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March 29, 2023
File No. 04.0021270.34

New Hampshire Department of Environmental Services
Waste Management Division
Solid Waste Management Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

Re: 2022 Annual Post-Closure Report
Cross Road Landfill
Exeter, New Hampshire
DES #198401081
DES-SW-SP-1992-001

Dear Permit Coordinator:

On behalf of the Town of Exeter, GZA GeoEnvironmental, Inc. is pleased to provide the New Hampshire Department of Environmental Services (NHDES) with the attached Solid Waste Management Bureau – Landfill Post-Closure Inspection Report (Report) for the Cross Road Landfill in Exeter. The Report and associated attachments are being submitted to fulfill the Solid Waste Facility Permit requirement of a Landfill Post-Closure Performance Report for the calendar year 2022.

GZA trusts that the information attached to this letter meets the needs of the NHDES. Should you have any questions, please contact us.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Erik B. Dyrness
Assistant Project Manager

James M. Wieck, P.G.
Consultant/Reviewer

Jeffrey D. Rowell, P.E.
Principal

EBD/JDR/JMW:jlb
\gzbabedford\jobs\21000s\21270 - exeter lf\04.0021270.34\report\2022 pcr\draft 04.0021270.34_pcm report 032923.docx

Attachments: Annual Post-Closure Report
Figure
Tables
Photographic Log 2022
Inspection Reports 2022

cc: Mr. Paul Vlasich, PE, Town Engineer, Town of Exeter



Annual Post-Closure Report



Instructions for Completing the ANNUAL POST-CLOSURE REPORT For Inactive (Closed) Solid Waste Landfills Reporting Year 2022



Complete all five pages of the Post-Closure Report (PCR) form for the **2022 calendar year (January 1 - December 31)**. Write only in the fields provided. If more space is needed to complete a section, attach additional pages and note at the bottom of the form how many additional pages are attached. Detailed section by section instructions are provided below. Submit the completed signed report to NHDES no later than **March 31, 2023**. Keep a copy of the completed report in the landfill's closure record.

You may obtain a copy of the NH Solid Waste Rules, [Env-Sw 100 et seq.](#), via www.des.nh.gov or by contacting the NHDES Public Information Office at (603) 271-8876.

For additional assistance in completing your PCR, contact the NHDES Solid Waste Management Bureau at (603) 271-2925 or solidwasteinfo@des.nh.gov.

SECTION 1 (Page 1) - Facility Identification

Facility Name: The name of the landfill as listed on the solid waste permit.

Physical Street Address: The physical location of the landfill. Do NOT provide a PO Box address.

Municipality: The city, town, village, etc. in New Hampshire where the landfill is physically located.

Solid Waste Facility Permit Number: The solid waste permit number that is listed on the solid waste permit. This number typically starts with "DES" or "DPHS". Do not confuse this permit number with the permit number of your Groundwater Monitoring or Release Detection Permit.

SECTION 2 (Page 1) - Permittee Information

Permittee: The individual or entity (e.g., Town) to whom the permit is issued.

Mailing Address, Town/City, State, Zip Code: The address that the permittee uses to receive mail.

Email Address: A current and frequently checked email address of the permittee. This is optional, but highly recommended as the best way to ensure you receive timely information from NHDES.

Daytime Phone Number: The daytime telephone number of the permittee, with area code.

SECTION 3 (Page 1) - Contact Person

Name: The name of the person NHDES should contact concerning post-closure activities at the landfill. This person may be different than the person who is signing in Section 8. The name you provide will be entered in our database as the contact person for this landfill until you notify us otherwise.

Job Title: The job or position title of the contact person.

Affiliation: The name of the company, municipality, or other entity for which the contact person works.

Email Address: A current and frequently checked email address of the contact person. This is optional, but highly recommended as the best way to ensure you receive timely information from NHDES.

Daytime Phone Number: The daytime telephone number of the contact person, with area code.

SECTION 4 (Page 1-4) - Inspections

Provide each date that the landfill was inspected during the reporting year. Closed landfills must be inspected at least twice per year (see [Env-Sw 807.05\(g\)](#)) and more frequently when specified in the landfill's approved post-closure inspection, monitoring, and maintenance plan. NHDES recommends that the twice-yearly inspections occur in the spring and fall. Inspection reports are due to NHDES within 30 days of completing the inspection (see [Env-Sw 807.05\(h\)](#)). **Summarize** the inspection findings from throughout the year using pages 2-4 of the PCR form and attach supporting documentation as appropriate.

SECTION 5 (Page 4) - Action Items Summary

This Section is your "To-Do List". Reportable "Action Items" are conditions at the landfill requiring maintenance, repair, or other corrective action to ensure the short and long-term integrity and proper performance of the landfill's various closure systems. Landfill closure systems include the capping system (or cover materials if there is no engineered capping system); the stormwater management system; the decomposition gas management system (e.g., probes, vents); the groundwater monitoring system; access

ways/roads; access control features (e.g., fences, gates, signs), and other landfill specific features (e.g., leachate collection and storage systems, tanks, vaults, pumps, alarms, etc.). Action Items are identified during the inspections you conduct, and because of the assessment of environmental monitoring. To identify Action Items to be reported in this PCR:

- (1) First: Look back at *last year's* PCR and list in column #1, all Action Items from that report that **were not completed during that year**, but **were completed during this reporting year**, note in column #2 that the item has been carried forward from a prior reporting year, and provide in column #3 the date the work was completed during this reporting year.

(Why? Because Action Items occurring in but not completed during prior years, are still Action Items that require your attention. Only after an Action Item is completed and reported as completed, should you then stop reporting it. In other words, all Action Items stay on your “To-Do List” until you complete them or take them off the list for other valid reasons. And we need to know when you have “crossed it off” your To-Do List.)

Attach proof of action item completion such as labeled and dated photographs, record drawings, and project completion documentation, or if previously submitted to NHDES during the reporting year, provide reference to the submittal by date.

- (2) Next: List in column #1 all Action Items carried forward from the prior reporting year that **were not completed during this reporting year**, note them as such in column #2, and provide in column #5 the anticipated date they will be addressed. Attach additional information as appropriate to document the status of/progress toward completing each incomplete Action Item carried forward from the prior reporting year(s).
- (3) Lastly: List in column #1 any other conditions at the landfill identified **during this reporting year** requiring maintenance, repair, or other corrective action to ensure the integrity of the landfill's various closure systems. Skip column #2, which is not relevant. In column #3, identify the date that each required corrective action was completed or in column #4 provide the date by which the work is anticipated to be completed. Attach additional information as appropriate to document the current status of/progress toward completing the Action Item.

NOTE: Action items are the responsibility of the permittee to address, without prompting by NHDES. Your landfill is a containment system for waste. The waste may still pose a risk to public health, safety and the environment if not properly contained. Even very old waste can pose unknown risks. Climate change, including extreme weather events, emerging contaminants, including PFAS and 1,4 dioxane, aging infrastructure, and changes in surrounding land use, are all factors to consider when assessing needs at your closed landfill. Caretaking your landfill's various closure systems is important to ensuring the waste is properly contained. Regular maintenance of the landfill and repairing small problems before they can become big problems, is also the best way to protect the investment you made to close and cap the landfill in order to protect public health, safety and the environment. Just as you need to maintain and repair the roof and gutter system on your home to keep it from leaking, you must likewise maintain and repair the capping and other closure systems at your landfill to ensure it continues to perform as a containment system. NHDES expects all permittees to independently address their Action Items in a timely manner and to report the same for record.

SECTION 6 (Page 5) - Summary and Assessment of Environmental Monitoring

Assessing the post-closure performance of your landfill is important to determining when the frequency and scope of post-closure monitoring and maintenance requirements, as specified in your permit and the NH Solid Waste Rules, can be adjusted, so that the landfill eventually can be placed under a custodial level of care. The assessment is necessary to determine how well the facility is progressing toward meeting the ultimate post-closure performance standards stated in [Env-Sw 807.04](#), paraphrased as follows:

- Is the facility still generating leachate? Typically evidenced by interpreting and assessing groundwater monitoring data and data trends, as well as leachate quality data and data trends (if the facility has a leachate collection system), and observations of leachate breakouts or seeps;
- Is the facility still generating decomposition gases? Typically evidenced by interpreting and assessing

- landfill gas monitoring data collected at vents, soil probes, and other monitoring points, such as inside nearby structures, and data trends, with due consideration of seasonal, atmospheric and other conditions noted when the data is collected;
- (c) Has the capping system achieved maximum settlement and retained its functional integrity? Typically evidenced by data from settlement surveys conducted over time, and data trends, with assessment of capping system tolerances, and visual observations of the landfill surface for differential settlement/depressions, ponding, protruding waste, apparent wrinkles in underlying synthetic capping materials, and other conditions attributable to settlement, displacement or loss of continuity of capping materials;
 - (d) Is the facility having an adverse impact to air, groundwater, or surface water quality? Typically evidenced by any number of inspection observations and data assessments; and
 - (e) Does the facility otherwise pose a risk to human health or the environment? Typically, facilities that contain waste in a system that requires inspection, monitoring and maintenance pose some risk.

In this section of your PCR, provide a **summary** of all environmental monitoring performed at or for the landfill during the reporting year and an **assessment** of the information relevant to achieving or making progress toward achieving the above-referenced performance standards/expectations. Use multiple lines of evidence collected during inspections and monitoring events to support the assessment. Include a statement from a qualified professional **engineer** as to whether the landfill is achieving the post-closure performance standards and whether adjustments to the approved post-closure monitoring and maintenance period or provisions are justified and recommended. [See Env-Sw 1105.14\(f\).](#)

While not required, NHDES recommends that an updated site plan be provided with the summary and assessment, showing the locations and designations of environmental monitoring points (e.g., gas probes) and landfill systems.

SECTION 7 (Page 5) - Additional Information

Use this section to provide additional information or explanation related to the landfill or information provided elsewhere in this report.

SECTION 8 (Page 5) - Signature

While any individual may fill out the PCR, only the permittee may sign the form. The permittee is the individual or entity that holds the permit. Most permits are not issued to/held by individuals. Rather, they are held by lawfully established companies, associations, or political subdivisions such as cities, towns or districts. If the permittee is other than an individual, the PCR must be signed by an individual duly authorized to sign for the permittee. For example, if the permittee is a municipality, a municipal official or municipal employee who is authorized to sign for the municipality can typically sign the report. Accordingly, provide the signature and title/affiliation of the duly authorized signatory. If the permittee has granted signatory authority to an environmental or engineering consultant or contractor, please include a copy of the authorization. See [Env-Sw 303.04\(b\).](#)

While not required, NHDES recommends that the permittee keep a copy of the completed PCR.

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ANNUAL POST-CLOSURE REPORT

Inactive (Closed) Solid Waste Landfills

Reporting Year 2022

Waste Management Division, SWMB



RSA 149-M / Env-Sw 1105.07(b)(2), Env-Sw 1105.14, & Env-Sw 807.05(i)

Complete and return this form by **MARCH 31, 2023**.

1. Facility Identification [Env-Sw 1105.14(a)]

Facility Name Cross Road Landfill and Stump Dump	
Physical Street Address 9 Cross Road	
Municipality Exeter	Solid Waste Facility Permit Number DES-SW-Sp-1992-001

2. Permittee Information [Env-Sw 1105.14(b)]

Permittee Town of Exeter, New Hampshire		
Mailing Address 13 Newfields Road		
Town/City Exeter	State NH	ZIP Code 03833
Email Address pvlasich@exeternh.gov	Daytime Phone Number (603) 773-6160	

3. Contact Person [Env-Sw 1105.14(d)] Check this box if this information has changed from last year.

Name Paul Vlasich	Job Title Town Engineer
Affiliation Public Works	
Email Address pvlasich@exeternh.gov	Daytime Phone Number (603) 773-6160

4. Inspections [Env-Sw 807.05(g)]

Date of Inspection	Inspector	Date Inspection Report Submitted to NHDES*
05/02/2022	E. Fulton	/ /
08/05/2022	E. Fulton	/ /
11/09/2022	E. Fulton	/ /

* Inspection reports are due 30 days following the inspection. See [Env-Sw 807.05\(h\)](#). If you did not submit the inspection reports for this reporting year, attach them and check this box .

SUMMARY OF INSPECTION FINDINGS

A. General Site Condition	Yes	No	N/A	Describe Condition
1. Is access to the landfill restricted by use of gates, fences or natural barriers? Ref Env-Sw 807.03(b)(11)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
2. Are weather-resistant legible signs posted around the perimeter of the landfill in areas where fencing is not used? Ref Env-Sw 807.03(b)(11)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Is the access road(s) properly graded and drained? Ref Env-Sw 806.08(c)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Is any portion of the site used for activities other than post-closure monitoring and maintenance? If you answered "yes," list these activities in Section 7 (Additional Information). For each activity, indicate if it is on or off cap/cover. Ref Env-Sw 807.05(o)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		See Section 7
5. Are all groundwater monitoring wells accessible and in good condition? Ref Env-Sw 807.03(b)(8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Is the surface water monitoring system functioning and maintained? Ref Env-Sw 807.03(b)(8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

B. Stormwater System Condition [Ref Env-Sw 807.03(b)(5)]	Yes	No	N/A	Describe Condition
1. Are the sedimentation/detention ponds maintained (e.g., sedimentation removed, no overgrown vegetation)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Are culverts intact and free of obstructions?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Are perimeter drainage swales/ditches well maintained, unobstructed, and free flowing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Do all drainage swales have positive drainage?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Are the methods used to control surface water well maintained (e.g., berms, benches)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Are runoff channels protected to prevent scour and erosion that creates sediment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Is there evidence of erosion (e.g., sedimentation in drainage ditches and ponds)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. Are storm drains in good condition (e.g., frame, grate, wall joints, pumps, sumps, pipes, inlet and outlet stone)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

C. Decomposition Gas Control System [Ref Env-Sw 807.03(b)(9)]	Yes	No	N/A	Describe Condition
1. Is the gas management system: <input checked="" type="checkbox"/> Passive OR <input type="checkbox"/> Active			<input type="checkbox"/>	
2. If the facility has an active gas management system, are all components of the system in good working order (e.g., blower, flare)? Date the system was last tested:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. If the facility has a passive gas management system, are all gas vents in good condition and functional (e.g., vent cap, riser pipe)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Are all soil gas probes in good condition and functional?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See Section 7
5. Are all indoor air quality monitors in good condition and functional?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Are there any landfill odors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
7. Is there evidence of stressed (e.g., damaged/weakened) vegetation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		See Section 7

C. Decomposition Gas Control System [Ref Env-Sw 807.03(b)(9)]	Yes	No	N/A	Describe Condition
8. Is the permittee required to monitor methane generation from the landfill? If "no," provide an explanation in Section 7 (Additional Information). If "yes," answer the following questions in this section and attach a summary table of all methane data collected; include data from vents, soil probes, and indoor air quality monitors (as applicable). Evaluate any trends in Section 6 (Summary and Assessment).	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
I. For this calendar reporting year, have methane levels exceeded 25% of the LEL inside any on or off-site structures? Ref Env-Sw 806.07(b)(1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
II. For this calendar reporting year, have methane levels exceeded 50% of the LEL at the property line within the soil? Ref Env-Sw 806.07(b)(2)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
III. If "yes" to question I. or II. above, did the permittee implement contingency procedures to ensure protection of public health & safety; and notify NHDES immediately?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

D. Cap (Cover) Condition [Ref Env-Sw 807.03(b)(4)]	Yes	No	N/A	Describe Condition
1. Is cap settlement uniform? (i.e. No visual evidence of depressions, water ponding, cracking, and/or sloughing)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		See Section 7
2. Is an instrument survey of the cap required? Ref Env-Sw 807.03(b)(10) If "yes," attach a summary table of all survey data collected and provide an evaluation of any trends. Date(s) the survey was conducted this reporting year:	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
3. Does cap slope promote runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		See Section 7
4. Is the cap mowed on a regular basis? NHDES recommends that landfills be mowed twice per year. Date the landfill was mowed for this reporting year: Summer '22	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
5. Is there evidence of erosion (e.g., erosion rills, exposed soil)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
6. Is the vegetative layer in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
7. Is there evidence of damage due to unauthorized access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
8. Is there evidence of damage due to burrowing animals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

E. Leachate Collection and Leak Detection Systems [Ref Env-Sw 807.03(b)(6) & Env-Sw 807.03(b)(7)]				Yes	No	N/A	Describe Condition
1. Are there any leachate breakouts or seeps, either on or off the landfill property?				<input checked="" type="checkbox"/>	<input type="checkbox"/>		See Section 7
2. Does the landfill have a leachate collection and/or leak detection system? If "yes," answer the following:				<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See Section 7
I. Are leachate collection and leak detection system appurtenances functioning properly?				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
II. Is leachate stored on-site prior to disposal? If "yes," what quantity of leachate is currently stored on-site?				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
III. Is leachate properly removed and disposed of on a periodic basis? If "yes," what is the frequency of disposal and the disposal destination?				<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

5. Action Items Summary

Action Item	Carried Forward from 2021?	Date Completed	Date to be Completed	Information Attached?
Soil gas probes	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2023	<input type="checkbox"/>
Depression on the southwestern side of the landfill cap	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2023	<input type="checkbox"/>
	<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/>
	<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/>
	<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/>
	<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/>
	<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/>
	<input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/>

6. Summary and Assessment [Ref Env-Sw 807.05(i) & Env-Sw 1105.14(f)] Use additional sheets if necessary.

Please see attachment for Section 6: Summary and Assessment

7. Additional Information Use additional sheets if necessary.

Please see the attached photographic log for recent (2022) representative photographs of Landfill conditions during inspections.

Please see attachment for Section 7: Additional Information.

8. Signature

By signing below, I affirm that the material and information submitted in this report is correct and complete to the best of my knowledge and belief, and that I am the permittee or a person duly authorized to sign for the permittee.

Signature of Permittee or Duly Authorized Individual

Date

Printed Name of Signatory

Title / Permittee Affiliation

This report contains _____ attached pages.

Form Submittal Instructions:

Please submit the completed form in PDF via email to solidwasteinfo@des.nh.gov or upload to [NHDES' OneStop Data Provider](#) portal using the universal solid waste management site code "123456789." If you are not registered as a Data Provider, you may complete a [registration form](#) to request a username, pin and password. **Please do not submit a paper copy of the completed form unless that is your only means to submit.** If you must submit the PCR in paper form, for tracking purposes please notify us by email, sent to solidwasteinfo@des.nh.gov, that you have submitted the PCR in paper form.

While not required, NHDES recommends that the permittee keep a copy of the completed PCR.



Exeter Landfill
9 Cross Road, Exeter, New Hampshire
Solid Waste Permit Number: DES-SW-SP-1992-001

SECTION 6 - SUMMARY AND ASSESSMENT

In accordance with Env-Sw 1105.14(f) and Env-Sw 807.05(i), an assessment of whether the facility is achieving the performance requirements in Env-807.04 is required in each annual report. The Town of Exeter is generally meeting or working toward meeting the performance standards during the post closure period (30 years). Visual inspections and field screening of the Landfill were completed by GZA on May 2, August 5, and November 9, 2022. The assessment below summarizes the post-closure performance standards as stated in Env-Sw 807.04 and paraphrased in the Annual Post-Closure Report Instructions.

