



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Robert R. Scott, Commissioner

EMAIL ONLY

June 14, 2024

Matthew Scruton, Town Administrator
Town of Rye
10 Central Road
Rye, NH 03870

Subject: Rye - Rye Municipal Landfill, Breakfast Hill Road
NHDES Site #198705029, Project #225

Groundwater Management Permit Renewal Application, prepared by CMA Engineers, Inc. (CMA), dated October 2, 2023

Groundwater Management Permit Renewal Application Addendum, prepared by CMA, dated March 12, 2024

June 2023 Private Water Supply Sampling Results, prepared by CMA, dated July 11, 2023

December 2023 Groundwater Sampling Data Transmittal, prepared by CMA, dated January 24, 2024

Dear Matthew Scruton:

Please find enclosed Groundwater Management Permit Number **GWP-198705029-R-007**, approved by the New Hampshire Department of Environmental Services (NHDES). This Permit is issued for a period of five years to monitor groundwater quality at the above-referenced site and is a renewal of your Permit that expired on April 15, 2024.

Please note that Periodic Summary Reports are due in January 2026 and 2028. Each Summary Report must provide all information required by N.H. Code of Administrative Rules Env-Or 607.04(a)(1 – 5). Results from November 2025 and November 2027 monitoring events shall be included in the Summary Reports; therefore, separate data submittals are not required. Standard groundwater quality data submittals are due within 45 days of completing the remaining monitoring events. These submittals must include a tabulated summary of analytical results, an updated site plan, groundwater elevation data, and laboratory analytical reports.

Please provide all required groundwater quality monitoring submittals to NHDES under the appropriate [Cover Sheet for Reports](#) and completed [Cover Sheet for Groundwater Monitoring Reports](#). The cover sheets must clearly show the NHDES identification number for this site (i.e., NHDES Site #198705029, Project #225). NHDES prefers for documents to be submitted in an electronic format through the [OneStop database](#).

Please note the requirements of the site water quality monitoring program, as defined under Condition #7 of the Permit, have changed based on our review of the monitoring results collected to date, and the information and recommendations provided in the Permit Renewal Application. Based on our review of the above-referenced submittals and the project record, NHDES has developed the following comments. Comments requiring a response from the Town and/or CMA are listed in ***bold italicized font***.

1. Groundwater data indicate that contamination may extend beyond the Groundwater Management Zone (GMZ) and that an evaluation of the GMZ is required at this time. Dissolved manganese, perfluorooctanoic acid (PFOA), and perfluorooctane sulfonic acid (PFOS) have continued to be detected in samples collected from eastern GMZ boundary monitoring well MW-4A at concentrations exceeding their respective Ambient Groundwater Quality Standards (AGQS). Additionally, manganese and PFOA continue to be detected in samples collected from downgradient GMZ boundary monitoring well MW-10 at concentrations exceeding their respective AGQS. Based on these exceedances in eastern and downgradient GMZ boundary monitoring wells, the eastern and downgradient extents of impacts related to the site have not been delineated and the GMZ is not adequately defined. ***Please evaluate the feasibility of adding groundwater sampling locations east-southeast of eastern GMZ boundary monitoring well MW-4A and downgradient of the current GMZ boundary wells to facilitate an evaluation of the GMZ. Findings of the evaluation should be provided with the November 2024 Data Submittal.***

CMA stated in the Permit Renewal Application that the parcel identified as Map 10 / Lot 82, which constitutes the southern portion of the GMZ where MW-10 is located, was recently developed with condominiums. CMA noted that sewage from the condominiums is discharged to an onsite septic system. NHDES recommends that the location of any septic infrastructure on Map 10 / Lot 82 be identified and considered in the proposal of downgradient monitoring well locations.

2. Consistent with similar sites, per- and polyfluoroalkyl substances (PFAS) monitoring requirements for off-site water supply wells have been modified as follows:
 - For private supply wells located at 296 Lafayette Road (Map 10 / Lot 84) and 8 Random Road (Map 10 / Lot 23 / Sublot 1), PFAS monitoring is to be conducted biennially in November 2024, 2026, and 2028.
 - For the private supply well located at 6 Random Road (Map 10 / Lot 23), PFAS monitoring is to be conducted once per Permit in November 2026. NHDES notes that CMA recommended discontinuing monitoring of the supply well at 6 Random Road because the residence has been connected to the municipal water supply and only uses the supply well for lawn maintenance. Supply well monitoring is to continue, at a reduced frequency, at 6 Random Road to evaluate the viability of the GMZ. NHDES may consider a request to discontinue monitoring at this location once the downgradient extent of impacts has been delineated as discussed in Note #1, above.
3. Manganese has been added to the list of monitoring parameters for off-site water supply wells located at 296 Lafayette Road (Map 10 / Lot 84), 8 Random Road (Map 10 / Lot 23 / Sublot 1), and 6 Random Road (Map 10 / Lot 23). Dissolved manganese concentrations continue to consistently exceed the AGQS of 0.3 milligrams per liter (mg/L) in GMZ boundary wells MW-4A and MW-10, and the extent of groundwater manganese impacts downgradient of the landfill has not yet been delineated. Please note that samples collected from water supply wells are to be analyzed for total metals, as stated in Condition #7 of the Permit.
4. 1,4-dioxane was detected in the November 2022 groundwater sample collected from monitoring well MW-6A at a concentration of 1.4 micrograms per liter ($\mu\text{g/L}$), which exceeds the AGQS of 0.32

