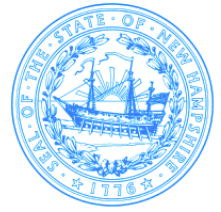




The State of New Hampshire
Department of Environmental Services



Robert R. Scott, Commissioner

July 21, 2021

CERTIFIED MAIL
7015 3010 0000 1292 9572
RETURN RECEIPT REQUESTED

LETTER OF DEFICIENCY
No. WMD LOD 21-023

North Country Environmental Services, Inc.
P.O. Box 9
Bethlehem, NH 03574
Email: john.gay@casella.com

**SUBJECT: North Country Environmental Services, Inc. Landfill, 581 Trudeau Rd., Bethlehem, NH
Solid Waste Permit No. DES-SW-SP-03-002**

Operating Deficiency – Leachate Release (May 1 - 3, 2021)

Dear Mr. Gay:

The New Hampshire Department of Environmental Services (NHDES) issues this Letter of Deficiency (LOD) to notify North Country Environmental Services, Inc. (NCES) that NHDES has identified compliance deficiencies, discussed below, concerning operation of the above-referenced solid waste facility.

On May 3, 2021, NCES reported a leachate spill or release from the facility's leachate storage units located outside the waste deposition area. Leachate was reportedly released through an open conduit from UST A to a valve box that is no longer in service (Valve Box 401). From the valve box, leachate reportedly traveled through an open conduit westward into soil, and overtopped the valve box to flow over the ground surface to the adjacent stormwater pond (Stormwater Pond No. 4). NHDES received a written incident report on May 7, 2021, and a "leachate management system audit" memorandum on June 10, 2021 as well as a follow-up letter to the audit on June 25, 2021.

NHDES hereby requests NCES address the deficiencies described below, in the manner specified in ***bold italic type***.

(1) Failure to provide leak-tight leachate storage units

NHDES understands that NCES has taken temporary measures to cap the conduit from UST A to the subject valve box, and has removed the valve box and westward running conduits.

Requested Response Action:

NHDES requests that NCES review by August 1, 2021 as-built construction plans and the field condition of the leachate storage system for the entire facility to identify any conduits at the facility, inclusive of the conduit from UST A to the location of the former valve box, that are no longer in use. By September 1, 2021, complete the decommissioning, by removal or grouting, of any such conduits identified to create the leak-tight system required pursuant to Env-Sw 805.06(g)(3)a.

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Provide a description and “as-built” drawing(s) of all conduit decommissioning by October 1, 2021.

(2) Failure to operate and maintain the facility in a manner that controls to the greatest extent practicable spills, and assures compliance with the facility permit, Solid Waste Rules and RSA 149-M

NCES reported that the leachate release was due to the Stage IV, Phase II pump failing to receive a wireless radio signal that the leachate tank storage system was full and the pump should stop operating. As such, the pump continued to send leachate to the on-site leachate tank storage system, resulting in the system overflowing and releasing leachate. Further, NCES verbally reported to NHDES during our meeting on May 3, 2021 that it had been having problems with proper operation of the wireless communication system for several weeks.

Further, the “leachate management system audit” report received by NHDES on June 10, 2021, which focused on an audit of the supervisory control and data acquisition (SCADA) system, identified that multiple interlocks and other controls that would prevent spills are not present.

The incident and reporting indicates a failure to operate and maintain the leachate management system in a manner that controls to the greatest extent practicable spills pursuant to Env-Sw 1005.01(d)(6); to maintain the facility to assure compliance with the permit and the Solid Waste Rules pursuant to Env-Sw 1005.01(e); to execute facility repairs and correct, abate, and remediate facility operating problems in a timely manner pursuant to Env-Sw 1005.01(f); and to operate the facility in compliance with RSA 149-M, the Rules, and the permit pursuant to Env-Sw 1105.04(a).

NCES committed to a timeline for addressing the results of the audit in its letter dated June 24, 2021 and received by NHDES on June 25, 2021. A copy of NCES’ letter is enclosed for reference.

Requested Response Action:

NHDES requests that NCES take the actions described in its June 24, 2021 letter to address the audit results, in accordance with the schedule provided in the June 24, 2021 letter, and provide monthly updates, as indicated in Item (3) below, on its progress addressing the results of the audit. With the final status report, provide record “as-built” drawings of any system modifications made.

(3) Incident report lacks necessary details

NCES submitted a written incident report on May 7, 2021 pursuant to Env-Sw 1005.09(a).