- (a) Is the facility still generating leachate?*

Leachate is no longer being generated at the Landfill.

- (b) Is the facility still generating decomposition gases?*

The Landfill continues to generate decomposition gasses. However, soil gas monitoring results indicate that methane concentrations in the soil gas at the boundaries of Town-owned land are less than 50% of the lower explosive limit (LEL).

Methane concentrations measured during 2022 in soil gas sampled from within monitoring points GMW-1 and GMW-2, located slightly to the north of the landfill cap, indicate long term fluctuating and generally stable to potentially decreasing concentrations. Methane concentrations were above the Lower Explosive Limit (LEL) during the April, August, and November 2022 monitoring rounds at monitoring point GMW-1. The concentrations of methane measured at monitoring points GMW-1, and GMW-2 decreased during 2022 compared to 2022 and continue to be below historic maximums as shown in **Exhibit 1** below.

Monitoring locations GMW 11R and GMW-12 were previously installed on Town property adjacent to the Landfill and between monitoring location GMW-10 and residences located to the southwest of the Landfill. Monitoring of GMW-11R and GMW-12 through 2022 has not detected the presence of methane. Methane was not detected above the instrument detection limit at 8 of the 12 monitoring locations during 2022.

Historical gas monitoring data are included in attached **Table 2**.

- (c) Has the capping system achieved maximum settlement and retained its functional integrity?*

Consistent with past years inspections, a depression indicative of uneven settlement of the Landfill cap was observed in the southwestern portion of the Landfill. Standing water is periodically observed within the depression during and after rain events in the approximately 400-square-foot area (previously reported to NHDES). The area has been inspected for visual evidence of further settlement during each of the three inspections every year since it was first observed. Water on the landfill cap is assumed to



drain down through the riprap and sloped areas over time. Repairs to the settled area are scheduled to be completed during 2023 based on the availability of Town funds, to retain its functional integrity. Please refer to **Section 7** for more details.

(d) Is the facility having an adverse impact to air, groundwater or surface water quality?

The Landfill results in impacts to groundwater quality which are managed in accordance with a Groundwater Management Permit (GMP) issued by the NHDES. Groundwater monitoring was completed by Civil & Environmental Consultants, Inc. (CEC) in accordance with the GMP issued for the Landfill (GWP-198401081-E-005) during April 7 through April 8, and November 9 through November 10, 2022. 2022 Landfill contaminant concentration data are included in attached **Table 1**. Calendar year 2022 groundwater Landfill contaminant concentration data are generally consistent with the results of historical landfill water quality monitoring, indicating that groundwater quality is gradually improving or has remained relatively stable following closure of the landfill during 1994. Recent and historical monitoring indicates exceedances of the New Hampshire Ambient Groundwater Quality Standards (NH AGQS) and/or Secondary Maximum Concentration Limits¹ (SMCLs), primarily for certain parameters typical of landfill-related water quality (e.g., arsenic, iron, and manganese). The concentrations of 1,4-dioxane, manganese, arsenic, and iron detected in samples collected from various monitoring wells surface water locations indicate the presence of these potential Landfill contaminants at concentrations exceeding NH AGQS within the existing Groundwater Management Zone (GMZ) boundary. Data collected during the 2022 monitoring rounds indicate that the concentrations of arsenic, manganese, and 1,4-dioxane at certain locations downgradient of the Landfill continue to exceed their respective AGQS. The remainder of the potential Landfill-related contaminants (i.e., chloride, iron, nitrate, and TKN) included in the GMP monitoring program were detected in one or more of the water quality samples collected during the reporting period. However, the concentrations of these parameters are below the applicable AGQS or WQCTS.

Results of the November 2022 sampling of surface water for Landfill-related metals (iron, manganese, and arsenic) from the Exeter River and the area of seeps located downgradient of the Landfill are generally consistent with the results of previous sampling. The Landfill-related metals and surface water flow data indicate collectively that the flow of surface water from the area of seeps contributes metals to the river, but at a de minimis rate.

The *Annual Summary Report Year 2022, Cross Road Landfill* prepared by GZA, dated February 10, 2023 provides additional information describing the results of groundwater monitoring during 2022 and accepted modifications to the Groundwater Management Permit for the Landfill, including the GMZ and groundwater monitoring program.

(e) Does the facility otherwise pose a risk to human health or the environment?

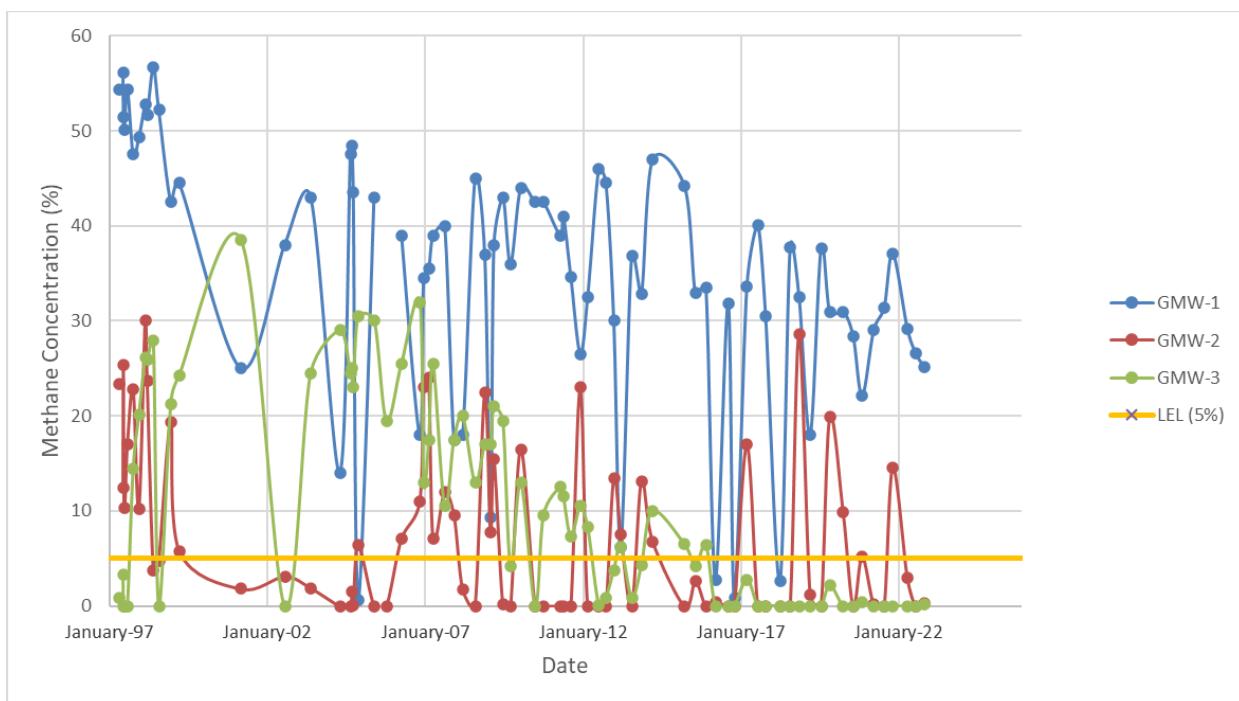
No human receptors to impacts from the Landfill have been identified.

¹ SMCL's are aesthetic-based secondary maximum contaminant-level water quality standards used to regulate public water systems (Env Dw 706 [Regulated Secondary Maximum Contaminant Levels]).



The areas located downgradient of the Landfill to the north and east are zoned for residential purposes. While GZA found evidence of residential bedrock groundwater supply wells within the study area, the residences were reportedly connected to the municipal water supply, and wells were reportedly not used as drinking water sources.

Exhibit 1: Historical Landfill Gas Monitoring Data





Section 7 – Additional Information

04.0021270.34

Exeter Landfill - Annual Post Closure Report 2022

Page 1 of 1

Exeter Landfill
9 Cross Road
Exeter, New Hampshire
Solid Waste Permit Number: DES-SW-SP-1992-001

SECTION 7 - ADDITIONAL INFORMATION

Section 4-A4

The Town of Exeter operates a recycling transfer station on the eastern portion site, located off the Landfill cap.

Section 4-C4

Four soil gas probe standpipes are unsecured (See **Photo 13**). The collection of landfill gas samples was not likely to have been impacted by the above-mentioned condition. GZA recommends that the soil gas standpipes be repaired as soon as practicable.

Section 4-C7

Stressed vegetation in the area of the uneven settlement discussed in Section 4-D4 and 4-D3 below was periodically observed during 2022. This is likely due to the presence of ponding water following snowmelt and rain events (See **Photo 8** and **Photo 9**).

Section 4-D1 and 4-D3

Consistent with past years inspections, during the 2022 site inspections, a depression indicative of uneven settlement of the Landfill cap was observed in the southwestern portion of the Landfill (See **Photo 8 and 9**). Standing water is periodically observed within the depression during and after rain events in the approximately 400-square-foot area (previously reported to NHDES). The area has been inspected for visual evidence of further settlement during each of the three inspections every year since it was first observed. Previously reported smaller areas of ponding have also been observed along the western edge of the cap upgradient of the observed historical erosion described below (See **Photo 10**). An approximate 2,700 square foot area of ponding has also been periodically observed in the northeast/center of the Landfill cap directly upgradient of the central riprap lined drainage swale (See **Photo 11**). Water observed in the northeast/center of the Landfill cap is assumed to drain down through the swale.

Section 4-E1

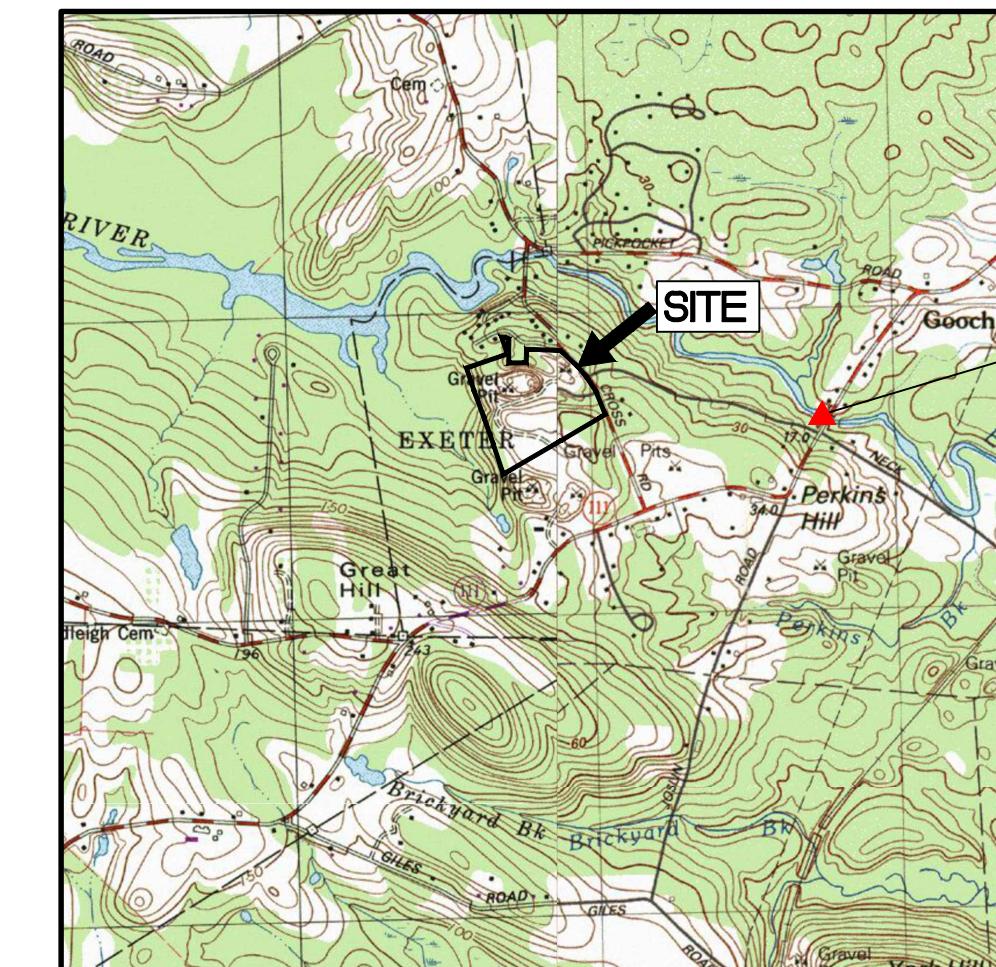
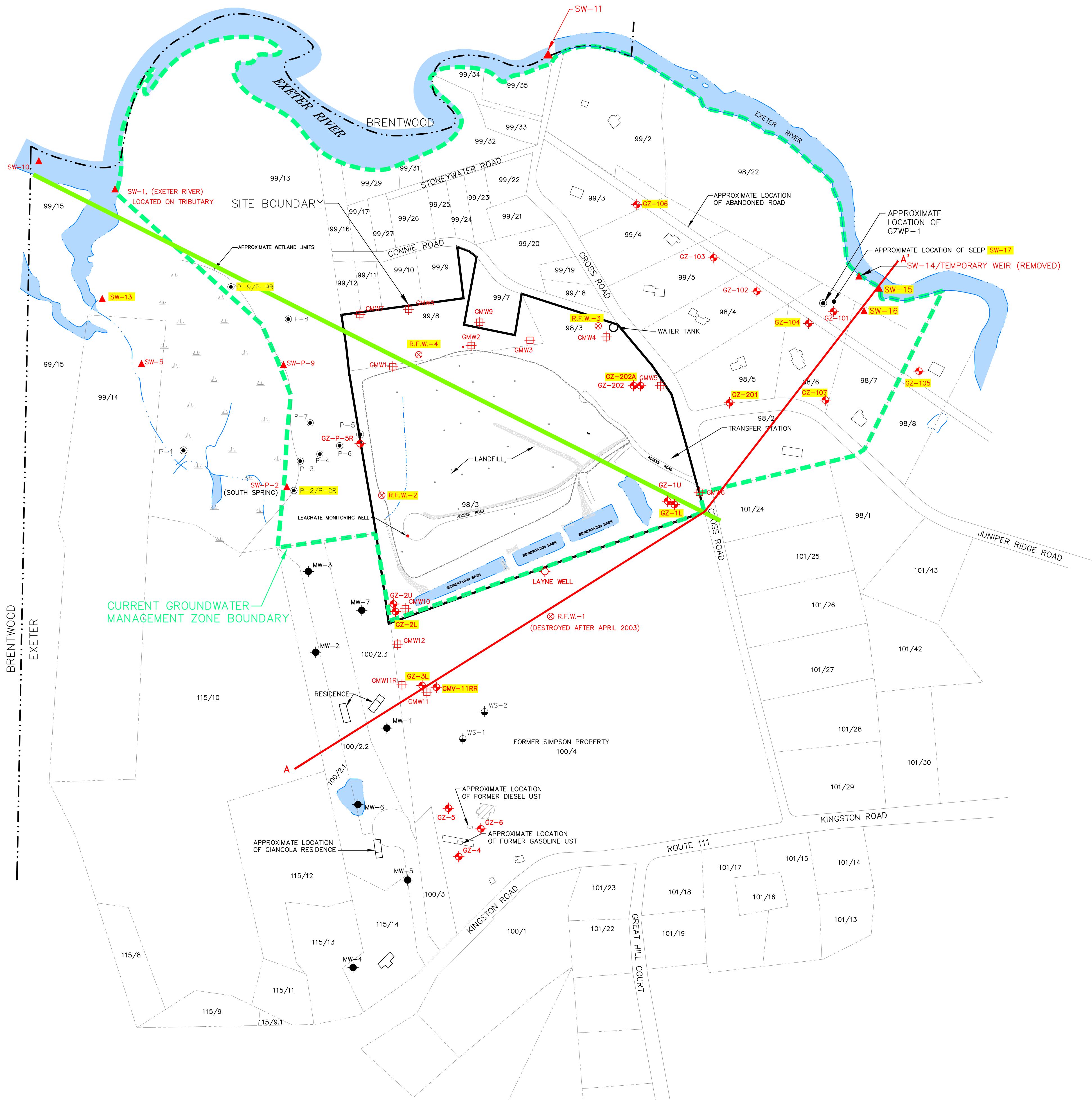
An off-site seep has been observed to the east of the Landfill with potential impacts to the Exeter River. Additional information about the seep can be found in GZA's Annual Summary Report, dated February 10, 2023.

Section 4-E2

A leachate monitoring well is located on the southwestern corner of the Landfill. The well was historically used to remove leachate from the Landfill. The leachate well has not been used for several years and its condition is unknown.