µg/L. Based on this exceedance, and as recommended by CMA, 1,4-dioxane has been added to the list of annual groundwater monitoring parameters for MW-6A.

5. Arsenic has been added to the list of landfill leachate indicator parameters required for annual monitoring because the applicable AGQS was reduced to 5 µg/L, effective July 1, 2021. This is consistent with requirements for similar sites within the state.
6. Monitoring for volatile organic compounds (VOCs) at downgradient groundwater monitoring wells MW-4A, MW-7B, and MW-10 has been added to the Permit at a frequency of once per Permit (November 2025). This is consistent with requirements for similar sites within the state.
7. NHDES developed the following general comments regarding the submittals:
 - The October 2, 2023 Groundwater Management Permit Renewal Application was missing the following required supporting information, which was later submitted to NHDES in the Application Addendum:
 - i. An updated list of property identification and ownership information for properties within the GMZ [Env-Or 607.10(c)(1)]
 - ii. A figure meeting the requirements of Env-Or 607.10(c)(8)

Please ensure that future Permit submittals include all of the required supporting information listed in their respective Parts of Env-Or 600.

- CMA stated in Section IV(b) – *Summary of Site Remediation* that a copy of the documentation for the Rye Landfill Groundwater Management Zone Overlay District was included in the report as Appendix B. NHDES noted that no such attachment was included in the report. ***Please ensure that all referenced attachments are included in future submittals.***

Should you have any questions regarding our comments, please contact me directly at NHDES' Waste Management Division.

Sincerely,



Jill M. Ready
Hazardous Waste Remediation Bureau
Tel: (603) 271-2999
Email: Jill.M.Ready@des.nh.gov

cc: Jodie Bray Strickland, P.E., CMA Engineers, Inc.
Rye Health Officer
Leah McKenna, Administrator, SWMB/NHDES
James O'Rourke, P.G., Permit Coordinator, HWRB/NHDES



The

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES

hereby issues

GROUNDWATER MANAGEMENT PERMIT NO. GWP-198705029-R-007

to the permittee

TOWN OF RYE

to monitor the groundwater quality at the

RYE MUNICIPAL LANDFILL
(Breakfast Hill Road)

in RYE, N.H.

via the groundwater monitoring system comprised of

5 monitoring wells and 3 private water supply wells

as depicted on the Site Plans entitled

“Figure 1 - November 2022 Groundwater Contour Plan” and

“Figure 2 – Private Water Supplies Within 500’/1,000’”

dated September 27, 2023 and May 4, 2023, respectively, and prepared by CMA Engineers, Inc.

TO: TOWN OF RYE
10 CENTRAL ROAD
RYE, NH 03870

Date of Issuance: June 14, 2024

Date of Expiration: June 13, 2029

Pursuant to authority in N.H. RSA 485-C:6-a, the New Hampshire Department of Environmental Services (NHDES), hereby grants this Permit to monitor past discharges to the groundwater at the above-described location for five years, subject to the following conditions:

(continued)

STANDARD MANAGEMENT PERMIT CONDITIONS

1. The permittee shall not violate Ambient Groundwater Quality Standards adopted by NHDES (N.H. Admin. Rules Env-Or 600) in groundwater outside the boundaries of the Groundwater Management Zone, as shown on the referenced site plans.
2. The permittee shall not cause groundwater degradation that results in a violation of surface water quality standards (N.H. Admin. Rules Env-Wq 1700) in any surface water body.
3. The permittee shall allow any authorized staff of NHDES, or its agent, to enter the property covered by this Permit for the purpose of collecting information, examining records, collecting samples, or undertaking other action associated with this Permit.
4. The permittee shall apply for renewal of this Permit prior to its expiration date but no more than 90 days prior to expiration.
5. This Permit is transferable only upon written request to, and approval of, NHDES. Compliance with the existing Permit shall be established prior to Permit transfer. Transfer requests shall include the name and address of the person to whom the Permit transfer is requested, the signatures of the current and future permittees, and a summary of all monitoring results to date.
6. NHDES reserves the right, under N.H. Admin. Rules Env-Or 600, to require additional hydrogeologic studies and/or remedial measures if NHDES receives information indicating the need for such work.
7. The permittee shall maintain a water quality monitoring program and submit monitoring results to NHDES no later than 45 days after sampling. Samples shall be taken from the monitoring wells as shown and labeled on the referenced site plan, and other sampling points as listed in the following table in accordance with the schedule outlined herein:

Monitoring Locations	Sampling Frequency	Parameters
MW-1A, MW-4A, MW-6A, MW-7B, and MW-10	November of each year	Specific conductance @25°C, pH, chloride, nitrate, Total Kjeldahl Nitrogen (TKN), arsenic, iron, manganese, and static water level elevation
MW-6A	November of each year	1,4-dioxane (using a 0.25 µg/L reporting limit)
MW-1A, MW-4A, MW-7B, and MW-10	November 2025 and November 2027	1,4-dioxane (using a 0.25 µg/L reporting limit)
MW-1A, MW-4A, MW-6A, and MW-10	November of each year	Per- and polyfluoroalkyl substances (PFAS)
MW-4A, MW-7B, and MW-10	November 2025	NHDES Waste Management Division Full List of Analytes for Volatile Organics

Monitoring Locations	Sampling Frequency	Parameters
Water Supply Wells Outside GMZ: 296 Lafayette Road (Map 10 / Lot 84) 8 Random Road (Map 10 / Lot 23 / Sublot 1)	November 2024, 2026, and 2028	PFAS and manganese
Former Water Supply Wells Outside GMZ: 6 Random Road (Map 10 / Lot 23)	November 2026	PFAS and manganese

Sampling shall be performed in accordance with the documents listed in Env-Or 610.02 (e). Samples shall be analyzed by a laboratory certified by the U.S. Environmental Protection Agency, or NHDES pursuant to Env-C 300. All overburden groundwater samples collected for metals analysis (arsenic, iron, and manganese) shall be analyzed for dissolved metals; and thus, must be field-filtered (with a 0.45-micron filter), and acidified after filtration in the field. Surface water samples, and groundwater samples collected from bedrock or water supply wells, shall be analyzed for total metals, and shall not be filtered.

Summaries of water quality shall be submitted in the month of January in even years beginning in 2026 to NHDES' Waste Management Division, using a format acceptable to NHDES. The Summary Report shall include the information listed in Env-Or 607.04 (a), as applicable.

The Periodic Summary Report shall be prepared and stamped by a professional engineer or professional geologist licensed in the State of New Hampshire.

8. Issuance of this Permit is based on the Groundwater Management Permit Renewal Application dated October 2, 2023, and the historical documents on file for NHDES Site #198705029. NHDES may require additional hydrogeologic studies and/or remedial measures if invalid or inaccurate data are submitted.
9. Within 30 days of discovery of a violation of an Ambient Groundwater Quality Standard at or beyond the Groundwater Management Zone boundary, the permittee shall notify NHDES in writing. Within 60 days of discovery, the permittee shall submit recommendations to correct the violation. NHDES shall approve the recommendations if NHDES determines that they will correct the violation.
10. All monitoring wells at the site shall be properly maintained and secured from unauthorized access or surface water infiltration.

ADDITIONAL CONDITION FOR LANDFILLS

11. The permittee shall maintain the capping system at the facility so that it continues to meet the standards set forth in Env-Sw 800.

SPECIAL CONDITIONS FOR THIS PERMIT

12. Recorded property within the Groundwater Management Zone shall include the lots as listed and described in the following table:

Tax Map / Lot No.	Property Address	Owner Name and Address	Deed Reference (Book / Page)
10 / 5	Rye Landfill Breakfast Hill Road Rye, NH 03870	Elaine Ciborowski Shared Trust 28 Monadnock Drive Westford, MA 01886	2653 / 2888
10 / 82	1244 Washington Road Rye, NH 03870	Washington Green, LLC 172 Route 101, Unit 25C Bedford, NH 03110	6109 / 115
10 / 82 / 1A	1244 Washington Road, Unit 1A Rye, NH 03870	Brennan Conley 1244 Washington Road, Unit 1A Rye, NH 03870	6386 / 1427
10 / 82 / 1B	1244 Washington Road, Unit 1B Rye, NH 03870	Kari Grimes 1244 Washington Road, Unit 1B Rye, NH 03870	6417 / 21
10 / 82 / 1C	1244 Washington Road, Unit 1C Rye, NH 03870	Colleen Harmon P.O. Box 1080 Rye, NH 03870	6394 / 710
10 / 82 / 1D	1244 Washington Road, Unit 1D Rye, NH 03870	Richards Family Trust 1244 Washington Road, Unit 1D Rye, NH 03870	6505 / 825
10 / 82 / 2A	1244 Washington Road, Unit 2A Rye, NH 03870	Rawan Khabbaz 1244 Washington Road, Unit 2A Rye, NH 03870	6405 / 2451
10 / 82 / 2B	1244 Washington Road, Unit 2B Rye, NH 03870	Maura McLaughlin 1244 Washington Road, Unit 2B Rye, NH 03870	6418 / 2225
10 / 82 / 2C	1244 Washington Road, Unit 2C Rye, NH 03870	Michelle Consolazio 1244 Washington Road, Unit 2B Rye, NH 03870	6409 / 160