For the quantity and types of wastes involved in the incident and clean-up activities pursuant to Env-Sw 1005.09(c)(4)b., the report states that the volume of leachate pumped after the tanks were reported full is approximately 154,000 gallons. This is an incomplete response because it lacks information required by Env-Sw 1005.09(c) on the quantity of liquids and sediments removed from the stormwater pond, inclusive of the forebay, aftbay and level spreader, and the quantity of soils excavated in and around the subject valve box, the westward running conduits and other areas where the ground surface was superficially excavated (“scraped”) to remove potentially impacted soils.

For the assessment required pursuant to Env-Sw 1005.09(c)(4)d., the report states that the leachate was contained onsite and therefore posed “no risk to human health or safety or impact off property.” This is an incomplete response and does not include an assessment of “actual or potential hazards to the environment, safety and human health.” NHDES anticipates that such an assessment will include a review of the actual or potential hazards posed by leachate, the possible exposure routes (e.g., inhalation, ingestion, dermal contact) for humans and the environment, and conclude whether an actual or potential hazard was posed to the environment, safety and human health, inclusive of the health and safety of site workers.

For the measures proposed to be taken to reduce, prevent or eliminate a recurrence of the incident pursuant to Env-Sw 1005.09(c)(5), the report states that the permittee would conduct a supervisory control and data acquisition (SCADA) system analysis, report data from sediment samples already collected, complete removal of sediments from the forebay of the stormwater pond and collect confirmatory soil samples, and ensure that vendors “check in” with landfill staff before leaving the site. This is an incomplete response because the proposed measures do not address near or short-term measures, such as temporary operating procedures while there is unreliable communication with the Stage IV Phase II pump, and removing liquids and sediments from the stormwater pond aftbay and level spreader. The proposed measures also do not address long-term measures, such as a permanent resolution to the wireless communication issue, evaluating and decommissioning existing leachate infrastructure, and/or otherwise changing leachate management practices.

Requested Response Action:

NHDES requests that NCES submit an amended incident report, containing the missing information identified above, by August 1, 2021, and provide monthly updates (on the first of each month, starting on August 1, 2021) on the status of addressing leachate infrastructure and management practices until such time as the measures identified pursuant to Env-Sw 1005.09(c)(5), inclusive of those identified in Items (1) and (2) above, have been in place for at least one month. With the final status report, provide record “as-built” drawings of any system modifications made. Note that the permittee is not relieved from seeking permit modifications when required pursuant to Env-Sw 300.

Please address all matters related to this Letter of Deficiency to:

Debra Sonderegger, Enforcement Coordinator

NHDES/WMD

P.O. Box 95

Concord, NH 03302-0095

Fax: 603-271-2456

Email: debra.a.sonderegger@des.nh.gov

Telephone: (603) 271-0674

A copy of the New Hampshire Solid Waste Rules, Env-Sw 100 et seq. is available on the NHDES website at <http://des.nh.gov/organization/commissioner/legal/rules/index.htm> or by contacting the Public Information Center at (603) 271-2975. Statutes are available via the State of NH website, www.nh.gov.

July 21, 2021

Page 4 of 4

Thank you in advance for giving this Letter of Deficiency immediate attention. Failure to respond as requested may result in enforcement action pursuant to RSA 149-M with regard to the noted deficiencies. Potential enforcement actions include issuance of an administrative order or referral to the New Hampshire Department of Justice (NHDOJ) for enforcement. Also, please be advised that issuance of this Letter of Deficiency and your response actions do not limit NHDES from seeking monetary penalties for the noted deficiencies, either administratively pursuant to RSA 149-M or by referral to NHDOJ.

Your cooperation is appreciated.

Sincerely,



Sarah Yuhas Kirn, P.G., Assistant Director
Waste Management Division

Tel.: (603) 848-8641

Email: sarah.l.yuhaskirn@des.nh.gov

encl. June 24, 2021 letter from NCES to NHDES

ec: Kevin Roy, NCES, email: kevin.roy@casella.com
Gabe Boisseau, Chair-Board of Selectmen, Town of Bethlehem, email: selectman3@bethlehemnh.org
Town Clerk, Town of Bethlehem, email: townclerk@bethlehemnh.org
Tim Fleury, Administrative Assistant, Town of Bethlehem, email: admin@bethlehemnh.org
NHDES Legal Unit