Figure



LOCUS MAP

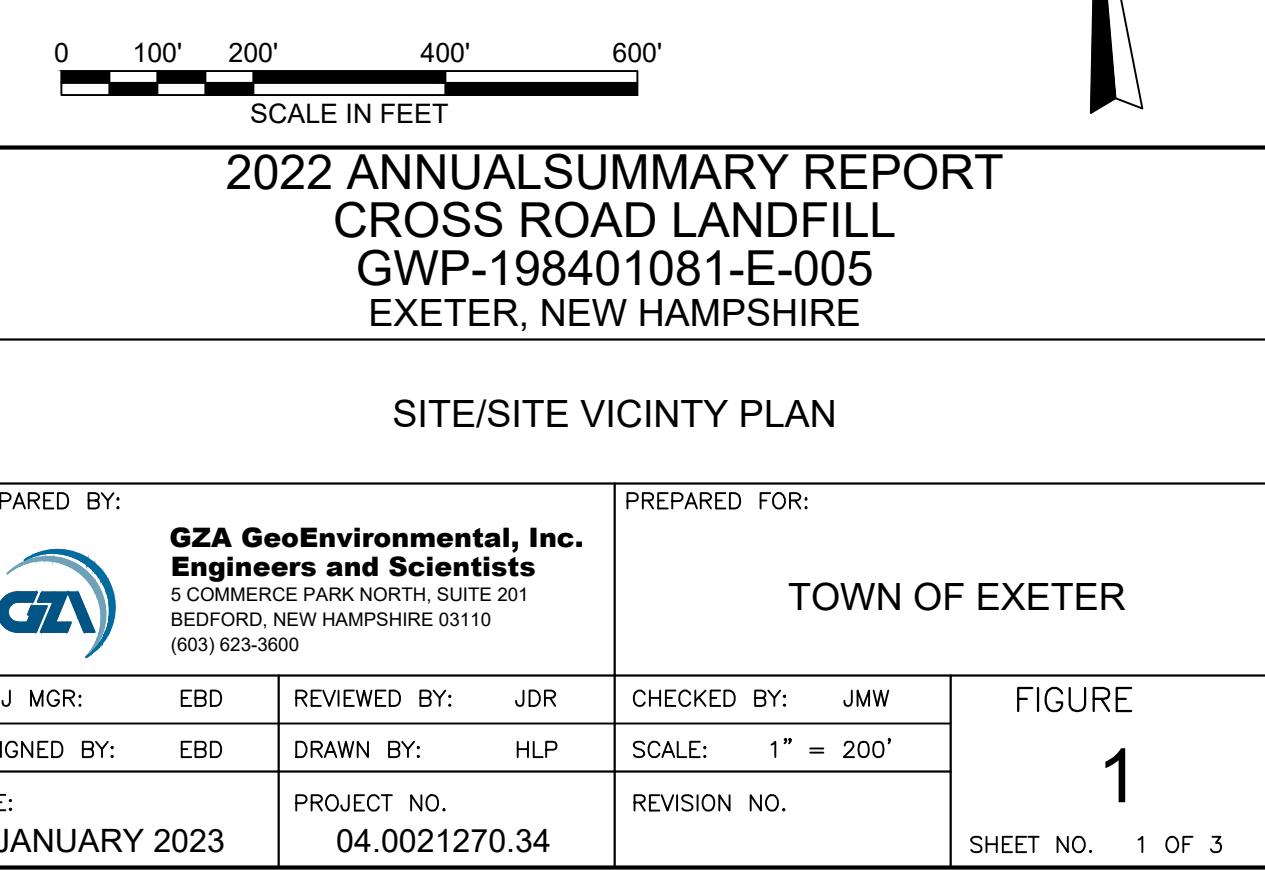
SCALE: 1" = 2000' ±

NOTE

1. BASE MAP DEVELOPED FROM PROPERTY TAX MAPS PROVIDED BY THE TOWN OF EXETER, NEW HAMPSHIRE INCLUDING TAX MAPS 98, 99, 100 AND 101.
 2. LOCUS MAP DEVELOPED FROM UNITED STATES GEOLOGIC SURVEY MAPS, KINGSTON, 1981 PHOTO REVISED 1989 AND EXETER 1985.
 3. THE LOCATIONS OF SITE FEATURES INCLUDING WELLS, PIEZOMETERS, AND ROADS ARE BASED ON INFORMATION SHOWN ON PLANS TITLED "TOPOGRAPHIC PLAN OF LAND OF CROSSROAD LANDFILL, PREPARED FOR THE TOWN OF EXETER, NEW HAMPSHIRE," PREPARED BY T.F. MORAN, INC. OF BEDFORD, NEW HAMPSHIRE, DATED JANUARY 24, 1994; "GROUNDWATER ELEVATION CONTOUR MAP—26 APRIL 1990, EXETER LANDFILL, EXETER, NEW HAMPSHIRE," PREPARED BY ROY F. WESTON, INC. (WESTON) OF CONCORD NEW HAMPSHIRE, DATED MAY 1990; "EXPLORATION LOCATION PLAN, EXETER LANDFILL, EXETER, NEW HAMPSHIRE," PREPARED BY GZA GEOENVIRONMENTAL, INC. OF MANCHESTER, NEW HAMPSHIRE, DATED JULY 1997; SITE SKETCH TITLED "PARKER SURVEY" PROVIDED BY THE TOWN OF EXETER, NEW HAMPSHIRE DATED NOVEMBER 1997. THE LOCATIONS OF CERTAIN WELLS, PIEZOMETERS, AND SURFACE WATER SAMPLING LOCATIONS ARE BASED ON TAPE MEASUREMENTS FROM SITE FEATURES BY GZA AND ARE APPROXIMATE.
 4. WETLAND LIMITS AND LOCATIONS OF SW-1, NORTH SPRING, SOUTH SPRING, AND P-6 WERE OBTAINED FROM FIGURE 4 OF A REPORT TITLED "REPORT OF HYDROGEOLOGIC INVESTIGATION, EXETER LANDFILL, EXETER, NEW HAMPSHIRE," PREPARED BY ROY F. WESTON, INC. OF CONCORD, NEW HAMPSHIRE, DATED JUNE 1990. THE LOCATIONS ARE APPROXIMATE.
 5. THE MONITORING WELL DESIGNATED "LAYNE WELL" WAS INSTALLED BY LAYNE NEW ENGLAND AS DIRECTED BY GIDLEY LABORATORIES, INC. (GIDL) OF FAIRHAVEN, MASSACHUSETTS DURING OR BEFORE 1979. PIEZOMETERS P-1 THROUGH P-9 WERE INSTALLED BY GIDL DURING OR BEFORE 1979. MONITORING WELLS RFW-1 THROUGH RFW-4 WERE INSTALLED BY WESTON DURING MARCH 27 THROUGH APRIL 4, 1990. MONITORING WELLS MW-1 THROUGH MW-3 LOCATED ON THE BRADSHER PROPERTY WERE INSTALLED BY EXETER ENVIRONMENTAL ASSOCIATES, (EEA) ON DECEMBER 22, 2000. MONITORING WELLS MW-4 THROUGH MW-7, ALSO LOCATED ON THE BRADSHER PROPERTY WERE INSTALLED BY EEA ON MAY 15, 2001. MONITORING WELLS GZ-1U, GZ-1L, GZ-2U, GZ-2L, GZ-3L, GZ-4, GZ-5 AND GZ-6 AND SOIL GAS MONITORING WELLS GMW10 AND GMW11 WERE INSTALLED BY CAPITAL ENVIRONMENTAL DRILLING SERVICE OF DUNBARTON, NEW HAMPSHIRE DURING JUNE 28 THROUGH JULY 6 2001. WELL POINTS P-2R AND P-9R WERE INSTALLED BY GZA DURING APRIL 2003. GZ-P-5R WAS INSTALLED BY NEW HAMPSHIRE BORING OF LONDONDERRY, NH ON APRIL 20, 2004. MONITORING WELLS GZ-201, GZ-202, AND GZ-202A WERE INSTALLED BY NEW HAMPSHIRE BORING DURING SEPTEMBER AND NOVEMBER 2012. MONITORING WELL GMW-11RR WAS INSTALLED BY NEW ENGLAND BORING DURING AUGUST 2019.
 6. LOCATION OF PHOTO LINEAMENT SHOWN BASED ON THE UNITED STATES GEOLOGIC SURVEY MAP TITLED "LINEAMENT MAP OF AREA 1 OF THE NEW HAMPSHIRE BEDROCK AQUIFER ASSESSMENT, SOUTH EASTERN NEW HAMPSHIRE," DATED 1997.
 7. LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.

| F

- | | | |
|-------|------------|--|
| | GZ-1L | GROUNDWATER MONITORING WELL BY GZA |
| | R.F.W.-4 | GROUNDWATER MONITORING WELL |
| | LAYNE WELL | LAYNE WELL FORMER MONITORING WELL BY OTHERS |
| | MW-1 | - OFFSITE OVERRUN MONITORING WELL BY OTHERS |
| | WS-1 | ABANDONED OVERRUN WATER SUPPLY WELL |
| | SW-5 | SURFACE WATER SAMPLING LOCATION |
| | GMW4 | SOIL GAS MONITORING WELL LOCATION |
| | P-5 | PIEZOMETER LOCATION |
| | | STREAM |
| | | OPEN SURFACE WATER |
| 100/4 | | TOWN OF EXETER, NEW HAMPSHIRE PROPERTY TAX MAP NO./LOT NO. |
| ----- | | TOWN OF EXETER, NEW HAMPSHIRE PROPERTY LOT BOUNDARY |
| | | APPROXIMATE LOCATION OF STRUCTURE |
| | | APPROXIMATE LOCATION OF FORMER STRUCTURE |
| | | CURRENT GROUNDWATER MANAGEMENT PERMIT
REQUIRED SAMPLING LOCATION |
| | | APPROXIMATE LOCATION OF PHOTO LINEAMENT IDENTIFIED BY
THE UNITED STATES GEOLOGICAL SURVEY |
| | | LOCATION OF CROSS SECTION LINE |





Tables

TABLE 1
WATER QUALITY DATA SUMMARY

Iron (mg/l)

Iron (mg/L)

NH AGQS = NE

See last page for note

TABLE 1
WATER QUALITY DATA SUMMARY

Manganese (mg/L)

NH AGQS = 0.300 mg/
WQCTS (Water and Fish Ingestion) = 0.05 mg/

Sampling Date	Overburden Monitoring Wells																	Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations									Leachate Monitoring Well				
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-103	GZ-104	GZ-105	GZ-106	GZ-107	GZ-201	GZ-202A	GMW-11RR	GZ-11	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-14	SW-15	SW-16	SW-17	Exeter River
PRE-CLOSURE	5/27/1992	0.14	0.93	4.9	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	-	-	-	-	-	-	-	6.4				
	11/12/1992	0.01	0.01	4.75	0.965	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	4/6/1993	<0.01	0.56	6.62	4.32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.56					
	7/1/1993	0.59	0.39	6.24	5.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	11/5/1993	0.12	0.34	10.8	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.78					
	4/14/1994	1.31	1.07	11.3	4.75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	7/15/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
POST-CLOSURE	11/18/1994	0.05	0.19	9.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	4/12/1995	<0.05	0.68	10.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	7/28/1995	<0.05	0.26	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	12/8/1995	<0.01	0.56	13	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	4/26/1996	<0.01	0.61	9.2	3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	7/25/1996	<0.02	0.66	15	5.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	11/14/1996	-	0.77	16	3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	4/21/1997	-	0.4	14	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
POST-CLOSURE	7/22/1997	0.8	0.47	0.36	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	11/11/1997	<0.005	0.73	19	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	4/15/1998	<0.005	0.67	14	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	7/6/1998	-	0.52	21	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	11/16/1998	<0.005	0.64	3.9	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	4/19/1999	<0.005	0.57	6.8	3.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	7/27/1999	<0.005	0.51	6.3	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	11/18/1999	<0.005	0.61	7.8	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	5/5/2000	0.018	0.55	7.8	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	7/7/2000	0.16	0.56	7	5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
POST-CLOSURE	11/16/2000	<0.005	0.51	4.8	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	4/25/2001	<0.005	0.97	2.9	5.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	7/25/2001	<0.003	0.62	2																																		

See last page for notes

TABLE 1
WATER QUALITY DATA SUMMARY
Ross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Chloride (mg/L)

NH AGQS = NE
SMCL = 250 mg/L
WQTS (Protection of Aquatic Life - Fresh Water Acute) = 230 mg/L

Sampling Date	Overburden Monitoring Wells															Bedrock Monitoring Wells			Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations									Leachate Monitoring Well			
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-15	SW-16	SW-17	Exeter River
5/27/1992	17	56	78	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48	-	-	-	-	-	-	-	-	-	900		
11/12/1992	24	70	78	188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	64	-	-	-	-	-	-	-	-	-	-
4/6/1993	32	70	34	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40	-	-	-	-	-	-	-	-	-	1,150
7/1/1993	900	700	650	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200	-	-	-	-	-	-	-	-	-	-
11/5/1993	18	52	66	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62	-	-	-	-	-	-	-	-	-	700
4/14/1994	6.6	56	52.6	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-
7/15/1994	5.24	49.7	46.6	147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.1	-	-	-	-	-	-	-	-	-	-
8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350
9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	950
10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	450
11/18/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	470
2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	500
4/12/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	490
7/28/1995	10	54	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	-	-	-	-	-	-	-	-	-	510
12/8/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200
4/26/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	550
7/25/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/14/1996	-	66	35	170	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	-	49	52	-	-	-	-	-	-	-	
4/21/1997	-	60	32	160	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	23	8	-	-	-	-	-	-	-	
7/22/1997	17	37	29	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69	-	49	39	-	-	-	-	-	-	-	
11/11/1997	78	103	36	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	-	80	40	-	-	-	-	-	-	-	-	
4/15/1998	52	56	22	97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	-	-	25	-	-	-	-	-	-	-	
7/6/1998	-	39	31	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	-	90	17	-	-	-	-	-	-	-	-
11/16/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/19/1999	28	50	140	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32	-	27	44	-	-	-	-	-	-	-	-	
7/27/1999	9.9	37	21	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	-	51	67	-	-	-	-	-	-	-	-
11/18/1999	40	47	28	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	47	53	-	-	-	-	-	-	-	-
5/5/2000	83	51	8.1	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2000	420	53	14	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	-	54	43	-	-	-	-	-	-	-	-
11/16/2000	120	73	44	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43	-	62	60	-	-	-	-	-	-	-	-
4/25/2001	72	63	34	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	-	42	39	-	-	-	-	-	-	-	-
7/25/2001	42	63	17	100	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	81	<5	26	11	-	-	-	-	-	-	-	-	
8/9/2001	-	-	-	-	51																													

- 94 See last page for no

TABLE 1
WATER QUALITY DATA SUMMARY

Nitrate (mg/L)

NH AGQS = 10 mg/L
WQCTS (Water and Fish Ingestion) = 10 mg/L

See last page for note

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

TKN (mg/L)

NH AGQS = NE
WQCTs = NE

Sampling Date	Overburden Monitoring Wells												Bedrock Monitoring Wells					Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations							Leachate Monitoring Well					
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/ South Spring)	SW-P-9 (P-9/1P-9R Northern Spring)	GZ-P-5R	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-15	SW-16	SW-17
5/27/1992	0.5	0.5	1.2	8.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150			
11/12/1992	0.665	0.904	0.477	7.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/6/1993	2.09	1.39	1.39	7.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	207			
7/1/1993	<1.0	<1.0	24	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/5/1993	0.164	0.164	0.789	8.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	213			
4/14/1994	0.393	0.241	1.24	7.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
7/15/1994	0.317	0.099	0.404	6.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/18/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/12/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
7/28/1995	1.64	<1	3.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
12/8/1995	0.56	0.31	3.8	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/26/1996	<1	0.24	2.5	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
7/25/1996	0.05	0.15	2.6	7.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/14/1996	-	0.69	11	19	-	-	-	-	-	-	-	-	-	-	-	-	-	0.12	-	-	0.74	0.52	-	-	-	-	-	-	-	-			
4/21/1997	-	0.61	1.5	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34	-	2.1	1.4	-	-	-	-	-	-	-	-			
7/22/1997	0.27	0.61	1.29	10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.45	-	3.36	0.44	-	-	-	-	-	-	-	-			
11/11/1997	0.3	1.9	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	1.5	0.8	-	-	-	-	-	-	-	-			
4/15/1998	<0.1	0.95	1.5	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	-	1.1	-	-	-	-	-	-	-	-	-			
7/6/1998	-	1.8	1.4	2.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.2	-	4.3	0.3	-	-	-	-	-	-	-	-	-		
11/16/1998	2.2	0.27	1.8	6.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	-	0.47	3.6	-	-	-	-	-	-	-	-	-		
4/19/1999	<0.5	<0.5	1.6	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	<0.5	<0.5	-	-	-	-	-	-	-	-	-		
7/27/1999	<0.01	<0.01	1.9	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.3	-	1.5	0.8	-	-	-	-	-	-	-	-	-		
11/18/1999	<0.5	<0.5	5.3	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	2.4	2	-	-	-	-	-	-	-	-	-		
5/5/2000	<0.5	<0.5	2.7	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	-	-	-	-	-	-	-	-	-	-	-			
7/7/2000	<0.5	<0.5	3.5	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	0.5	<0.5	-	-	-	-	-	-	-	-	-		
11/16/2000	1.3	0.5	2.5	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4.1	45.2	-	-	-	-	-	-	-	-	-	-	
4/25/2001	0.7	ND	1.8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	5	2.2	-	-	-	-	-	-	-	-	-	-	
7/25/2001	0.8	<0.3	1.1	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4	16	-	-	-	-	-	-	-	-	-	-	
8/9/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/28/2001	0.6	0.3</td																															

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

1,4-Dioxane (mg/L)

NH AGQS = 0.32 µg/L
WQCTS (Water and Fish Ingestion) = NE

Sampling Date	Overburden Monitoring Wells															Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations									Leachate Monitoring Well						
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-103	GZ-104	GZ-105	GZ-106	GZ-107	GZ-201	GZ-202A	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	SW-P-9 (P-9/1P-9R Northern Spring)	GZ-P-5R	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-14	SW-15	SW-16	SW-17	Exeter River
4/27/2009	-	-	1	6	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	-	<1	-	-	1	-	5	-	-	-	-	-	-	-	-	-	-	
11/4/2009	-	-	1	4	-	-	-	-	-	-	-	<1	-	-	-	-	-	-	-	-	-	<1	-	-	1	-	2	-	-	-	-	-	-	<1	<1	-		
4/20/2010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/11/2010	-	<1	2	4	<1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	<1	<1	<1	-	1	<1	3	-	-	-	-	-	-	-	-	-		
4/22/2011	-	<0.25	1	1	<0.25	-	-	-	-	-	-	-	0.95	-	-	-	-	-	-	-	-	<0.25	-	-	0.58	<0.25	2	-	-	-	-	-	-	-	-	-		
11/4/2011	-	<0.25	1.3	1.4	<0.25	-	-	-	-	-	-	-	1.6	-	-	-	-	-	-	-	<0.25	<0.25	<0.25	-	0.56	<0.25	-	-	-	-	-	-	-	-	-			
4/30/2012	-	0.55	1.6	2.8	<0.25	-	-	-	-	-	-	-	0.83	-	-	-	-	-	-	-	<0.25	-	-	1.2	0.50	-	-	-	-	-	-	-	-	-	-			
11/5/2012	-	<0.25	1.5	1.3	<0.25	-	-	-	-	-	-	-	1.7	-	-	-	<0.25	2.8	-	<0.25	<0.25	-	-	1.4	0.55	2.1	-	-	-	-	-	-	<0.25	<0.25	-			
5/7/2013	-	-	-	-	-	-	-	-	-	-	-	0.70	-	1.2	-	-	<0.25	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
12/19/2013	-	<0.25	0.25	1.1	<0.25	-	-	-	-	-	-	0.79	-	1.2	-	-	<0.25	2.0	-	<0.25	<0.25	<0.25	-	-	-	1.1	-	-	-	-	-	-	-	1.3	<0.25	-		
4/15/2014	-	-	-	-	-	-	-	-	-	-	-	<0.25	-	-	-	<0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.25	-	-		
11/3/2014	-	-	-	-	-	-	-	-	-	-	-	0.33	-	-	-	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.25	-	-	
11/17/2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-	<0.25	-	-	
11/2/2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4/24/2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11/7/2017	-	<0.25	2.2	3.2	-	-	-	-	-	-	-	0.71	-	-	-	<0.25	2.0	-	<0.25	<0.25	<0.25	-	1.4	-	1.4	-	-	-	-	-	-	<0.25	-	1.3	-			
4/25/2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.70	-	-	
4/24/2019	-	<0.2	2.1	4.2	-	-	-	-	-	-	-	<0.2	-	-	-	<0.2	5.3	-	0.44	<0.2	<0.2	-	-	-	1.8	-	-	-	-	-	-	-	-	0.73	-	-		
11/4/2019	-	<0.2	2.0	2.9	-	-	-	-	-	-	-	0.89	-	1.4	-	1.2	-	<0.2	4.4	<0.2	<0.2	<0.2	-	0.70	-	1.1	-	-	-	-	-	-	<0.2	1.0	1.3	0.81	-	
4/16/2020	-	<0.2	0.9	0.81	-	-	-	-	-	-	-	0.79	<0.2	1.0	<0.2	0.9	<0.2	<0.2	1.8	<0.2	<0.2	<0.2	-	-	0.53	-	-	-	-	-	-	0.81	0.78	0.52	0.42	-		
11/5/2020	-	<0.2	1.5	1.5	-	-	-	-	-	-	-	1.0	<0.2	1.5	<0.2	2.0	<0.2	<0.2	2.1	<0.2	<0.2	<0.2	-	-	1.1	-	-	-	-	-	-	1.2	1.6	1.6	1.9	-		
4/8/2021	-	<0.2	0.78	0.68	-	-	-	-	-	-	-	-	0.98	-	-	-	<0.2	1.3	<0.2	<0.2	<0.2	-	-	1.4	-	-	-	-	-	-	-	-	0.59	-	-			
11/10/2021	-	<0.2	0.59	0.78	-	-	-	-	-	-	-	-	0.73	<0.2	0.20	<0.2	<0.2	0.96	<0.2	<0.2	<0.2	<0.2	-	-	0.83	-	-	-	-	-	-	<0.2	0.73	-	0.42	-		
4/5/2022	-	<0.2	1.17	0.74	-	-	-	-	-	-	-	-	0.56	-	-	-	<0.2	1.43	<0.2	<0.2	<0.2	-	-	1.13	-	-	-	-	-	-	-	-	-	0.48	-	-		
11/2/2022	-	<0.2	<0.2	2.6	-	-	-	-	-	-	-	0.58	<0.2	2.6	<0.2	1.5	<0.2	<0.2	0.2	-	0.70	-	-	1.5	-	-	-	-	-	-	<0.2	-	0.83	0.33	-			