Tax Map / Lot No.	Property Address	Owner Name and Address	Deed Reference (Book / Page)
10 / 82 / 2D	1244 Washington Road, Unit 2D Rye, NH 03870	Paul & Christine Scovotti 1244 Washington Road, Unit 2D Rye, NH 03870	6408 / 2162
10 / 82 / 3A	1244 Washington Road, Unit 3A Rye, NH 03870	Kimberly Seefried 1244 Washington Road, Unit 3A Rye, NH 03870	6387 / 364
10 / 82 / 3B	1244 Washington Road, Unit 3B Rye, NH 03870	Kevin Walsh 1244 Washington Road, Unit 3B Rye, NH 03870	6367 / 1836
10 / 82 / 3C	1244 Washington Road, Unit 3C Rye, NH 03870	Peter Moynahan P.O. Box 35 Rye, NH 03870	6404 / 1134
10 / 82 / 3D	1244 Washington Road, Unit 3D Rye, NH 03870	Laura Webb Revocable Trust 1244 Washington Road, Unit 3D Rye, NH 03870	6386 / 1455
10 / 82 / 4A	1244 Washington Road, Unit 4A Rye, NH 03870	Equity Trust Co. 1244 Washington Road, Unit 4A Rye, NH 03870	6407 / 1872
10 / 82 / 4B	1244 Washington Road, Unit 4B Rye, NH 03870	Rachel Hartnett 1244 Washington Road, Unit 4B Rye, NH 03870	6377 / 276
10 / 82 / 4C	1244 Washington Road, Unit 4C Rye, NH 03870	Anya Burzynski & Cameron Springer 1244 Washington Road, Unit 4C Rye, NH 03870	6398 / 2435
10 / 82 / 4D	1244 Washington Road, Unit 4D Rye, NH 03870	Daniel & Kristen Tremblay 1244 Washington Road, Unit 4D Rye, NH 03870	6399 / 1441
10 / 82 / 5A	1244 Washington Road, Unit 5A Rye, NH 03870	Thomas & Gina Dolan 1244 Washington Road, Unit 5A Rye, NH 03870	6430 / 1934

Tax Map / Lot No.	Property Address	Owner Name and Address	Deed Reference (Book / Page)
10 / 82 / 5B	1244 Washington Road, Unit 5B Rye, NH 03870	69 Howland Realty, LLC 173 Deforest Road Burlington, VT 05401	6500 / 912
10 / 82 / 5C	1244 Washington Road, Unit 5C Rye, NH 03870	Jonathan & Kerry Smith 1244 Washington Road, Unit 5C Rye, NH 03870	6422 / 359
10 / 82 / 5D	1244 Washington Road, Unit 5D Rye, NH 03870	Joseph & Lisa Barry 1244 Washington Road, Unit 5D Rye, NH 03870	6495 / 517

13. Each Annual or Periodic Summary Report shall include updated potential receptor information meeting the requirements of Env-Or 606.07(d). Potential receptor information shall be presented on a tax map with an accompanying table showing updated property ownership and use information.
14. The permittee shall update the ownership information required by Env-Or 607.03(a)(20) for all properties within the Groundwater Management Zone prior to renewal of the Permit, or upon a recommendation for site closure.



Jeffrey M. Marts, P.G., Administrator
Hazardous Waste Remediation Bureau
Waste Management Division

Any person aggrieved by any terms or conditions of this Permit may appeal to the N.H. Waste Management Council (“Council”) by filing an appeal that meets the requirements specified in RSA 21-O:14 and the rules adopted by the Council, Env-WMC 200. The appeal must be filed directly with the Council within 30 days of the date of this decision and must set forth fully every ground upon which it is claimed that the decision complained of is unlawful or unreasonable. Only those grounds set forth in the notice of appeal can be considered by the Council.

Information about the Council, including a link to the Council’s rules, is available at <https://nhec.nh.gov/>. Copies of the rules also are available from NHDES’ Public Information Center at (603) 271-2975.