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Robert R. Scott, Commissioner

EMAIL ONLY

August 25, 2021

John Gay
Casella Waste Management, Inc.
1855 VT Route 100
Hyde Park, VT 05655

Subject: **Bethlehem** – North Country Environmental Services (NCES) Landfill,
581 Trudeau Road, DES Site #**198704033**, Project #1737

Initial Response Action Report, prepared by Sanborn, Head & Associates, Inc.
(SHA), dated June 18, 2021

Dear Mr. Gay:

The New Hampshire Department of Environmental Services (NHDES) has reviewed the above-referenced document for the NCES Landfill, prepared on your behalf by SHA. The submittal provides a summary of initial response actions taken subsequent to a **May 1 to May 3, 2021 leachate spill at the site as reported to NHDES on May 3, 2021.**

As discussed in our [May 20, 2021 letter](#), NHDES finds the above-noted leachate spill meets the **definition of a discharge** as defined by Env-Or 602.09. As a result, NHDES required the submittal of an Initial Response Action (IRA) report to summarize the incident and the corrective action work/remedial work taken, identify potential receptors, and compile all sampling and analytical results collected as part of the response action.

Based on our review of the above documents, we developed the comments that follow below:

1. According to attachments included with the Initial Response Action Report (IRA) report, up to **154,000 gallons of leachate was released from the leachate management infrastructure** which subsequently impacted Detention Pond #4. NHDES notes Detention Pond #4 is an unlined stormwater detention pond consisting of two bays that when full outlets to a level stormwater discharge area; or “level spreader”. As presented in the IRA report, analytical results from surface water sampling during the initial response actions **indicate leachate impacted surface water within both bays of the detection pond and the level spreader.**
2. As documented in the IRA report, soil and sediment was excavated from the detention pond and additional soil was excavated during the removal of leachate management infrastructure. Confirmatory soil sampling conducted following excavation activities and submitted for laboratory analysis for Volatile Organic Compounds (VOCs), selected metals, and Total Kjeldahl Nitrogen (TKN) **did not indicate detections of residual impacts to soil above Soil Remediation Standards (SRS).**

3. An initial round of groundwater sampling at area monitoring wells, using an expanded list of analytical parameters, was completed as required by NHDES' May 20, 2021 letter. A second round of groundwater sampling (using the same analytical parameters) was required to be completed in conjunction with the July 2021 Permit monitoring round ([NHDES email July 9, 2021](#)), the results of which are pending. As discussed by SHA in the IRA report, concentrations in groundwater generally were detected within prior historical ranges or were consistent with recent trends. Other compounds that were sampled for the first time have no prior data for comparison.

Required Further Actions:

In consideration of the above, continued monitoring for potential impacts from the May 2021 leachate discharge is required via the groundwater monitoring well network on a bimonthly basis to account for any delayed response in the wells that may be due to travel time and seasonal influences. We note this monitoring is in addition to the existing requirements of the Groundwater Management and Release Detection Permit. The next sampling round is to be completed in September 2021. Monitoring wells MW-604, MW-803, B-304UR/DR, and B-919U/M/D shall be sampled and analyzed for the following:

- Specific conductance @25°C, pH, chemical oxygen demand (COD), bromide, chloride, nitrate, total Kjeldahl-nitrogen (TKN), antimony, arsenic, barium, beryllium, cadmium, chromium, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, sodium, thallium, zinc;
- NHDES Waste Management Division Full List of Analytes for Volatile Organics (Full List VOCs) including 1,4-dioxane (using a 0.25 ug/l reporting limit);
- Per- and polyfluoroalkyl substances (PFAS); and,
- Static water level elevation measurements.

Monitoring results are to be submitted to NHDES within 45 days of the sampling event and are required to include tabulated laboratory results and a site figure with groundwater contours generated from the event. Submittals shall include an evaluation of the results by SHA and recommendations for further monitoring, and/or corrective action in accordance with Env-Or 703.18 and 703.19. Results and analysis shall be transmitted as standalone submittals, separate from standard Permit submittals.

NHDES notes the release occurred within the Groundwater Management Zone (GMZ) associated with the former unlined landfill which was removed in the 1990s. As has been documented in the project record residual impacts from the former unlined landfill, although diminished, are still present within the GMZ. Careful evaluation of the results of future long term monitoring will be needed to distinguish between impacts from the former unlined landfill and the May 2021 leachate release.