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Specific Conductance (mg/L)

NH AGQS = NE
WQCTS (Water and Fish Ingestion) = NE

Sampling Date	Overburden Monitoring Wells														Bedrock Monitoring Wells						Groundwater Seep Monitoring Stations				Surface Water Monitoring Stations							Leachate Monitoring Well						
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-103	GZ-104	GZ-105	GZ-106	GZ-107	GZ-201	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2) Southern Spring	SW-P-2 (P-2/1P-2R) Southern Spring	GW-P-5R	SW-P-9 (P-9/1P-9R) Northern Spring	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-14	SW-15	SW-16	SW-17	Exeter River
5/27/1992	150	370	910	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,500						
11/12/1992	130	347	858	1,270	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
4/6/1993	180	340	699	855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,790						
7/1/1993	134	368	991	1,350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
11/5/1993	136	352	943	1,310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,830						
4/14/1994	69	350	710	958	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
7/15/1994	77	335	740	1,200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
11/18/1994	140	340	800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
7/22/1997	189	1,024	202	156	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
7/22/1999	117	325	1,076	1,100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
4/25/2001	261	327	887	847	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
7/25/2001	229	301	1,390	982	810	-	-	504	296	805	-	-	-	-	-	-	-	-	-	530	290	585	-	131	494	-	261	-	-	-	-	-						
8/9/2001	-	-	-	-	662	-	-	435	225	-	-	-	-	-	-	-	-	-	603	769	279	-	-	-	-	-	-	-	-	-	-	-	-					
11/28/2001	590	387	1,610	984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	470	477	-	398	-	-	-	-	-	-					
4/24/2002	266	349	912	940	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
11/20/2002	192	355	822	782	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
4/29/2003	535	94	1,003	431	346	-	-	-	-	-	-	-	-	-	-	-	-	-	-	586	696	224	-	259	573	-	140	-	-	-	-	-	-	-				
11/17/2003	-	117	968	412	362	-	-	-	-	-	-	-	-	-	-	-	-	-	-	613	712	242	-	230	508	-	103	-	-	-	-	-	-	-				
4/28/2004	-	542	1,017	760	405	-	-	-	-	-	-	-	-	-	-	-	-	-	596	553	382	342	-	247	270	762	-	-	-	-	-	-	-	-				
11/15/2004	-	226	1,262	794	251	-	-	-	-	-	-	-	-	-	-	-	-	-	436	402	204	-	-	199	180	406	-	-	-	-	-	-	-	-				
4/28/2005	-	558	1,093	717	390	-	-	-	-	-	-	-	-	-	-	-	-	559	561	366	-	-	240	235	723	-	-	-	-	-	-	-	-					
11/8/2005	-	268	1,330	905	554	-	-	-	-	-	-	-	-	-	-	-	-	623	711	284	-	-	265	397	581	-	-	-	-	-	-	-	-					
4/17/2006	-	205	1,231	606	301	-	-	-	-	-	-	-	-	-	-	-	-	393	324	218	-	-	170	255	464	320	-	-	-	-	-	-	-					
11/20/2006	-	274	796	756	1,050	-	-	-	-	-	-	-	-	-	-	-	-	582	308	257	-	-	197	363	442	113	-	-	-	-	-	-	-					
5/2/2007	-	358	603	707	508	-	-	-	-	-	-	-	-	-	-	-	-	627	-	-	-	-	308	363	517	347	-	-	-	-	-	-	119					
11/14/2007	-	303	633	715	510	-	-	-	-	-	-	-	-	-	-	-	-	525	605	229	-	-	217	344	485	208	-	-	-	-	-	-	97					
4/25/2008	-	367	681	856	700	-	-	-	-	-	-	-	-	-	-	-	-	668	-	-	-	-	325	246	517	257	-	-	-	-	-	-	155					
11/18/2008	-	341	634	871	765	-	-	-	-	-	-	-	-	-	-	-	-	417	-	-	-	-	487	677	-	-	-	-	-	-	-	-	131					
4/27/2009	-	367	636	835	712	-	-	-	-	-	-	-	-	-	-	-	-	598	-	-	-	-	317	226	502	117	-	-	-	-	-	-	248					
11/4/2009	-	350	1,062	1,070	338	-	-	-	-	-	-	-	-	-	-	-	-	607	-	-	-	-	668	554	217	-	-	-	-	-	-	-	262					
4/20/2010	-	347	1,																																			

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

DO (mg/L)

NH AGQS = NE
WQCTS (Water and Fish Ingestion) = NE

Sampling Date	Overburden Monitoring Wells															Bedrock Monitoring Wells					Groundwater Seep Monitoring Stations				Surface Water Monitoring Stations								Leachate Monitoring Well											
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-103	GZ-104	GZ-105	GZ-106	GZ-107	GZ-201	GZ-202A	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/South Spring)	SW-P-2 (P-2/P-2R Southern Spring)	GW-P-5R	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-14	SW-15	SW-16	SW-17	Exeter River	MW-6					
4/16/2020	-	3.60	2.95	2.71	-	-	-	-	-	-	5.6	10.46	6.80	9.35	5.25	8.85	3.88	2.78	7.65	7.25	10.40	4.20	-	-	-	-	5.01	-	-	-	-	-	9.94	9.59	9.34	9.22	-	-						
11/5/2020	-	2.54	2.72	2.50	-	-	-	-	-	-	8.77	10.75	7.15	8.62	7.17	8.22	3.28	2.27	7.14	3.30	5.02	4.46	-	-	-	-	3.64	-	-	-	-	-	9.08	8.6	7.23	5.81	-	-						
11/10/2021	-	3.77	4.32	1.99	-	-	-	-	-	-	-	-	-	-	-	-	4.16	8.82	9.78	7.6	2.97	7.07	7.49	6.71	9.41	4.40	-	-	-	-	1.48	-	-	-	-	-	10.96	9.47	-	7.85	-	-		
4/5/2022	-	4.80	4.28	2.93	-	-	-	-	-	-	-	-	-	-	-	-	6.02	-	-	-	5.00	6.75	8.66	5.88	12.21	6.37	-	-	-	-	1.93	-	-	-	-	-	-	-	11.11	-	-	-	-	-
11/2/2022	-	3.03	5.36	1.93	-	-	-	-	-	-	-	-	-	-	-	-	5.35	8.38	9.41	7.31	5.07	2.92	5.65	4.49	16.05	4.24	-	-	0.38	-	0.30	-	-	-	4.38	9.98	-	3.32	8.36	10.75	8.93	9.03	-	-

See last page for notes.

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

ORP (mg/L)

NH AGQS = NE
WQCTS (Water and Fish Ingestion) = NE

Sampling Date	Overburden Monitoring Wells															Bedrock Monitoring Wells					Groundwater Seep Monitoring Stations					Surface Water Monitoring Stations							Leachate Monitoring Well MW-6									
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-103	GZ-104	GZ-105	GZ-106	GZ-107	GZ-201	GZ-202A	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/South Spring)	SW-P-2 (P-2/PR Southern Spring)	GW-P-5R	SW-P-9 (P-9/PR Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-14	SW-15	SW-16	SW-17	Exeter River			
4/16/2020	-	67.6	241.6	3.2	-	-	-	-	-	-	-	323.3	339.0	313.3	319.5	337.4	245.1	196.4	196.4	208.0	68.9	-9.1	82.9	-	-	-	-	-15.2	-	-	-	-	-	245.1	253.0	318.8	328.6	-	-			
11/5/2020	-	153.7	68.1	-36.9	-	-	-	-	-	-	-	129.9	135.4	-12.6	161.3	62.3	97.4	144.8	-66.4	188.0	-62.8	-174.6	158.1	-	-	-	-	-44.9	-	-	-	-	-	47.2	56.6	60.5	59.7	-	-			
11/10/2021	-	65.4	69.3	-50.1	-	-	-	-	-	-	-	-	-	-	-	40.4	83.9	68.3	51.1	69.4	18.7	-16.2	-139.7	14.3	-	-	-	-	-35.0	-	-	-	-	-	74.6	54.0	-	68.2	-	-		
4/5/2022	-	70.9	36.4	-44.5	-	-	-	-	-	-	-	-	9.4	-	-	-	105.5	-57.2	88.8	-63.0	-131.7	-6.8	-	-	-	-	-21.3	-	-	-	-	-	-	-	-	33.6	-	-				
11/2/2022	-	56.9	170.0	-6.9	-	-	-	-	-	-	-	-	104.5	153.9	166.7	202.9	211.4	-14.0	233.6	254.4	-134.7	-30.4	-	-	-	-	-22.8	-	-	-111.7	-	-	72.1	90.3	-	-28.7	93.2	26.2	183.7	136.3	-	-

See last page for notes.

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Barium (mg/L)

NH AGQS= 2 mg/L
WQCTS (Water and Fish Ingestion) = 1.0 mg/L

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Barium (mg/L)

WQCTS (Water and Fish Ingestion) = 1.0 mg/L

Sampling Date	Overburden Monitoring Wells														Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations								Leachate Monitoring Well				
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GZ-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-15	SW-16	SW-17	Exeter River
4/5/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/2/2022	-	0.033	0.074	0.11	-	-	-	-	-	-	0.030	-	0.077	0.060	0.030	0.014	0.061	0.021	-	0.49	-	0.043	-	-	-	-	-	0.016	0.022	0.056	0.023	-	-	

See last page for notes.

TABLE 1
WATER QUALITY DATA SUMMARY

Cadmium (mg/L)

NH AGQS = 0.005 mg/L

Sampling	Overburden Monitoring Wells															Bedrock				Groundwater Seep Monitoring Stations				Surface Water Monitoring Stations								Leachate Monitoring Well		
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	SW-P-9 (P-9/1P-9R Northern Spring)	GW-P-5R	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-15	SW-16	SW-17	Exeter River
PRE-CLOSURE	5/27/1992	<0.005	0.007	<0.005	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005			
	11/12/1992	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	
	4/6/1993	0.01	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005	
	7/1/1993	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	
	11/5/1993	0.02	0.02	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	0.02		
	4/14/1994	0.015	<0.01	<0.01	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.016	-	-	-	-	-	-	-	-	-	-		
	7/15/1994	<0.01	<0.01	0.017	0.028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-		
	8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.014		
	9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.022		
	10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.011		
POST-CLOSURE	11/18/1994	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-		
	12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005		
	2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005		
	4/12/1995	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005			
	7/28/1995	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	0.7			
	12/8/1995	<0.004	<0.004	<0.004	<0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.004	-	-	-	-	-	-	-	-	-	<0.004			
	4/26/1996	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005			
	7/25/1996	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	-	-	-	-	-	-			
	11/14/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	4/21/1997	-	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	-	-	-	-	-	-	-	-				
	7/22/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11/11/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	4/15/1998	<0.001	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	<0.001	-	-	-	-	-	-	-	-	-			
	7/6/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11/16/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	4/19/1999	<0.001	<0.001	0.002	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.007	-	0.012	<0.001	-	-	-	-	-	-	-			
	7/27/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11/18/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
POST-CLOSURE	5/5/2000	<0.001	<0.001	0.002	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-			
	7/7/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11/16/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	4/25/2001	<0.001	<0.001	<0.001	0.0016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0078	-	0.0042	0.0022	-	-	-	-</td						

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Cadmium (mg/L)

NH AGQS = 0.005 mg/L
WQCTS (Protection of Aquatic Life - Fresh Water Acute) = 0.21 ug/L

Sampling	Overburden Monitoring Wells													Bedrock					Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations								Leachate Monitoring Well				
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GW-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-15	SW-16	SW-17	Exeter River
4/16/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/5/2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/8/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/10/2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/5/2022	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-		
11/2/2022	-	<0.001	<0.001	<0.001	-	-	-	-	-	-	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	

See last page for notes.

TABLE 1
WATER QUALITY DATA SUMMARY

Sodium (mg/L)

NH AGQS= 0.10 mg/L
WQCTS (Water and Fish Ingestion) = NE

Sampling Date	Bedrock Monitoring Wells														Groundwater Seep Monitoring Stations				Surface Water Monitoring Stations								Leachate Monitoring Well							
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GZ-1L	GMW-11RR	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GZ-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-15	SW-16	SW-17	Exeter River
5/27/1992	0.01	0.1	0.04	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	0.06			
11/12/1992	0.1	<0.01	0.02	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	-	-	-	-	-	-	-	-	-	-		
4/6/1993	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	0.08		
7/1/1993	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-		
11/5/1993	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	<0.05		
4/14/1994	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	<0.01		
7/15/1994	<0.01	<0.01	0.016	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	-	-		
8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	
9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	
10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	
11/18/1994	<0.05	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-	-		
12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	
2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	
4/12/1995	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1		
7/28/1995	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1	-	-	-	-	-	-	-	-	-	-	<0.1			
12/8/1995	<0.03	<0.03	<0.03	<0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.03	-	-	-	-	-	-	-	-	-	-	0.018			
4/26/1996	<0.03	<0.03	<0.03	0.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.03	-	-	-	-	-	-	-	-	-	-	<0.03			
7/25/1996	<0.004	<0.004	<0.004	<0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.004	-	-	-	-	-	-	-	-	-	-	-			
11/14/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/21/1997	-	<0.004	<0.004	<0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.004	<0.004	<0.004	<0.004	-	-	-	-	-	-	-				
7/22/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/11/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/15/1998	<0.004	<0.004	<0.004	<0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.004	-	-	<0.004	-	-	-	-	-	-	-	-			
7/6/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/16/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/19/1999	<0.004	<0.004	<0.004	<0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.004	<0.004	<0.004	<0.004	-	-	-	-	-	-	-	-			
7/27/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/18/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5/5/2000	<0.004	<0.004	0.008	0.009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.004	-	-	-	-	-	-	-	-	-	-				
7/7/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
11/16/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4/25/2001	<0.004	<0.004	<0.004	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.012	-	0.0045	<0.004	-	-	-	-	-	-	-	-			
7/25/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8/9/2001	-	-	-	-	<0.004	-	-	-	-	-	-	-	-	-	-	<0.004	<0.004	<0.004	<0.004															

See last page for note

TABLE 1
WATER QUALITY DATA SUMMARY

Lead (mg/L)

NH AGQS = 0.015 mg/L
WOCTS (Water and Fish Ingestion) = NE

Sampling Date	Overburden Monitoring Wells															Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Stations								Leachate Monitoring Well			
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-102	GZ-104	GZ-106	GZ-201	GZ-202A	GMW-11RR	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	SW-P-9 (P-9/1P-9R Northern Spring)	GZ-P-5R	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	SW-15	SW-16	SW-17	Exeter River
5/27/1992	0.006	0.031	0.011	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	0.03			
11/12/1992	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/6/1993	0.001	0.001	0.001	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	-	-	-	-	0.018		
7/1/1993	<0.1	<0.1	9.06	<0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.78	-	-	-	-	-	-	-	-	-	-		
11/5/1993	<0.01	<0.01	<0.01	<0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	-	-	-	-	-	-	-	-	-	<0.01		
4/14/1994	<0.005	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-		
7/15/1994	<0.05	0.052	<0.05	<0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.05	-	-	-	-	-	-	-	-	-	-			
8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.1		
9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9		
10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.03		
11/18/1994	<0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001	-	-	-	-	-	-	-	-	-	-			
12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005		
2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001		
4/12/1995	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005			
7/28/1995	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	<0.005			
12/8/1995	<0.002	0.003	0.006	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.003	-	-	-	-	-	-	-	-	-	0.009			
4/26/1996	<0.02	<0.02	<0.02	<0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.02	-	-	-	-	-	-	-	-	-	<0.02			
7/25/1996	<0.005	0.053	<0.005	0.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	-	-	-				
11/14/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/21/1997	-	0.004	0.004	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	-	0.012	0.003	-	-	-	-	-	-	-				
7/22/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/11/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/15/1998	<0.002	<0.002	18	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	<0.002	-	-	-	-	-	-	-	-				
7/6/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/16/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/19/1999	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	-	0.003	<0.002	-	-	-	-	-	-	-				
7/27/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/18/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
5/5/2000	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	-	-	-	-	-	-	-	-	-				
7/7/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
11/16/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
4/25/2001	<0.002	<0.002	<0.002	<0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.002	-	<0.002	<0.002	-	-	-	-	-	-	-				
7/25/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
8/9/2001	-	-	-	-	-	<0.016	-	-	-	-	-	-	-	-	-	-	-	<0.016	<0.016	<0.016	-	-	-	-	-	-	-	-	-	-				
11/28/2001	-	-	-	-																														

See last page for notes

TABLE 1
WATER QUALITY DATA SUMMARY

Mercury (mg/L)

NH AGQS = 0.002 mg/L
WQCTS (Water and Fish Ingestion) = 0.00005 mg/L

See last page for note

TABLE 1
WATER QUALITY DATA SUMMARY

Selenium (mg/L)

NH AGQS = 0.05 mg/L
TS (Water and Fish Ingestion) = 0.170 mg/L

See last page for notes

TABLE 1
WATER QUALITY DATA SUMMARY

Silver (mg/L)

NH AGQS = 0.10 mg/L
WQCTS (Water and Fish Ingestion) = 0.05 mg/L

- <0.001 See last page for notes

TABLE 1
WATER QUALITY DATA SUMMARY
 Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081

(mg/L)

See last page for notes

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Thallium (mg/L)

NH AGQS = 0.002 mg/L
WQCTS (Water and Fish Ingestion) = 0.0017 mg/L

Sampling Date	Overburden Monitoring Wells										Bedrock Monitoring Wells				Groundwater Seep Monitoring Stations			Surface Water Monitoring Locations						Leachate Monitoring Well		
	RFW-1	RFW-2	RFW-3	RFW-4	GZ-1U	GZ-2	GZ-3	GZ-4	GZ-5	GZ-6	GZWP-1	GZ-104	GZ-1L	GZ-2L	GZ-3L	Giancola Residence	SW-P-2 (P-2/1P-2R Southern Spring)	GZ-P-5R	SW-P-9 (P-9/1P-9R Northern Spring)	SW-1	SW-5	SW-10	SW-11	SW-12	SW-13	Exeter River
5/27/1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/12/1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/6/1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/1/1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/5/1993	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/14/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/15/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/30/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.023
9/6/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.001
10/11/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
11/18/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/23/1994	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.04
2/2/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.001
4/12/1995	<0.005	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005	-	-	-	-	-	-	-	<0.005
7/28/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.005
12/8/1995	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24
4/26/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06
7/25/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/14/1996	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/21/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/22/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/11/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/15/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/6/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/16/1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/19/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/27/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/18/1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/5/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/7/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/16/2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/25/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7/25/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8/9/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/28/2001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/17/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/24/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/20/2002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/29/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/17/2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/28/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/15/2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/28/2005	-	-	-	-																						

TABLE 1
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Thallium (mg/L)

4/22/2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/14/2011	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/30/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/5/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5/7/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12/19/2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/15/2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11/3/2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See last page for notes.

