number

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- 32792

A. DISPOSAL SITE COMPLIANCE HISTORY SUMMARY:

- ☐ 1. Check here if a Tier Classification Compliance History of the person listed in BWSC107, Section D, was previously submitted, and there has been no change in that person's compliance history, or the person in Section D has no compliance history. If this box is checked, this section does not have to be completed.

2. List all permits or licenses that have been issued by the Department that are relevant to this Disposal Site:

Program	Permit Number	Permit Category	Facility ID
a. Air Quality			
b. Hazardous Waste (M.G.L. c. 21C)			
c. Solid Waste			
d. Industrial Wastewater Management			
e. Water Supply			
f. Water Pollution Control/Surface Water			
g. Water Pollution Control/Groundwater			
h. Water Pollution Control/Sewer Connection			
i. Wetland & Waterways			

3. List all other Federal, state or local permits, licenses, certifications, registrations, variances, or approvals that are relevant to this Disposal Site:

Issuing Authority or Program, or Documentation Type	Identification Number	Date Issued mm/dd/yyyy
MASSDEP BWSC - ADMINISTRATIVE CONSENT ORDER	00009941NT	10/2/2020

- ☒ 4. Check here to certify that, if needed, a statement further describing the Compliance History of this Disposal Site is attached.

This statement must describe the compliance history of the person or entity named in BWSC107, Section D with the following: (1) DEP regulations; and (2) other laws for the protection of health, safety, public welfare and the environment administered or enforced by any other government agency. Such a statement should identify information such as: (1) actions relevant to the Disposal Site taken by the Department to enforce its requirements including, but not limited to, a Notice of Noncompliance (NON), Notice of Intent to Assess Civil Administrative Penalty (PAN), Notice of Intent to Take Response Action (NORA), and an administrative enforcement order; (2) administrative consent orders; (3) judicial consent judgements; (4) similar administrative actions taken by other Federal, state or local agencies; (5) civil or criminal actions relevant to the Disposal Site brought on behalf of the DEP or other Federal, state, or local agencies; and (6) any additional relevant information. For each action identified, provide the following information: (1) name of the issuing authority, type of action, identification number and date issued; (2) description of noncompliance cited; (3) current status of the matter; and (4) final disposition, if any.



GZA GeoEnvironmental, Inc.