Please note NHDES' Solid Waste Management Bureau will be providing additional comments related to the leachate release separately under Solid Waste Permit No. DES-SW-SP-03-002.

John Gay
DES #198704033
August 25, 2021
Page 3 of 3

If you have any questions in regards to this letter, please contact me directly at NHDES' Waste Management Division.

Sincerely,

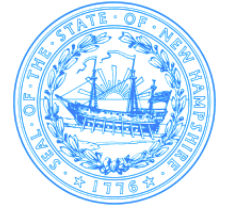


James W. O'Rourke, P.G.
Waste Management Division
Tel: (603) 271-2909
Fax: (603) 271-2181
Email: James.W.ORourke@des.nh.gov

ec: **Michael J. Wimsatt, P.G., WMD Director, NHDES**
Sarah Yuhás Kirn, P.G., WMD Assistant Director, NHDES
Karlee Kenison, P.G., HWRB Administrator, WMD/NHDES
Matthew Taylor, P.G., HWRB/NHDES
Jaime Colby, P.E., SWMB/NHDES
Timothy White, P.G., Sanborn, Head & Associates, Inc.
Board of Selectmen, Town of Bethlehem
Attention Health Officer, Town of Bethlehem



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Robert R. Scott, Commissioner

EMAIL ONLY

June 30, 2023

John Gay
Casella Waste Management, Inc.
1855 VT Route 100
Hyde Park, VT 05655

Subject: Bethlehem - North Country Environmental Services (NCES) Landfill,
581 Trudeau Road, DES Site #198704033, Project #1737

Supplemental Site Investigation - September 2021 Monitoring Well Installation and Water Quality Results, prepared by Sanborn, Head & Associates, Inc. (SHA), dated November 15, 2021

April 2023 Tri-Annual Water Quality Monitoring Results, prepared SHA, dated May 31, 2023

Dear John Gay:

The New Hampshire Department of Environmental Services (NHDES) has reviewed the above-referenced documents for the NCES Landfill, as submitted on your behalf by SHA. The submittals provide a summary of the Supplemental Site Investigation (SSI) initiated to delineate the downgradient extent of groundwater impacts in the area of the B-304 wells as required in our February 17, 2021 letter and April Data Transmittal prepared to comply with the ongoing monitoring and reporting requirements of the site Groundwater Management and Release Detection Permit GWP-198704033-B-007 (the Permit).

Based on the detection of per- and polyfluoroalkyl substances (PFAS) above Ambient Groundwater Quality Standards (AGQS) in samples collected from the downgradient B-928 monitoring well couplet since installation, sampled in part as part of the post Initial Response Action (IRA) groundwater monitoring related to the May 2021 leachate release, additional sampling downgradient is required. The sampling is required to define the downgradient extent of PFAS impacts and confirm the validity of the Groundwater Management Zone (GMZ) associated with the former unlined landfill which was removed in the 1990s. Given the topography on the river side of Muchmore Road, installation of additional monitoring wells in the downgradient area may not be feasible but should be evaluated. However, at this time, the sampling of the seep and spring locations in addition to the Permit monitoring will be required. Sampling locations are to include S-108, S-109, S-1, S-101, and SF-1 along with monitoring wells B-928U/D, B-304UR/DR, MW-604, and MW-802. Samples shall be sampled and analyzed for the following:

- Specific conductance @25°C, pH, chemical oxygen demand (COD), bromide, chloride, nitrate, total Kjeldahl-nitrogen (TKN), iron, manganese.
- NHDES Waste Management Division Full List of Analytes for Volatile Organics (Full List VOCs), 1,4-dioxane (using a 0.25 ug/l reporting limit).
- Per- and polyfluoroalkyl substances (PFAS).
- Static water level elevation measurements (wells only).

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Sampling of monitoring locations S-108, S-109, S-1, S-101, SF-1, B-928U/D, B-304UR/DR, MW-604, and MW-802 should be completed as outlined above within 90 days of this letter. The results of the sampling round shall be submitted to NHDES within 45 days of sampling and include evaluation of the analytical results, and recommendations for any additional investigation or remediation.

As a result of the ongoing SSI, during the July Permit monitoring round NHDES requires the B-928 couplet and MW-604 be sampled and analyzed for the same suite of parameters as required by the Permit for the B-304 couplet (during the July Permit monitoring round). NHDES Waste Management Division Full List of Analytes for Volatile Organics and 1,4-dioxane (using a 0.25 ug/l reporting limit) are also required to be sampled for at MW-604, and the B-928 and B-304 couplets. The results of the July sampling are to be reported with the regular Permit submittal and should also be considered with the discussion of the above required SSI reporting.