TABLE 1 - Notes
WATER QUALITY DATA SUMMARY
Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

04.0021270.34

NOTES:

1. Concentrations are in milligrams per liter (mg/L) or micrograms per liter ($\mu\text{g}/\text{L}$) as indicated.
2. "-" indicates that measurements were not made/not applicable.
3. "<" indicates the parameter was not detected above the detection limit shown.
4. **Bold** face print indicates detection.
5. "NH AGQS" indicates New Hampshire Ambient Groundwater Quality Standards as defined in the New Hampshire Code of Administrative Rules Env-Or 603.03 revised October 22, 2016.
6. **Shading** indicates that the measured level exceeds its NH AGQS, Secondary Maximum Contaminant Level (SMCL), or Water Quality Criteria for Toxic Substances (WQCTS) at time of sampling as defined by the New Hampshire Code of Administrative Rules Env-Wq 1703.23, adopted November 17, 2016. For groundwater monitoring locations where NH AGQS are not established for the referenced parameter SMCLs are used to shade data. For surface water monitoring locations where WQCTS are not established for the referenced parameter NH AGQS are used to shade data.
7. "NE" indicates none established.
8. "DA" indicates that the Chain-of-Custody indicates a sample taken and a volatile organic compound (VOC) laboratory report was not available.
9. Water quality data were compiled by GZA GeoEnvironmental, Inc. from analytical laboratory reports provided by the Town of Exeter.
10. "BDL" indicates target VOCs for the method used were below laboratory detection limits.
11. " $\mu\text{S}/\text{cm}$ " indicates microseimens per centimeter.
12. "M" indicates that the percent recovery for the matrix was outside of the acceptance criteria. Refer to analytical reports for additional information.
13. The analytical laboratory reports provided by Resource Environmental Group for groundwater monitoring wells RFW-2, RFW-3 and RFW-4 during November 2006 are mislabeled GZ-2, GZ-3 and GZ-4, respectively.
14. The groundwater elevation data provided by Resource Environmental Group for GZ-2U during November 2006 is mislabeled GZ-2M.
15. For 11/14/2007 the percent recovery for sample P-9R for chloride was 85.
16. Please note that based on review of historical chain-of-custody forms, samples for metals analyses collected from groundwater monitoring wells have been field filtered and represent dissolved metals analyses. Samples collected from surface water location SW-1 have not been field filtered and represent total metals analyses. Samples collected at P-2 (southern spring) and P-9 (northern spring) through 2002 were also not field filtered and represent total metals analyses. Samples collected from the replacement well points (P-2R, P-5R, and P-9R) during 2006 were field filtered. For further information regarding historic sampling procedures, please refer to Section 5.2.4 (Review of Historic Total Metals and Dissolved Metals Analyses) of GZA's May 10, 2002 report.
17. Landfill water quality monitoring associated with the samples labeled P-2 and P-9 has been performed by Mr. Tom Walker of REG. Based on conversations with Mr. Walker during a site visit on April 17, 2002, the samples designated P-2 and P-9 on laboratory reports and chain-of-custody forms since November 1996 (the start of routine sampling of P-2 and P-9) were collected from surface water proximate to P-2 and about 300 feet south of P-9 from November 1996 through November 2001. The locations sampled from November 1996 through November 2001 are designated SW-P-2 and SW-P-9 on **Figure 1**. The data from these locations represent total metals analyses of surface water. Replacement groundwater well points designated P-2R and P-9R have been sampled since November 2001.
18. The NH AGQS for 1,4-dioxane was revised on September 1, 2018 to 0.32 $\mu\text{g}/\text{L}$.
19. The NH AGQS for Manganese was revised on January 1, 2021 to 300 $\mu\text{g}/\text{L}$.
20. The NH AGQS for Arsenic was revised on July 1, 2021 to 5 $\mu\text{g}/\text{L}$.

TABLE 2A
LANDFILL GAS DATA SUMMARY
(Historical Monitoring Locations)

Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081

Sample Date	Air Temperature (°C)	Barometric Pressure (mb)	Sampled By	GMW-1					GMW-2					GMW-3							
				CGI		Infrared Detector			CGI		Infrared Detector			CGI		Infrared Detector					
				O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	CH ₄ %	CO ₂ %	O ₂ %	
11-14-96 ¹	-	-	RLI	-	12.0	-	-	-	-	-	42.0	-	-	-	-	-	52.0	-	-	-	
04-21-97 ²	-	-	RLI	9.5	92.0	-	-	-	-	6.3	95.0	-	-	-	-	20.6	0.0	-	-	-	
05-16-97	-	-	GZA	1.3	31.0	-	-	-	-	3.0	44.0	-	-	-	-	2.0	44.0	-	-	-	
05-19-97 ³	-	-	GZA	-	-	-	54.4	35.6	0.9	-	-	-	23.4	24.3	2.8	-	-	-	0.9	0.7	20.0
07-08-97 ⁴	-	-	GZA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07-09-97 ³	-	-	GZA	-	-	-	56.1	41.3	0.0	-	-	-	12.4	2.7	19.3	-	-	-	3.3	1.9	19.3
07-14-97 ³	-	-	GZA	-	-	-	51.5	39.0	0.0	-	-	-	25.4	28.4	2.1	-	-	-	0.0	0.0	20.7
07-23-97 ³	-	-	GZA	-	-	-	50.1	38.7	0.0	-	-	-	10.3	2.6	18.6	-	-	-	0.0	0.0	20.3
08-29-97 ⁶	-	-	GZA	-	-	-	54.4	38.5	0.1	-	-	-	17.0	24.5	6.0	-	-	-	0.0	0.0	20.0
11-03-97 ⁷	-	-	GZA	-	-	-	47.5	35.1	0.1	-	-	-	22.8	26.0	3.3	-	-	-	14.4	24.7	0.8
01-08-98 ⁸	-	-	GZA	-	-	-	49.3	31.3	0.0	-	-	-	10.2	10.8	10.5	-	-	-	20.1	23.0	0.0
03-23-98 ⁸	-	-	GZA	-	-	-	52.8	32.8	0.8	-	-	-	30.1	28.1	1.0	-	-	-	26.2	25.9	1.5
04-14-98 ⁹	-	-	GZA	-	-	-	51.7	35.5	0.0	-	-	-	23.7	27.9	0.0	-	-	-	25.9	27.1	0.0
06-24-98 ¹⁰	-	-	GZA	-	-	-	56.7	35.5	0.0	-	-	-	3.8	5.5	15.8	-	-	-	27.9	29.3	0.0
08-26-98 ¹⁰	-	-	GZA	-	-	-	52.2	39.8	0.2	-	-	-	4.8	17.3	6.5	-	-	-	0.0	0.2	20.9
01/12/99 ¹¹	-	-	GZA	-	-	-	42.5	34.4	0.2	-	-	-	19.3	27.2	0.6	-	-	-	21.3	27.4	0.8
04/19/99 ⁸	-	-	GZA	-	-	-	44.5	29.5	0.0	-	-	-	5.8	9.0	12.4	-	-	-	24.3	24.2	2.6
04/02/01 ¹²	-	-	GZA	-	-	-	25.0	15.3	11.3	-	-	-	1.8	2.6	19.5	-	-	-	38.5	26.7	0.0
08/20/02 ¹²	-	-	GZA	-	-	-	38.0	32.0	0.2	-	-	-	3.1	5.6	12.2	-	-	-	0.0	7.1	11.7
06/17/03 ¹²	-	-	GZA	-	-	-	43.0	28.0	0.0	-	-	-	1.9	8.1	11.4	-	-	-	24.5	24.0	0.1
05/19/04 ¹²	17.2	1009 - 1013	GZA	-	-	-	14.0	9.4	9.6	-	-	-	0.0	1.5	19.2	-	-	-	29.0	26.0	1.2
09/14/04 ¹²	22.2	1009 - 1011	GZA	-	-	-	47.5	27.0	0.0	-	-	-	0.0	2.7	17.5	-	-	-	24.5	27.0	0.0
10/5/04 ¹²	10.0	1014 - 1019	GZA	-	-	-	48.5	29.0	0.0	-	-	-	1.5	8.3	12.0	-	-	-	25.0	25.0	0.0
10/21/04 ¹²	8.9	1024	GZA	-	-	-	43.5	27.0	0.0	-	-	-	0.1	8.3	11.4	-	-	-	23.0	23.0	0.0
12/17/04 ¹²	-	1008 - 1011	GZA	-	-	-	0.6	2.5	19.3	-	-	-	6.4	7.1	14.3	-	-	-	30.5	24.0	0.2
6/20/05 ¹²	-	1014 - 1019	GZA	-	-	-	43.0	26.0	0.0	-	-	-	0.0	4.0	15.5	-	-	-	30.0	24.0	0.0
11/7/05 ¹²	-	982 - 997	GZA	-	-	-	-	-	-	-	-	-	0.0	4.3	15.4	-	-	-	19.5	25.0	0.0
5/1/06 ¹²	-	1001 - 1005	GZA	-	-	-	39.0	25.0	0.0	-	-	-	7.1	19.0	0.9	-	-	-	25.5	21.0	0.0
11/28/06 ¹²	-	1024 - 1026	GZA	-	-	-	18.0	11.0	5.9	-	-	-	11.0	19.0	1.5	-	-	-	32.0	27.0	0.4
1/12/07 ¹²	-	1015 - 1019	GZA	-	-	-	34.5	24.0	0.0	-	-	-	23.0	25.0	0.0	-	-	-	13.0	19.0	0.0
3/12/07 ¹²	-	1012 - 1016	GZA	-	-	-	35.5	24.0	0.0	-	-	-	24.0	24.0	0.0	-	-	-	17.5	19.0	0.0
5/1/07 ¹²	-	1001 - 1005	GZA	-	-	-	39.0	25.0	0.0	-	-	-	7.1	19.0	0.9	-	-	-	25.5	21.0	0.0
9/11/07 ¹²	-	996 - 999	GZA	-	-	-	40.0	21.0	0.0	-	-	-	12.0	20.0	0.1	-	-	-	10.5	19.0	0.0
9/14/07 ¹²	-	1010 - 1013	GZA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12/28/07 ¹²	-	1016 - 1023	GZA	-	-	-	17.5	11.0	7.8	-	-	-	9.6	18.0	0.6	-	-	-	17.5	18.0	0.3
4/7/08 ¹²	-	1022 - 1024	GZA	-	-	-	18.0	9.1	13.0	-	-	-	1.7	13.0	9.4	-	-	-	20.0	18.0	4.6
8/28/08	-	1007-1009	GZA	-	-	-	45.0	24.0	0.0	-	-	-	0.0	5.7	14.2	-	-	-	13.0	21.0	2.1
12/18/08	-	1016-1021	GZA	-	-	-	37.0	25.0	6.5	-	-	-	22.5	26.0	3.5	-	-	-	17.0	23.0	0.0
2/23/09	-	1003-1005	GZA	-	-	-	9.3	6.6	13.7	-	-	-	7.8	16.0	7.4	-	-	-	17.0	17.0	2.3
4/3/09	-	1001 -1004	GZA	-	-	-	38.0														

TABLE 2A
LANDFILL GAS DATA SUMMARY
(Historical Monitoring Locations)

Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081

Sample Date	Air Temperature (°C)	Barometric Pressure (mb)	Sampled By	GMW-1					GMW-2					GMW-3							
				CGI		Infrared Detector			CGI		Infrared Detector			CGI		Infrared Detector					
				O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	CH ₄ %	CO ₂ %	O ₂ %		
4/20/18	-	1009	GZA	-	-	52.0	2.6	2.1	19.6	-	-	0.0	0.0	9.0	13.3	-	-	0.0	0.0	1.5	19.3
8/17/18	-	1016	GZA	-	-	>100	37.7	27.2	0.1	-	-	0.0	0.0	5.6	14.2	-	-	0.0	0.0	0.2	20.1
11/28/18	-	992	GZA	-	-	>100	32.5	23.6	0.0	-	-	>100	28.6	25.9	0.0	-	-	0.0	0.0	0.2	21.4
4/5/19	-	1025	GZA	-	-	>100	18.0	15.3	3.9	-	-	24	1.2	13.5	8.1	-	-	0.0	0.0	7.5	13.9
8/9/19	-	999	GZA	-	-	>100	37.6	23.8	0.0	-	-	0.0	0.0	3.4	16.4	-	-	0.0	0.0	8.4	9.1
11/18/19	-	1014	GZA	-	-	>100	30.9	24.5	0.1	-	-	>100	19.9	25.2	0.0	-	-	44	2.2	17.8	0.2
4/20/20	-	1002	GZA	-	-	>100	31.0	25.9	0.7	-	-	>100	9.9	24.0	0.3	-	-	0.0	0.0	7.3	11.9
8/14/20	-	1014	GZA	-	-	>100	28.4	22.9	0.1	-	-	0.0	0.0	0.7	19.2	-	-	0.0	0.0	1.6	18
11/25/20	-	1025	GZA	-	-	>100	22.1	20.0	0.2	-	-	>100	5.2	20.9	0.2	-	-	8.0	0.4	14.6	3.9
4/8/21	-	1016	GZA	-	-	>100	29.0	25.2	0.1	-	-	4.0	0.2	8.5	12.1	-	-	0.0	0.0	2.9	17.7
8/4/21	-	1009	GZA	-	-	>100	31.4	23.2	0.2	-	-	0.0	0.0	2.7	16.9	-	-	0.0	0.0	2.7	16.9
11/15/21	-	1000	GZA	-	-	>100	37.1	25.7	0.0	-	-	>100	14.6	21.2	1.9	-	-	0.0	0.0	11.2	7.6
5/2/22	-	1017	GZA	-	-	>100	29.2	23.5	0.1	-	-	60	3.0	15.2	4.5	-	-	0.0	0.0	5.3	14.6
8/5/22	-	1015	GZA	-	-	>100	26.6	21.6	0.3	-	-	0.0	0.0	2.3	18.3	-	-	0.0	0.0	1.7	18.8
11/9/22	-	1035	GZA	-	-	>100	25.2	23.4	0.0	-	-	6.0	0.3	12.5	8.5	-	-	4.0	0.2	13.1	7.5

See Table 2B for notes.

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Table 2A,B - Gas Data 022823/Table 2A - Historical Locations

TABLE 2A
LANDFILL GAS DATA SUMMARY
(Historical Monitoring Locations)

Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081

Sample Date	Air Temperature (°C)	Barometric Pressure (mb)	Sampled By	GMW-4						GMW-5						GMW-6					
				CGI		Infrared Detector				CGI		Infrared Detector				CGI		Infrared Detector			
				O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %
11-14-96 ¹	-	-	RLI	-	32.0	-	-	-	-	-	4.0	-	-	-	-	-	0.0	-	-	-	-
04-21-97 ²	-	-	RLI	8.6	94.0	-	-	-	-	19.8	10.0	-	-	-	-	-	-	-	-	-	-
05-16-97	-	-	GZA	9.0	0.0	-	-	-	-	20.0	0.0	-	-	-	-	20.3	0.0	-	-	-	-
05-19-97 ³	-	-	GZA	-	-	-	0.0	9.3	9.6	-	-	-	0.1	0.1	20.2	-	-	-	0.0	0.0	19.1
07-08-97 ⁴	-	-	GZA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07-09-97 ³	-	-	GZA	-	-	-	0.6	0.1	20.5	-	-	-	0.0	0.0	20.4	-	-	-	0.1	0.0	20.7
07-14-97 ³	-	-	GZA	-	-	-	0.1	11.0	7.8	-	-	-	0.1	2.2	17.9	-	-	-	0.0	0.0	20.6
07-23-97 ³	-	-	GZA	-	-	-	0.5	0.1	20.2	-	-	-	0.0	0.0	21.3	-	-	-	0.0	0.0	21.3
08-29-97 ⁶	-	-	GZA	-	-	-	0.0	10.2	9.6	-	-	-	0.0	0.0	20.3	-	-	-	0.0	0.0	20.3
11-03-97 ⁷	-	-	GZA	-	-	-	0.0	10.0	9.5	-	-	-	0.0	2.6	17.8	-	-	-	0.0	0.9	19.7
01-08-98 ⁸	-	-	GZA	-	-	-	0.0	8.2	10.8	-	-	-	0.0	2.4	16.7	-	-	-	0.0	0.8	19.4
03-23-98 ⁸	-	-	GZA	-	-	-	0.0	8.5	12.1	-	-	-	0.0	0.3	20.8	-	-	-	0.0	0.9	20.2
04-14-98 ⁹	-	-	GZA	-	-	-	0.1	7.0	12.5	-	-	-	0.1	2.1	18.2	-	-	-	0.1	0.9	19.5
06-24-98 ¹⁰	-	-	GZA	-	-	-	0.0	5.5	12.9	-	-	-	0.0	1.8	18.5	-	-	-	0.0	0.8	19.7
08-26-98 ¹⁰	-	-	GZA	-	-	-	0.0	6.4	13.0	-	-	-	0.0	2.2	18.2	-	-	-	0.0	0.0	20.9
01/12/99 ¹¹	-	-	GZA	-	-	-	0.0	7.9	13.8	-	-	-	0.0	1.6	20.7	-	-	-	0.0	1.2	21.6
04/19/99 ⁸	-	-	GZA	-	-	-	0.0	6.3	12.3	-	-	-	0.0	0.1	19.5	-	-	-	0.0	0.3	19.2
04/02/01 ¹²	-	-	GZA	-	-	-	0.0	3.7	16.8	-	-	-	0.0	0.8	20.5	-	-	-	0.0	0.8	20.6
08/20/02 ¹²	-	-	GZA	-	-	-	0.0	7.2	13.0	-	-	-	0.0	1.0	19.6	-	-	-	0.0	0.4	20.2
06/17/03 ¹²	-	-	GZA	-	-	-	0.0	6.1	14.0	-	-	-	0.0	1.3	19.6	-	-	-	0.0	1.2	19.8
05/19/04 ¹²	17.2	1009 - 1013	GZA	-	-	-	0.0	7.9	11.6	-	-	-	0.0	1.3	19.4	-	-	-	0.0	1.2	19.8
09/14/04 ¹²	22.2	1009 - 1011	GZA	-	-	-	0.0	10.9	10.3	-	-	-	-	-	-	-	-	-	0.0	2.0	19.1
10/5/04 ¹²	10.0	1014 - 1019	GZA	-	-	-	0.0	9.7	9.1	-	-	-	-	-	-	-	-	-	0.0	2.0	18.8
10/21/04 ¹²	8.9	1024	GZA	-	-	-	0.0	8.4	10.7	-	-	-	0.0	0.9	19.5	-	-	-	0.0	2.2	19.0
12/17/04 ¹²	-	1008 - 1011	GZA	-	-	-	0.0	2.4	18.2	-	-	-	0.0	0.4	20.4	-	-	-	0.0	1.9	19.2
6/20/05 ¹²	-	1014 - 1019	GZA	-	-	-	0.0	7.0	13.4	-	-	-	0.0	2.8	17.7	-	-	-	0.0	2.9	18.3
11/7/05 ¹²	-	982 - 997	GZA	-	-	-	0.0	4.8	15.4	-	-	-	-	-	-	-	-	-	0.0	3.8	17.7
5/1/06 ¹²	-	1001 - 1005	GZA	-	-	-	0.0	8.0	13.2	-	-	-	0.0	1.0	20.0	-	-	-	0.0	4.8	16.8
11/28/06 ¹²	-	1024 - 1026	GZA	-	-	-	0.0	12.0	6.6	-	-	-	0.0	1.2	19.1	-	-	-	0.0	3.0	18.1
1/12/07 ¹²	-	1015 - 1019	GZA	-	-	-	0.0	4.6	15.2	-	-	-	0.1	0.1	20.6	-	-	-	0.0	6.1	15.1
3/12/07 ¹²	-	1012 - 1016	GZA	-	-	-	0.0	3.3	16.4	-	-	-	0.0	0.2	20.5	-	-	-	0.0	5.9	15.7
5/1/07 ¹²	-	1001 - 1005	GZA	-	-	-	0.0	8.0	13.2	-	-	-	0.0	1.0	20.0	-	-	-	0.0	4.8	16.8
9/11/07 ¹²	-	996 - 999	GZA	-	-	-	0.0	12.0	6.4	-	-	-	0.0	2.7	15.4	-	-	-	0.0	3.7	17.6
9/14/07 ¹²	-	1010 - 1013	GZA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12/28/07 ¹²	-	1016 - 1023	GZA	-	-	-	0.0	4.6	16.0	-	-	-	0.0	0.2	20.1	-	-	-	0.0	1.0	19.4
4/7/08 ¹²	-	1022 - 1024	GZA	-	-	-	0.0	6.2	13.0	-	-	-	0.0	0.6	20.2	-	-	-	0.0	1.9	19.5
8/28/08	-	1007-1009	GZA	-	-	-	0.0	8.0	13.2	-	-	-	0.0	3.9	16.9	-	-	-	0.0	2.9	18.3
12/18/08	-	1016-1021	GZA	-	-	-	0.0	7.2	12.9	-	-	-	0.0	0.6	20.2	-	-	-	0.0	4.3	17.2
2/23/09	-	1003-1005	GZA	-	-	-	0.0	4.6	13.7	-	-	-	0.0	0.2	20.5	-	-	-	0.0	2.9	17.9
4/3/09	-	1001 - 1004	GZA	-	-	-	0.0	7.7	11.1	-											

TABLE 2A
LANDFILL GAS DATA SUMMARY
(Historical Monitoring Locations)

Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081

Sample Date	Air Temperature (°C)	Barometric Pressure (mb)	Sampled By	GMW-4						GMW-5						GMW-6					
				CGI		Infrared Detector				CGI		Infrared Detector				CGI		Infrared Detector			
				O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %
4/20/18	-	1009	GZA	-	-	0.0	0.0	6.3	14.6	-	-	0.0	0.0	0.8	20.3	-	-	0.0	0.0	0.1	20.8
8/17/18	-	1016	GZA	-	-	0.0	0.0	5.2	15.7	Could not locate						-	-	0.0	0.0	3.1	18.4
11/28/18	-	992	GZA	-	-	0.0	0.0	11.8	8.0	-	-	0.0	0.0	1.6	20.6	-	-	0.0	0.0	4.5	17.5
4/5/19	-	1025	GZA	-	-	0.0	0.0	6.2	15.6	-	-	0.0	0.0	4.6	17.8	-	-	0.0	0.0	4.6	17.8
8/9/19	-	999	GZA	-	-	0.0	0.0	8.4	9.1	-	-	0.0	0.0	5.1	14.7	-	-	0.0	0.0	3.1	18.8
11/18/19	-	1014	GZA	-	-	0.0	0.0	12.2	10.2	-	-	0.0	0.0	2	18.4	-	-	0.0	0.0	4.8	17.7
4/20/20	-	1002	GZA	-	-	0.0	0.0	5.8	15.8	-	-	0.0	0.0	1.2	17.8	-	-	0.0	0.0	4.6	17.5
8/14/20	-	1014	GZA	-	-	0.0	0.0	1.1	18.9	Could not locate						-	-	0.0	0.0	1.5	19.2
11/25/20	-	1025	GZA	-	-	0.0	0.0	14.9	6.4	-	-	0.0	0.0	1.4	20.9	-	-	0.0	0.0	3.8	18.3
4/8/21	-	1016	GZA	-	-	0.0	0.0	5.9	17.1	-	-	0.0	0.0	2.1	19.1	-	-	0.0	0.0	2.6	18.9
8/4/21	-	1009	GZA	-	-	0.0	0.0	7.1	13.6	-	-	0.0	0.0	6.3	14.1	-	-	0.0	0.0	1.9	18.8
11/15/21	-	1000	GZA	-	-	0.0	0.0	11.7	9.8	-	-	0.0	0.0	1.8	19.3	-	-	0.0	0.0	4.1	18.1
5/2/22	-	1017	GZA	-	-	0.0	0.0	6.0	15.4	-	-	0.0	0.0	3.8	17.0	-	-	0.0	0.0	3.8	18.1
8/5/22	-	1015	GZA	-	-	0.0	0.0	5.1	15.6	-	-	0.0	0.0	3.9	16.2	-	-	0.0	0.0	1.8	19.1
11/9/22	-	1035	GZA	-	-	0.0	0.0	8.2	10.7	-	-	0.0	0.0	2.5	18.8	-	-	0.0	0.0	5.8	16.9

See Table 2B for notes.

\GZABedford\Jobs\21000s\21270 - Exeter LF\04.0021270.34\Report\2022 PCR\Tables\

Table 2A,B - Gas Data 022823/Table 2A - Historical Locations

TABLE 2A
LANDFILL GAS DATA SUMMARY
(Historical Monitoring Locations)

Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081

Sample Date	Air Temperature (°C)	Barometric Pressure (mb)	Sampled By	GMW-7					GMW-8					GMW-9						
				CGI		Infrared Detector			CGI		Infrared Detector			CGI		Infrared Detector				
				O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %
11-14-96 ¹	-	-	RLI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04-21-97 ²	-	-	RLI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
05-16-97	-	-	GZA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
05-19-97 ³	-	-	GZA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07-08-97 ⁴	-	-	GZA	18.6	0.0	-	-	-	-	3.3	3.0	-	-	-	-	17.0	33.0	-	-	
07-09-97 ³	-	-	GZA	-	-	-	0.0	0.0	20.7	-	-	-	0.2	9.8	8.6	-	-	-	0.7	0.6
07-14-97 ³	-	-	GZA	-	-	-	0.3	0.0	20.5	-	-	-	0.2	4.7	15.3	-	-	-	0.0	0.0
07-23-97 ³	-	-	GZA	-	-	-	0.1	0.0	20.9	-	-	-	0.2	0.1	20.5	-	-	-	0.0	0.1
08-29-97 ⁶	-	-	GZA	-	-	-	0.0	0.0	20.3	-	-	-	0.0	0.0	20.3	-	-	-	0.0	0.0
11-03-97 ⁷	-	-	GZA	-	-	-	0.0	0.0	20.6	-	-	-	0.0	0.0	20.7	-	-	-	0.0	0.0
01-08-98 ⁸	-	-	GZA	-	-	-	0.0	4.3	15.1	-	-	-	0.0	2.1	17.1	-	-	-	0.5	6.2
03-23-98 ⁸	-	-	GZA	-	-	-	0.0	5.1	15.8	-	-	-	0.0	0.3	20.8	-	-	-	0.0	0.5
04-14-98 ⁹	-	-	GZA	-	-	-	0.0	6.6	13.2	-	-	-	0.0	4.5	14.5	-	-	-	2.5	16.9
06-24-98 ¹⁰	-	-	GZA	-	-	-	0.0	0.0	20.6	-	-	-	0.0	5.7	11.9	-	-	-	0.0	0.3
08-26-98 ¹⁰	-	-	GZA	-	-	-	0.0	0.1	20.8	-	-	-	0.0	5.4	15.6	-	-	-	0.0	5.1
01/12/99 ¹¹	-	-	GZA	-	-	-	0.0	8.0	15.5	-	-	-	0.0	2.7	19.8	-	-	-	0.0	17.6
04/19/99 ⁸	-	-	GZA	-	-	-	0.0	0.0	19.8	-	-	-	0.0	0.0	19.8	-	-	-	0.0	0.0
04/02/01 ¹²	-	-	GZA	-	-	-	0.0	3.4	18.1	-	-	-	0.0	2.1	18.2	-	-	-	0.0	1.5
08/20/02 ¹²	-	-	GZA	-	-	-	0.0	0.5	20.0	-	-	-	0.0	3.9	16.1	-	-	-	0.0	1.2
06/17/03 ¹²	-	-	GZA	-	-	-	0.0	5.4	13.7	-	-	-	0.0	5.3	13.0	-	-	-	0.0	5.5
05/19/04 ¹²	17.2	1009 - 1013	GZA	-	-	-	0.0	1.7	18.8	-	-	-	0.0	4.4	14.1	-	-	-	0.0	0.7
09/14/04 ¹²	22.2	1009 - 1011	GZA	-	-	-	0.0	1.2	19.0	-	-	-	0.0	4.3	16.1	-	-	-	0.0	0.9
10/5/04 ¹²	10.0	1014 - 1019	GZA	-	-	-	0.0	2.4	17.5	-	-	-	0.0	4.2	16.3	-	-	-	0.0	5.1
10/21/04 ¹²	8.9	1024	GZA	-	-	-	0.0	3.9	16.1	-	-	-	0.0	2.9	17.7	-	-	-	0.0	3.7
12/17/04 ¹²	-	1008 - 1011	GZA	-	-	-	0.0	3.8	16.8	-	-	-	0.0	1.2	19.1	-	-	-	0.0	4.4
6/20/05 ¹²	-	1014 - 1019	GZA	-	-	-	0.0	2.0	18.3	-	-	-	0.0	6.3	11.6	-	-	-	0.0	1.8
11/7/05 ¹²	-	982 - 997	GZA	-	-	-	0.0	2.1	18.2	-	-	-	0.0	7.5	10.5	-	-	-	0.0	3.4
5/1/06 ¹²	-	1001 - 1005	GZA	-	-	-	0.0	4.7	14.3	-	-	-	0.0	4.1	14.7	-	-	-	0.0	4.2
11/28/06 ¹²	-	1024 - 1026	GZA	-	-	-	0.0	5.6	13.1	-	-	-	0.0	2.6	17.3	-	-	-	0.0	7.9
1/12/07 ¹²	-	1015 - 1019	GZA	-	-	-	0.0	6.4	12.7	-	-	-	0.0	3.1	17.1	-	-	-	0.0	2.1
3/12/07 ¹²	-	1012 - 1016	GZA	-	-	-	0.0	5.5	15.0	-	-	-	0.0	4.6	15.1	-	-	-	0.0	9.8
5/1/07 ¹²	-	1001 - 1005	GZA	-	-	-	0.0	4.7	14.3	-	-	-	0.0	4.1	14.7	-	-	-	0.0	4.2
9/11/07 ¹²	-	996 - 999	GZA	-	-	-	0.1*	2.3	18.8	-	-	-	0.1*	5.7	14.1	-	-	-	0.1*	4.8
9/14/07 ¹²	-	1010 - 1013	GZA	-	-	-	0.0	4.4	16.0	-	-	-	0.0	3.0	17.5	-	-	-	0.0	2.0
12/28/07 ¹²	-	1016 - 1023	GZA	-	-	-	0.0	4.7	14.2	-	-	-	0.0	1.6	18.6	-	-	-	0.0	5.0
4/7/08 ¹²	-	1022 - 1024	GZA	-	-	-	0.0	4.2	15.9	-	-	-	0.0	1.7	18.3	-	-	-	0.0	6.9
8/28/08	-	1007-1009	GZA	-	-	-	0.0	2.0	18.0	-	-	-	0.0	5.0	15.0	-	-	-	0.0	0.0
12/18/08	-	1016-1021	GZA	-	-	-	0.3	6.7	6.0	-	-	-	0.0	2.3	18.3	-	-	-	0.0	2.0
2/23/09	-	1003-1005	GZA	-	-	-	0.0	3.6	17.3	-	-	-	0.0	1.8	18.2	-	-	-	0.0	5.2
4/3/09	-	1001 -1004	GZA	-	-	-	0.0	7.7	15.5	-	-	-	0.0	5.2	14.1	-	-	-	0.0	6.2
7/15/09	-	1002 - 1007	GZA	-	-	-	0.0	4.0	15.1	-	-	-	0.0	5.0	13.1	-	-	-	0.0	3.7
10/12/09	-	1116 - 1119	GZA	-	-	-	0.0	4.6	15.3	-	-	-	0.0	3.7	17.3	-	-	-	0.0	0.2
2/8/10	-	999 - 1001																		

TABLE 2A
LANDFILL GAS DATA SUMMARY
(Historical Monitoring Locations)

Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081

Sample Date	Air Temperature (°C)	Barometric Pressure (mb)	Sampled By	GMW-7					GMW-8					GMW-9							
				CGI		Infrared Detector			CGI		Infrared Detector			CGI		Infrared Detector					
				O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %	O ₂ %	LEL%	LEL%	CH ₄ %	CO ₂ %	O ₂ %
4/20/18	-	1009	GZA	-	-	0.0	0.0	2.2	19.4	-	-	0.0	0.0	0.4	20.4	-	-	0.0	0.0	0.6	20.2
8/17/18	-	1016	GZA	-	-	0.0	0.0	5.1	14.0	-	-	0.0	0.0	9.3	11.3	-	-	0.0	0.0	1.1	19.7
11/28/18	-	992	GZA	-	-	0.0	0.0	1.0	20.5	-	-	0.0	0.0	2.7	18.6	-	-	0.0	0.0	0.3	21.1
4/5/19	-	1025	GZA	-	-	0.0	0.0	6.2	15.6	-	-	0.0	0.0	4.5	17.8	-	-	0.0	0.0	6.9	14.5
8/9/19	-	999	GZA	-	-	0.0	0.0	2.0	18.8	-	-	0.0	0.0	6.6	14.1	-	-	0.0	0.0	0.4	20.6
11/18/19	-	1014	GZA	-	-	0.0	0.0	4.9	17.0	-	-	0.0	0.0	3.8	19.2	-	-	0.0	0.0	8.1	12.8
4/20/20	-	1002	GZA	-	-	0.0	0.0	6.2	14.1	-	-	0.0	0.0	4.0	16.6	-	-	0.0	0.0	7.4	12.6
8/14/20	-	1014	GZA	-	-	0.0	0.0	0.5	20.1	-	-	0.0	0.0	4.1	16.8	-	-	0.0	0.0	0.2	20.0
11/25/20	-	1025	GZA	-	-	0.0	0.0	7.3	14.1	-	-	0.0	0.0	3.1	19.3	-	-	0.0	0.0	7.3	14.5
4/8/21	-	1016	GZA	-	-	0.0	0.0	3.2	18.4	-	-	0.0	0.0	3.5	17.2	-	-	0.0	0.0	4.2	16.2
8/4/21	-	1009	GZA	-	-	0.0	0.0	1.4	19.1	-	-	0.0	0.0	4.6	15.4	-	-	0.0	0.0	0.3	20.2
11/15/21	-	1000	GZA	-	-	0.0	0.0	1.7	20.2	-	-	0.0	0.0	2.6	18.8	-	-	0.0	0.0	1.1	20.6
5/2/22	-	1017	GZA	-	-	0.0	0.0	3.1	18.4	-	-	0.0	0.0	2.9	17.7	-	-	0.0	0.0	4.3	16.5
8/5/22	-	1015	GZA	-	-	0.0	0.0	0.5	20.5	-	-	0.0	0.0	4.1	17.0	-	-	0.0	0.0	0.7	20.1
11/9/22	-	1035	GZA	-	-	0.0	0.0	5.0	16.3	-	-	0.0	0.0	3.5	17.7	-	-	0.0	0.0	8.6	12.7

See Table 2B for notes.

\GZABedford\Jobs\21000s\21270 - Exeter LF\04.0021270.34\Report\2022 PCR\Tables\

Table 2A,B - Gas Data 022823/Table 2A - Historical Locations

TABLE 2
LANDFILL GAS DATA SUMMARY
(Historical Monitoring Locations)

Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

Notes:

UEL - Methane = 15%

LEL - Methane = 5%

CGI = Combustible Gas Indicator

Lower explosive limit (LEL) should not exceed 50% of the gases at the property boundary.

1. Analysis by Resource Laboratories (RLI) with Ecolyzer System 400 Combustible Gas/Oxygen Monitor.
2. Analysis by RLI with Neotonics Exotox Model 50 Gas Monitor.
3. Analysis by GZA GeoEnvironmental, Inc. (GZA) with Geotechnical Instruments Infrared-Gas Analyzer S/N 684.
4. GMW-7, GMW-8, GMW-9 installed 7/8/97, sampled at end of day following installation with O2/LEL meter.
5. Readings on 5/19 and 7/9/97 were taken with tube inserted in open top of PVC well. Readings were taken after values appeared to stabilize. Readings on 7/14/97 and after were taken with a cap and tube adapter installed on the top of the well to prevent infiltration of ambient air from the top of the well.
6. Analysis by GZA with Geotechnical Instruments Infrared-Gas Analyzer Model No. GA94A, S/N G2578.
7. Analysis by GZA with Landtec Infrared-Gas Analyzer Model No. GEM-500, S/N 587.
8. Analysis by GZA with Landtec Infrared-Gas Analyzer Model No. GA 90, S/N 1132.
9. Analysis by GZA with Landtec Infrared-Gas Analyzer Model No. GA 90, S/N 1457.
10. Analysis by GZA with Landtec Infrared-Gas Analyzer Model No. GA 90, S/N 1388.
11. Analysis by GZA with Landtec Infrared-Gas Analyzer Model No. GA 90, S/N 1256.
12. Analysis by GZA with Gas Data Model LMSx multi gas meter.
13. Oxygen (O2)% / Lower Explosive Limit % readings were taken with a combustible gas indicator that may not provide accurate readings if O2% is below ambient air (i.e., 18-19%).
14. Methane% / Carbon Dioxide% / O2% readings were taken with an infrared gas analyzer that is not dependent on oxygen concentration for readings of methane or carbon dioxide.
15. * indicates background readings increased to 0.1 % measurement suspect.
16. Barometric pressure readings were not recorded during the April 20, 2018 and August 17, 2018 landfill gas surveys. The pressures were taken from Weather Underground historical data at the Wentworth St. station.
17. Calibration gas was not provided during the November 2022 monitoring round, calibrations could not be verified in the field. Equipment is calibrated by the vendor prior to use.

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TABLE 2B
LANDFILL GAS DATA SUMMARY
(Supplemental Monitoring Locations)

Cross Road Landfill - Exeter, New Hampshire
 NHDES No. 198401081

Date	Air Temperature (°C)	Barometric Pressure (millibar)	GMW-10				GMW-11				GMW-11R				GMW-12				
			Infrared Detector				Infrared Detector				Infrared Detector				Infrared Detector				
			LEL%	CH ₄ %	CO ₂ %	O ₂ %	LEL%	CH ₄ %	CO ₂ %	O ₂ %	LEL%	CH ₄ %	CO ₂ %	O ₂ %	LEL%	CH ₄ %	CO ₂ %	O ₂ %	
7/24/2001 ^{2,4}	-	-	-	1.1	3.0	15.4	-	1.3	2.6	17.8	-	-	-	-	-	-	-	-	
8/9/2001 ^{2,4}	-	-	-	0.1	6.9	15.0	-	0.6	2.0	17.2	-	-	-	-	-	-	-	-	
8/20/2002 ²	-	-	-	0.0	2.4	18.7	-	0.0	0.8	19.8	-	-	-	-	-	-	-	-	
06/17/03 ³	-	-	-	6.0/0.0	0.0	20.8	-	0.0	1.5	19.3	-	-	-	-	-	-	-	-	
05/19/04 ³	21.1	1009 - 1013	-	6.0/0.0	6.7	11.7	-	0.0	0.9	18.0	-	-	-	-	-	-	-	-	
09/13/04 ³	22.8	1009 - 1011	-	54.0	14.0	1.6	-	0.0	0.8	18.9	-	-	-	-	-	-	-	-	
9/14/04 ³	17.7	1020 - 1022	-	35.0	12.0	6.1	-	0.0	2.3	17.5	-	-	-	-	-	-	-	-	
9/21/04 ³	17.8	1014 - 1015	-	43.0	14.0	7.3	-	0.0	2.3	14.2	-	-	-	-	-	-	-	-	
9/28/04 ³	17.8	1004 - 1006	-	37.5	13.0	8.2	-	0.0	2.4	17.5	-	-	-	-	-	-	-	-	
10/5/04 ³	12.8	1014 - 1019	-	13.5	6.1	13.3	-	0.0	2.2	17.5	-	-	-	-	-	-	-	-	
10/21/04 ³	8.9	1024	-	41.5	11.0	7.9	-	0.0	1.9	18.0	-	-	-	-	-	-	-	-	
12/17/04 ³	-	1008 - 1011	-	6.3/3.8	1.9	18.4	-	0.0	1.6	17.5	-	-	-	-	-	-	-	-	
6/20/05 ³	-	1014 - 1019	-	2.3	5.5	8.3	-	0.0	0.0	20.6	-	-	-	-	-	-	-	-	
9/20/05 ³	-	997 - 998	-	-	-	-	-	-	-	-	0.0	2.1	19.0	-	0.0	1.5	15.0		
11/7/05 ³	-	982 - 997	-	6.4	5.2	11.1	-	-	-	-	0.0	3.2	17.3	-	0.2	9.8	10.0		
5/1/06 ³	-	1001 - 1005	-	5.1	0.9	19.6	-	-	-	-	0.0	0.3	20.6	-	0.1	4.4	9.6		
11/28/06 ³	-	1024 - 1026	-	28.0	13.0	6.7	-	-	-	-	0.0	4.4	16.1	-	0.0	0.0	20.3		
1/12/07 ³	-	1015 - 1019	-	15.0	14.0	2.7	-	-	-	-	0.0	4.4	16.9	-	0.0	9.0	2.3		
3/12/07 ³	-	1012 - 1016	-	9.2	5.9	12.8	-	-	-	-	0.0	3.5	17.7	-	0.0	7.6	4.4		
5/1/07 ³	-	1001 - 1005	-	3.1	0.9	19.6	-	-	-	-	0.1	4.4	9.6	-	0	0.3	20.6		
9/11/07 ³	-	996 - 999	-	0.0	2.0	18.0	-	-	-	-	0.0	5.3	11.3	-	0.0	0.0	19.0		
12/28/07 ³	-	1016 - 1023	-	0.0	0.0	20.5	-	-	-	-	0.0	3.6	13.2	-	0.0	3.6	17.2		
4/7/08 ³	-	1022 - 1024	-	0.1	0.1	20.5	-	-	-	-	0.0	0.0	20.8	-	0.0	2.2	18.6		
8/28/08	-	1007-1009	-	0.0	0.6	19.6	-	-	-	-	0.0	5.6	8.9	-	0.0	2.1	18.6		
12/18/08	-	1016-1021	-	0.0	2.0	18.0	-	-	-	-	0.0	0.3	20.3	-	0.0	0.3	20.4		
2/23/09	-	1003-1005	-	0.0	0.2	20.1	-	-	-	-	0.0	3.7	17.4	-	0.0	5.1	19.7		
4/3/09	-	1002	-	0.0	0.0	20.4	-	-	-	-	0.9	9.6	0.7	-	0.0	3.1	18.0		
7/15/09	-	1002	-	0.0	0.2	20.0	-	-	-	-	0.0	0.0	20.7	-	0.0	7.2	4.9		
10/12/09	-	1116 - 1117	-	0.0	4.6	16.3	-	-	-	-	0.0	5.4	11.1	-	0.0	2.4	18.5		
2/8/10	-	1001 - 1002	-	14.0	5.2	19.2	-	-	-	-	1.5	4.8	17.5	-	0.0	3.8	19.8		
7/23/10	-	1003-1007	-	0.0	4.0	16.1	-	-	-	-	0.0	0.0	20.2	-	0.0	3.4	12.9		
10/29/10	-	1005-1009	-	21.3	17.3	1.5	-	-	-	-	0.0	0.5	20.9	-	0.0	5.2	12.2		
5/9/11	-	1004-1008	-	0.0	0.0	20.7	-	-	-	-	0.0	1.5	19.6	-	0.0	5.4	8.6		
6/15/11	-	997-1000	-	0.2	0.0	20.8	-	-	-	-	0.1	0.0	20.8	-	0.0	0.2	20.4		
9/9/11	-	1004	-	0.5	0.5	20.1	-	-	-	-	0.0	2.1	18.9	-	0.0	8.9	4.0		
12/27/11	-	1007-1010	-	0.0	0.0	20.8	-	-	-	-	0.0	3.8	17.1	-	0.0	9.1	3.4		
3/21/12	-	1013-1020	-	0.0	0.2	20.6	-	-	-	-	0.0	1.7	19.5	-	0.0	7.1	6.6		
7/26/12	-	995	-	0.0	4.3	16.5	-	-	-	-	0.0	1.5	19.3	-	0.0	6.3	9.3		
10/18/12	-	1007-1011	-	0.0	4.3	16.2	-	-	-	-	0.0	2.1	19.0	-	0.0	5.3	13.0		
1/17/13*	-	1007-1013	-	2.2	1.2	14.6	-	-	-	-	0.0	2.2	18.8	-	0.0	4.0	13.8		
4/8/13	-	1007-1013	-	0.0	0.8	16.3	-	-	-	-	0.0	0.9	19.9	-	0.0	2.4	15.8		
8/12/13	-	1006-1008	-	-	-	-	-	-	-	-	0.0	1.7	19.2	-	0.0	7.7	7.7		
12/2/13	-	1010	-	19.7	16.7	2.2	-	-	-	-	0.1	2.9	19.9	-	0.1	7.1	11.8		
4/11/14	-	1003	-	5.7	2.3	12.7	-	-	-	-	0.0	1.7	19.1	-	0.0	6.1	8.9		
4/14/15	-	1006	-	6.1	2.8	13.2	-	-	-	-	0.0	1.6	19.0	-	0.0	7.1	11.4		
8/18/15	-	1004	-	15.4	1.8	14.1	-	-	-	-	0.0	1.8	19.0	-	0.0	7.2	11.9		
12/17/15	-	1005	-	5.1	1.6	14.3	-	-	-	-	0.0	2.4	18.1	-	0.0	6.1	12.4		
04/05/16	-	1018	0.0	0.0	0.6	18.7	-	-	-	-	Not Accessible				0.0	0.0	3.9	13.8	
08/31/16	-	1006	0.0	0.0	3.3	18.0	-	-	-	-	0.0	0.0	1.1	20.2	0.0	5.1	14.7		
11/11/16	-	998-999	>100	17.1	16.7	2.1	-	-	-	-	0.0	0.0	1.3	20.6	0.0	0.2	21.3		
4/14/17	-	1002-1004	>100	24.9	17.3	2.7	-	-	-	-	0.0	0.0	1.9	20.2	0.0	6.2	11.0		
8/7/17	-	1021	0.0	0.0	4.7	16.6	-	-	-	-	0.0	0.0	20.7	0.0	0.0	0.5	19.7		
11/6/17	-	1005	0.0	0.0	2.9	10.5	-	-	-	-	0.0	0.0	1.8	20.1	0.0	4.7	15.1		
4/20/18	-	1009	0.0	0.0	1.8	16.4	-	-	-	-	0.0	0.0	0.2	21.0	0.0	0.0	0.2	20.9	
8/17/18	-	1016	74	3.7	2.5	14.9	-	-	-	-	0.0	0.0	0.4	20.2	0.0	0.0	0.6	20.0	
11/28/18	-	992	>100	14.1	5.5	11.3	-	-	-	-	0.0	0.0	2.9	18.8	0.0	0.0	8.5	6.3	
4/5/19	-	1025	14	0.7	2.2	16.4	-	-	-	-	0.0	0.0	1.8	20.2	0.0	0.0	3.0	14.2	
8/9/19	-	999	0.0	0.0	5.8	14.7	-	-	-	-	0.0	0.0	5.3	12.4	0.0	0.0	5.3	12.4	
11/18/19	-	1014	0.0	0.0	1.8	15.6	-	-	-	-	0.0	0.0	2.0	21	0.0	0.0	5.3	14.7	
4/20/20	-	1002	0.0	0.0	1.4	16.5	-	-	-	-	0.0	0.0	1.2	20.4	0.0	0.0	4.8	10.8	
8/14/20	-	1014	0.0	0.0	1.8	19.2	-	-	-	-	0.0	0.0	0.7	20	0.0	0.0	0.0	20.5	
11/25/20	-	1025	6.0	0.3	8.3	7.2	-	-	-	-	0.0	0.0	1.6	21.2	0.0	0.0	4.2	16.8	
4/8/21	-	1016	0.0	0.0	1.6	14.9	-	-	-	-	0.0	0.0	0.9	20.5	0.0	0.0	3.7	13.7	
8/4/21	-	1009	0.0	0.0	2.2	14.6	-	-	-	-	0.0	0.0	0.1	20.8	0.0	0.0	0.2	20.6	
11/15/21	-	1000	>100	21.0	10.5	7.2	-	-	-	-	0.0	0.0	2.3	19.9	0.0	0.0	0.2	21.9	
5/2/22	-	1017	80	4.0	3.5	13.8	-	-	-	-	0.0	0.0	1.3	20.6	0.0	0.0	4.5	11.8	
8/5/22	-	1015	0.0	0.0	4.5	17.0	-	-	-	-	0.0	0.0	0.8	20.0	0.0	0.0	2.9	16.5	
11/9/22	-	1035	0.0	0.0	3.0	13.4	-	-	-	-	0.0	0.0	2.1	20.2	0.0	0.0	4.6	16	

Notes:

1. Lower explosive limit (LEL) should not exceed 50% of the gases at the property boundary.
2. Analysis by GZA GeoEnvironmental, Inc. (GZA) with Geotechnical Instruments Infrared-Gas Analyzer S/N

TABLE 2B
LANDFILL GAS DATA SUMMARY
(Supplemental Monitoring Locations)

Cross Road Landfill - Exeter, New Hampshire
NHDES No. 198401081

8. Methane% / Carbon Dioxide% / Oxygen% readings were taken with an infrared gas analyzer that is not dependent on oxygen concentration for readings of methane or carbon dioxide.
9. "% 0/0/0%" indicates methane reading after 1 minute and approximately 5 minutes, respectively.

9 . "6.0/0.0" indicates methane reading after 1 minute and approximately 5 minutes, respectively.



Photographic Log 2022



GZA GeoEnvironmental, Inc.

PHOTOGRAPHIC LOG

Client Name: The Town of Exeter, New Hampshire	Site Location: 2022 Annual Post Closure Report Cross Road Landfill, Exeter, New Hampshire	Project No: 04.0021270.34
--	--	-------------------------------------

Photo No.: 1	Date: August 2022	
Description: Landfill cap as viewed from the northeast corner of the landfill cap facing southwest.		

Photo No.: 2	Date: August 2022	
Description: Landfill cap as viewed from the southwest corner of the landfill cap facing east.		



GZA GeoEnvironmental, Inc.

PHOTOGRAPHIC LOG

Client Name: The Town of Exeter, New Hampshire	Site Location: 2022 Annual Post Closure Report Cross Road Landfill, Exeter, New Hampshire	Project No: 04.0021270.34
--	--	-------------------------------------

Photo No.: 3	Date: May 2022	Description: Southern slope of landfill cap as viewed from the southwest corner of the landfill cap facing east.	
-------------------------------	--------------------------	--	---

Photo No.: 4	Date: November 2022	Description: Drainage swale adjacent to access road facing east.	
-------------------------------	-------------------------------	--	--



GZA GeoEnvironmental, Inc.

PHOTOGRAPHIC LOG

Client Name: The Town of Exeter, New Hampshire	Site Location: 2022 Annual Post Closure Report Cross Road Landfill, Exeter, New Hampshire	Project No: 04.0021270.34
--	--	-------------------------------------

Photo No.: 5	Date: November 2022	
Description: Drainage swale in the central portion of cap as viewed from the access road looking west.		

Photo No.: 6	Date: May 2022	
Description: Sedimentation basins to the south of the landfill as viewed from the access road on the central-western end of the landfill cap, facing south.		



GZA GeoEnvironmental, Inc.

PHOTOGRAPHIC LOG

Client Name: The Town of Exeter, New Hampshire	Site Location: 2022 Annual Post Closure Report Cross Road Landfill, Exeter, New Hampshire	Project No: 04.0021270.34
--	--	-------------------------------------

Photo No.: 7	Date: May 2022	Description: Representative landfill gas vent located across top of landfill cap.	
-------------------------------	--------------------------	---	---

Photo No.: 8	Date: August 2022	Description: Depression located on the southwest corner of the landfill cap at the end of the access road, facing south. Refer to Section 7.	
-------------------------------	-----------------------------	---	--



GZA GeoEnvironmental, Inc.

PHOTOGRAPHIC LOG

Client Name: The Town of Exeter, New Hampshire	Site Location: 2022 Annual Post Closure Report Cross Road Landfill, Exeter, New Hampshire	Project No: 04.0021270.34
--	--	-------------------------------------

Photo No.: 9	Date: May 2022	Description: Ponding in the depression located on the southwest corner of the landfill cap at the end of the access road looking north. Refer to note in Section 7 .	
-------------------------------	--------------------------	--	---

Photo No.: 10	Date: May 2022	Description: Low area along the western edge of the landfill cap facing South. Refer to note in Section 7 .	
--------------------------------	--------------------------	---	--



GZA GeoEnvironmental, Inc.

PHOTOGRAPHIC LOG

Client Name: The Town of Exeter, New Hampshire	Site Location: 2022 Annual Post Closure Report Cross Road Landfill, Exeter, New Hampshire	Project No: 04.0021270.34
--	--	-------------------------------------

Photo No.: 11	Date: November 2022	
Description: Ponding located directly above the riprap in the central portion of the landfill cap. Refer to note in Section 7 .		

Photo No.: 12	Date: August 2022	
Description: Western slope of the landfill cap, facing to the north.		



GZA GeoEnvironmental, Inc.

PHOTOGRAPHIC LOG

Client Name: The Town of Exeter, New Hampshire	Site Location: 2022 Annual Post Closure Report Cross Road Landfill, Exeter, New Hampshire	Project No: 04.0021270.34
--	--	-------------------------------------

Photo No.: 13	Date: November 2022	Description: Damaged and unsecured soil gas probe standpipe. Refer to note in Section 7 .	
--------------------------------	-------------------------------	---	---



Inspection Reports 2022

**DES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**

**April 2022 Post-Closure Inspection Report
Cross Road Landfill
Exeter, New Hampshire
NHDES Site #198401081
Project Number 978**

Prepared For:
Town of Exeter, New Hampshire
13 Newfields Road
Exeter, New Hampshire 03833
(603) 418-6431
Ms. Jennifer Mates, P.E.

Prepared By:
GZA GeoEnvironmental, Inc.
5 Commerce Park North, Suite 201
Bedford, New Hampshire 03110-6984
(603) 623-8724
Erik B. Dyrness
Erik.dyrness@gza.com
GZA File No.: 04.0021270.32

Date of Report: June 2, 2022



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5 Commerce Park North
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F: 603.624.9463
www.gza.com



June 2, 2022
File No. 04.0021270.33

New Hampshire Department of Environmental Services
Waste Management Division
Solid Waste Management Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

Re: April 2022 Landfill Inspection
Cross Road Landfill
Exeter, New Hampshire
DES Site #198401081
DES-SW-SP-1992-001

Permit Coordinator:

On behalf of the Town of Exeter, GZA GeoEnvironmental, Inc. is pleased to provide the New Hampshire Department of Environmental Services (NHDES) the attached Solid Waste Management Bureau – Landfill Post-Closure Inspection Report for the Cross Road Landfill in Exeter, New Hampshire, completed on May 2, 2022.

The associated attachment is being submitted to fulfill the requirement of filing inspection reports in accordance with Env-Sw 807.05(h) and Env-Sw 303.

Subsequent inspection reports will be submitted following the August and November 2022 inspections, and summarized in the 2022 Post Closure Monitoring Report, due during the month of March 2023.

GZA trusts that the information attached to this letter meets the needs of the NHDES. Should you have any questions, please contact us.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Erik B. Dyrness
Assistant Project Manager

James M. Wieck, P.G.
Consultant/Reviewer

Jeffrey D. Rowell, P.E.
Principal

EBD/JDR/JMW:pca

\\\gzabedford\jobs\21000s\21270\04.0021270.33\report\inspection reports\april 2022\final 04.0021270.33_april 2022 inspection 06022022.docx

Attachment: April 2022 Inspection Report

cc: Ms. Jennifer Perry, P.E., Town of Exeter



Landfill Post-Closure Inspection Report
April 2022

Landfill Post-Closure Inspection Report

A. Site Information		B. Contact Information				
Facility Name: Cross Road Landfill + Stump Dump		Permittee Name: Town of Exeter				
Address: 9 Cross Road		Address: 10 Front St				
Date Waste Receipt Stopped: 10/10/1993		Phone #: 603-418-643				
Closure Date: Cap Date: 10/10/1994		Contact Person: Jennifer Perry				
Cap Design: Soil: <input checked="" type="checkbox"/> Paper Fiber: <input type="checkbox"/> Geomembrane: LLDPE: <input type="checkbox"/> HDPE: <input type="checkbox"/> Other: describe _____						
Permit #: 198401081		Inspected by: EAF Date: 5/21/27				
C. Funding						
Is the Facility owner receiving funding from the State for closure of the landfill [Grant Program, etc.]? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
If yes, provide the funding source.						
D. Enforcement						
Is the Facility under any enforcement action? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
If yes, check the appropriate box: Notice of Finding; <input type="checkbox"/> Letter of Deficiency; <input type="checkbox"/> Administrative Order; <input type="checkbox"/> Administrative Fine; <input type="checkbox"/> Other:						
If yes, provide status of enforcement:						
E. Off-Cap Features						
If damage is present, indicate if damage is Minor or Major then use Section H to provide additional information as necessary. [Minor damage = no immediate repair needed, but should be repaired or watched during the year] [Major damage = requires immediate repair and submittal of a work scope to conduct repair]						
		Yes	No	NA	Minor	Major
(1)	Is there adequate access control [e.g., fencing or <u>natural boundaries</u> ?]	✓				
(2)	Are perimeter warning signs present?	✓				
(3)	Is the access road(s) in good condition?	✓				
(4)	Is the retention/infiltration basin(s) in good condition?	✓				
(5)	Is the drainage system in good working order?	✓				
(6)	Are all culverts intact and free of obstructions?	✓				
(7)	Are all under-the-cap drain outlets in good condition?			✓		
(8)	Are all of the soil gas probes in good condition?	✓	✓		✓	
(9)	Were there any landfill odors detected at the property line?		✓			

Landfill Post-Closure Inspection Report

		Yes	No	NA	Minor	Major
(10)	Is the Gas Management System: <input checked="" type="checkbox"/> Passive <input type="checkbox"/> Active					
(11)	If the cap has an active gas collections system, are all components of the system in good working order? Date system last tested: <u>Summer 2021</u>			/		
(12)	Is the soil gas cutoff trench performing as designed?			/		
(13)	Are all of the groundwater monitoring wells in good condition?			/		
(14)	Were any leachate break-outs observed?	/				
(15)	Is there evidence of damaged/weakened vegetation?		/			
(16)	Has any off-cap portion of the site, during this or past monitoring periods, been used for activities other than post-closure? Explain in Sec. H.	/				
(17)	Other observations?:		/			

F. Cap Features

If damage is present, indicate damage as Minor or Major then use Section H to provide additional information if necessary.

[Minor damage = no immediate repair needed, but should be repaired or watched during the year]

[Major damage = requires immediate repair and submittal of a work scope to conduct repair]

		Yes	No	NA	Minor	Major
(1)	Is the vegetative layer in good condition? When was the landfill last mowed? Date:	/				
(2)	Are all landfill side slopes in good condition?	/				
(3)	Is there evidence of erosion?		/			
(4)	Has cap settlement been uniform?	/	.		/	
(5)	Are there depressions in the cap's surface?	/			/	
(6)	Is there evidence of damage due to burrowing animals?		/			
(7)	Is there evidence of damage due to unauthorized access?		/			
(8)	Is there any blockage of the drainage swales?		/			
(9)	Do All drainage swales have positive drainage?	/				
(10)	Are all culverts intact and free of obstructions?	/				
(11)	Are all landfill gas vents in good condition?	/				
(12)	Are there any leachate break-outs present?		/			
(13)	Is the landfill cap used for other than post-closure monitoring and maintenance? Explain in Sec. H.		/			
(14)	Is the access road across the landfill cap in good condition?	/				
(15)	The overall condition of the cap? [circle one]	Good	Fair	Poor		
(16)	Other:					

G. Reporting Requirements

		Yes	No	NA
(1)	Was a report submitted to the DES for the prior monitoring period?	/		
(2)	Was there any reported damage [minor or major] to the capping system in the	/		

Landfill Post-Closure Inspection Report

	previous report?	Yes	No	NA
(3)	If damage to the cap is being reported for the current monitoring period, is the damage similar to the previous monitoring period.	✓		
(4)	Is an instrument survey of the cap required? [If required, attach a settlement data summary table.]		✓	
(5)	Is the owner required to monitor methane generation from the landfill?	✓		
(6)	For this monitoring period have methane levels exceeded 25% of the LEL inside any on or off-site structures?		✓	
(7)	For this monitoring period have methane levels exceeded 50% of the LEL at the property line?		✓	
(8)	For this monitoring period have methane levels exceeded 10% of the LEL in the ambient air at the property line?		✓	
(9)	Are there any trends in the methane data thus far collected? [If yes, please provide an explanation in Section H.]		✓	
(10)	Is the Facility in compliance with its Groundwater Management Permit?	✓		
(11)	For this monitoring period, are there any AGQS violations?		✓	
(12)	Has the landfill been used in the past for activities other than post-closure monitoring and maintenance? [Explain using Sec. H.]		✓	
(13)	Other:			
(14)	Other:			

Attach summary table of all settlement data collected to date, if applicable.

Attach summary table of all methane data collected to date, if applicable

Attach summary table [**only**] of all water quality data collected to date.

Attach a site plan, **only** if a plan has **not** previously been submitted.

[Note: Submittal of cap and/or vent construction details is no longer necessary]

H. Comments and Recommendations

Landfill Post-Closure Inspection Report

E8: Some soil gas stand pipes are unsecured

F4+F5: Settlement observed in SW corner of cap
and in central portion of the cap near
rip-cap

E16: Exeter town transfer station + DPW Gravel Yard

G11: AGOS Exceedances

El Fulton

5/2/22

Authorized Signature/Date

**DES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**

**August 2022 Post-Closure Inspection Report
Cross Road Landfill
Exeter, New Hampshire
NHDES Site #198401081
Project Number 978**

Prepared For:
Town of Exeter, New Hampshire
13 Newfields Road
Exeter, New Hampshire 03833
(603) 773-6157
Ms. Jennifer Perry, P.E.

Prepared By:
GZA GeoEnvironmental, Inc.
5 Commerce Park North, Suite 201
Bedford, New Hampshire 03110-6984
(603) 623-8724
Erik B. Dyrness
Erik.dyrness@gza.com
GZA File No.: 04.0021270.33

Date of Report: August 16, 2022



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August 16, 2022
File No. 04.0021270.33

New Hampshire Department of Environmental Services
Waste Management Division
Solid Waste Management Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

Re: August 2022 Landfill Inspection
Cross Road Landfill
Exeter, New Hampshire
DES Site #198401081
DES-SW-SP-1992-001

Permit Coordinator:

On behalf of the Town of Exeter, GZA GeoEnvironmental, Inc. is pleased to provide the New Hampshire Department of Environmental Services (NHDES) the attached Solid Waste Management Bureau – Landfill Post-Closure Inspection Report for the Cross Road Landfill in Exeter, New Hampshire, completed on August 5, 2022.

The associated attachment is being submitted to fulfill the requirement of filing inspection reports in accordance with Env-Sw 807.05(h) and Env-Sw 303.

A subsequent inspection reports will be submitted following the November 2022 inspection, and summarized in the 2022 Post Closure Monitoring Report, due during the month of March 2023.

GZA trusts that the information attached to this letter meets the needs of the NHDES. Should you have any questions, please contact us.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Erik B. Dyrness

Erik B. Dyrness
Assistant Project Manager

James M. Wieck

James M. Wieck, P.G.
Consultant/Reviewer

Jeffrey D. Rowell
Jeffrey D. Rowell, P.E.
Principal

EBD/JDR/JMW:

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Attachment: August 2022 Inspection Report

cc: Ms. Jennifer Perry, P.E., Town of Exeter



Landfill Post-Closure Inspection Report
August 2022

Landfill Post-Closure Inspection Report

A. Site Information		B. Contact Information				
Facility Name: Cross Road Landfill and Stump Dump		Permittee Name: Town of Exeter				
Address: 9 Cross Road		Address: 10 Front St				
Date Waste Receipt Stopped: 10/10/1993		Phone #: 603-418-6431				
Closure Date: Cap Date:		Contact Person: Jennifer Perry				
Cap Design: Soil: <input checked="" type="checkbox"/> Paper Fiber: <input type="checkbox"/> Geomembrane: LLDPE: <input checked="" type="checkbox"/> HDPE: <input type="checkbox"/> Other: describe _____						
Permit #: 198401 081		Inspected by: EAF		Date: 8/5/22		
C. Funding						
Is the Facility owner receiving funding from the State for closure of the landfill [Grant Program, etc.]?						
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
If yes, provide the funding source.						
D. Enforcement						
Is the Facility under any enforcement action?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
If yes, check the appropriate box:						
Notice of Finding; <input type="checkbox"/> Letter of Deficiency; <input type="checkbox"/> Administrative Order; <input type="checkbox"/> Administrative Fine; <input type="checkbox"/> Other:						
If yes, provide status of enforcement:						
E. Off-Cap Features						
If damage is present, indicate if damage is Minor or Major then use Section H to provide additional information as necessary.						
[Minor damage = no immediate repair needed, but should be repaired or watched during the year] [Major damage = requires immediate repair and submittal of a work scope to conduct repair]						
		Yes	No	NA	Minor	Major
(1)	Is there adequate access control [e.g., fencing or natural boundaries]?	<input checked="" type="checkbox"/>				
(2)	Are perimeter warning signs present?	<input checked="" type="checkbox"/>				
(3)	Is the access road(s) in good condition?	<input checked="" type="checkbox"/>				
(4)	Is the retention/infiltration basin(s) in good condition?	<input checked="" type="checkbox"/>				
(5)	Is the drainage system in good working order?	<input checked="" type="checkbox"/>				
(6)	Are all culverts intact and free of obstructions?	<input checked="" type="checkbox"/>				
(7)	Are all under-the-cap drain outlets in good condition?			<input checked="" type="checkbox"/>		
(8)	Are all of the soil gas probes in good condition?	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
(9)	Were there any landfill odors detected at the property line?		<input checked="" type="checkbox"/>			

Landfill Post-Closure Inspection Report

		Yes	No	NA	Minor	Major
(10)	Is the Gas Management System: <input checked="" type="checkbox"/> Passive <input type="checkbox"/> Active					
(11)	If the cap has an active gas collections system, are all components of the system in good working order? Date system last tested: "			✓		
(12)	Is the soil gas cutoff trench performing as designed?			✓		
(13)	Are all of the groundwater monitoring wells in good condition?			✓		
(14)	Were any leachate break-outs observed?	✓				
(15)	Is there evidence of damaged/weakened vegetation?		✓			
(16)	Has any off-cap portion of the site, during this or past monitoring periods, been used for activities other than post-closure? Explain in Sec. H.	✓				
(17)	Other observations?:		✓			

F. Cap Features

If damage is present, indicate damage as Minor or Major then use Section H to provide additional information if necessary.

[Minor damage = no immediate repair needed, but should be repaired or watched during the year]
 [Major damage = requires immediate repair and submittal of a work scope to conduct repair]

		Yes	No	NA	Minor	Major
(1)	Is the vegetative layer in good condition? When was the landfill last mowed? Date: Summer 2022	✓				
(2)	Are all landfill side slopes in good condition?	✓				
(3)	Is there evidence of erosion?		✓			
(4)	Has cap settlement been uniform?	✓			✓	
(5)	Are there depressions in the cap's surface?	✓			✓	
(6)	Is there evidence of damage due to burrowing animals?	✓				
(7)	Is there evidence of damage due to unauthorized access?	✓				
(8)	Is there any blockage of the drainage swales?	✓				
(9)	Do All drainage swales have positive drainage?	✓				
(10)	Are all culverts intact and free of obstructions?	✓				
(11)	Are all landfill gas vents in good condition?	✓				
(12)	Are there any leachate break-outs present?		✓			
(13)	Is the landfill cap used for other than post-closure monitoring and maintenance? Explain in Sec. H.		✓			
(14)	Is the access road across the landfill cap in good condition?	✓				
(15)	The overall condition of the cap? [circle one]	Good	Fair	Poor		
(16)	Other:					

G. Reporting Requirements

		Yes	No	NA
(1)	Was a report submitted to the DES for the prior monitoring period?	✓		
(2)	Was there any reported damage [minor or major] to the capping system in the	✓		

Landfill Post-Closure Inspection Report

	previous report?	Yes	No	NA
(3)	If damage to the cap is being reported for the current monitoring period, is the damage similar to the previous monitoring period.	<input checked="" type="checkbox"/>		
(4)	Is an instrument survey of the cap required? [If required, attach a settlement data summary table.]		<input checked="" type="checkbox"/>	
(5)	Is the owner required to monitor methane generation from the landfill?	<input checked="" type="checkbox"/>		
(6)	For this monitoring period have methane levels exceeded 25% of the LEL inside any on or off-site structures?		<input checked="" type="checkbox"/>	
(7)	For this monitoring period have methane levels exceeded 50% of the LEL at the property line?		<input checked="" type="checkbox"/>	
(8)	For this monitoring period have methane levels exceeded 10% of the LEL in the ambient air at the property line?		<input checked="" type="checkbox"/>	
(9)	Are there any trends in the methane data thus far collected? [If yes, please provide an explanation in Section H.]		<input checked="" type="checkbox"/>	
(10)	Is the Facility in compliance with its Groundwater Management Permit?	<input checked="" type="checkbox"/>		
(11)	For this monitoring period, are there any AGQS violations?		<input checked="" type="checkbox"/>	
(12)	Has the landfill been used in the past for activities other than post-closure monitoring and maintenance? [Explain using Sec. H.]		<input checked="" type="checkbox"/>	
(13)	Other:			
(14)	Other:			

Attach summary table of all settlement data collected to date, if applicable.

Attach summary table of all methane data collected to date, if applicable

Attach summary table [**only**] of all water quality data collected to date.

Attach a site plan, **only** if a plan has **not** previously been submitted.

[Note: Submittal of cap and/or vent construction details is no longer necessary]

H. Comments and Recommendations

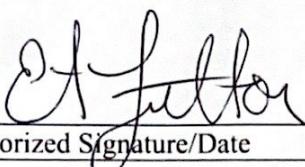
Landfill Post-Closure Inspection Report

E8 - Some soil gas standpipes are unsecured

E16 - Exeter town transfer station + DPW ~~stack~~ gravel yard

F4 + F5 - Settlement observed in SW corner of cap and in central portion near rip-rap

G 11 - A RQS Exceedences


E. J. Fullerton 8/15/22
Authorized Signature/Date

**DES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**

**November 2022 Post-Closure Inspection Report
Cross Road Landfill
Exeter, New Hampshire
NHDES Site #198401081
Project Number 978**

Prepared For:
Town of Exeter, New Hampshire
13 Newfields Road
Exeter, New Hampshire 03833
(603) 773-6157
Ms. Jennifer Perry, P.E.

Prepared By:
GZA GeoEnvironmental, Inc.
5 Commerce Park North, Suite 201
Bedford, New Hampshire 03110-6984
(603) 623-8724
Erik B. Dyrness
Erik.dyrness@gza.com
GZA File No.: 04.0021270.33

Date of Report: December 2, 2022



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MANAGEMENT

5 Commerce Park North
Suite 201
Bedford, NH 03110
T: 603.623.3600
F: 603.624.9463
www.gza.com



December 2, 2022
File No. 04.0021270.33

New Hampshire Department of Environmental Services
Waste Management Division
Solid Waste Management Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

Re: November 2022 Landfill Inspection
Cross Road Landfill
Exeter, New Hampshire
DES Site #198401081
DES-SW-SP-1992-001

Permit Coordinator:

On behalf of the Town of Exeter, GZA GeoEnvironmental, Inc. is pleased to provide the New Hampshire Department of Environmental Services (NHDES) the attached Solid Waste Management Bureau – Landfill Post-Closure Inspection Report for the Cross Road Landfill in Exeter, New Hampshire, completed on November 9, 2022.

The associated attachment is being submitted to fulfill the requirement of filing inspection reports in accordance with Env-Sw 807.05(h) and Env-Sw 303.

The inspection will be summarized in the 2022 Post Closure Monitoring Report, due during the month of March 2023.

GZA trusts that the information attached to this letter meets the needs of the NHDES. Should you have any questions, please contact us.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

Erik B. Dyrness

Erik B. Dyrness
Assistant Project Manager

James M. Wieck

James M. Wieck, P.G.
Consultant/Reviewer

Jeffrey D. Rowell

Jeffrey D. Rowell, P.E.
Principal

EBD/JDR/JMW:

p:\21000s\21270\04.0021270.33\report\inspection reports\november 2022\final 04.0021270.33_november 2022 inspection 120222.docx

Attachment: November 2022 Inspection Report

cc: Ms. Jennifer Perry, P.E., Town of Exeter



Landfill Post-Closure Inspection Report
November 2022

Landfill Post-Closure Inspection Report

A. Site Information		B. Contact Information		
Facility Name: Cross Road Landfill and Stump Dump Address: 9 Cross Road Date Waste Receipt Stopped: Closure Date: Cap Date: Cap Design: Soil: <input checked="" type="checkbox"/> Paper Fiber: <input type="checkbox"/> Geomembrane: LLDPE: <input checked="" type="checkbox"/> HDPE: <input type="checkbox"/> Other: describe _____		Permittee Name: Town of Exeter Address: 10 Front St Phone #: 603-418-6431 Contact Person: Jennifer Penny		
Permit #: 198401081		Inspected by: EAF Date: 11/9/22		
C. Funding				
Is the Facility owner receiving funding from the State for closure of the landfill [Grant Program, etc.]? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
If yes, provide the funding source. NA				
D. Enforcement				
Is the Facility under any enforcement action? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
If yes, check the appropriate box: Notice of Finding; <input type="checkbox"/> Letter of Deficiency; <input type="checkbox"/> Administrative Order; <input type="checkbox"/> Administrative Fine; <input type="checkbox"/> Other: If yes, provide status of enforcement:				
E. Off-Cap Features				
If damage is present, indicate if damage is Minor or Major then use Section H to provide additional information as necessary. [Minor damage = no immediate repair needed, but should be repaired or watched during the year] [Major damage = requires immediate repair and submittal of a work scope to conduct repair]				
		Yes	No	NA
(1)	Is there adequate access control [e.g., fencing or <u>natural boundaries</u> ?]	✓		
(2)	Are perimeter warning signs present?	✓		
(3)	Is the access road(s) in good condition?	✓		
(4)	Is the retention/infiltration basin(s) in good condition?	✓		
(5)	Is the drainage system in good working order?	✓		
(6)	Are all culverts intact and free of obstructions?	✓		
(7)	Are all under-the-cap drain outlets in good condition?	✓	✓	
(8)	Are all of the soil gas probes in good condition?	✓		✓
(9)	Were there any landfill odors detected at the property line?	✓		

Landfill Post-Closure Inspection Report

		Yes	No	NA	Minor	Major
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(12)	Is the soil gas cutoff trench performing as designed?			✓		
(13)	Are all of the groundwater monitoring wells in good condition?			✓		
(14)	Were any leachate break-outs observed?	✓	/			
(15)	Is there evidence of damaged/weakened vegetation?					
(16)	Has any off-cap portion of the site, during this or past monitoring periods, been used for activities other than post-closure? Explain in Sec. H.	✓				
(17)	Other observations?:	✓				

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(4)	Has cap settlement been uniform?	✓			✓	
(5)	Are there depressions in the cap's surface?	✓			✓	
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