NHDES recommends that PFAS samples be analyzed using an isotope dilution method using LC/MS/MS for a broad suite of target analytes to evaluate the potential source(s), transport, and fate of PFAS impacts. NHDES encourages analysis of PFAS samples using the draft USEPA CWA Method 1633, noting that this method is subject to revision. Alternatively, NHDES will accept analysis following the protocols for PFAS by LC/MS/MS outlined in Table B-15 of the U.S. Department of Defense Quality Systems Manual 5.4 (or later version), or isotope dilution following methodologies based on USEPA Method 533 or USEPA Method 537.1. NHDES also recommends that analytical data summary tables and laboratory reports include both CAS Number and analyte names, with PFAS ordered by carbon chain length and split by families. NHDES recommends an expanded analytical list, which includes potential precursors, be utilized for PFAS monitoring events to provide the most informative picture possible of potential upgradient influences to site groundwater.

Please note that along with the submittal of documents through NHDES' OneStop website, NHDES is requesting that all PFAS analytical results be uploaded to NHDES' Environmental Monitoring Database (EMD). Please PFAS sampling results to the EMD as they become available using NHDES' [Environmental Monitoring Database \(EMD\) Process for PFAS Data Collected at Waste Sites](#) guidance. Technical questions regarding EMD data uploads should be directed to Elijah Herman at (603) 271-2979 or Elijah.M.Herman@des.nh.gov.

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

Sincerely,



James W. O'Rourke, P.G.

Waste Management Division

Tel: (603) 271-2909

Email: James.W.ORourke@des.nh.gov

cc: Timothy White, P.G., Sanborn, Head & Associates, Inc.
Board of Selectmen, Town of Bethlehem
Bethlehem Health Officer
Leah McKenna, Administrator, SWMB/NHDES
Jaime Colby, P.E., SWMB/NHDES
Amy Renzi, P.G., State Sites Supervisor, HWRB/NHDES

DES Says PFAS In Test Wells In Bethlehem; CLF Intervenes In Lawsuit Against DES

Robert Blechl rblechl@caledonian-record.com Staff Writer Aug 1, 2023



The state has found Casella Waste Systems to be in violation of its operating permit by placing waste outside the permitted vertical limits of its landfill in Bethlehem. (File photo)

As questions continue over Casella Waste Systems' involvement in the writing of a landfill setback bill, recent public documents show officials in New Hampshire inquiring about **contaminants showing up in test wells at the landfill in Bethlehem** and an environmental group granted intervenor status in Casella's lawsuit against the New Hampshire Department of Environmental Services.

New entries were also filed in the class action labor-related lawsuit filed against the company in federal court in Vermont.

In June, lawmakers in New Hampshire killed Senate Bill 61, which sought site-specific surface water setbacks for new landfills.

Before the vote, a right-to-know request turned up emails between Mike Wimsatt, director of DES's Solid Waste Bureau, Mark Sanborn, assistant DES commissioner, and Bryan Gould, an attorney enlisted by Casella who helped write some of SB 61.

Last week, Casella CEO John Casella, in a letter to the editor, defended his company's involvement.

Letters from local residents objecting to his position followed.

The company's involvement was brought up by several area residents during a public input session with DES on July 19 on landfill siting requirements.

Among those offering input was Adam Finkel, of Dalton, a former health programs director with the U.S. Occupational Health and Safety Administration, who had previously said it's one thing to invite independent experts to help draft language in a bill and another thing to involve a company with a financial interest.

During the July 19 webinar, Finkel said no one has objected to DES communicating with everyone.

"That is your job," he said. "That was my job at the federal level. But there is a huge difference between bringing somebody into an office or picking up the phone and talking with them and — I believe this is evident in the record — asking one side and one side only for permission to write or amend each single word in a piece of legislation. Those were two incredibly different things and it's very disingenuous to say you speak to everyone. We've spoken, Mr. Wimsatt, many times and you've been very generous with your time, but there's a difference between speaking and listening and asking for permission. I've never asked anyone on the industry or environmental side for permission."

"Your characterization that the agency is asking for permission is completely false and misleading and I object to that," said Wimsatt.

"We've both seen the same emails," said Finkel.

In one email, on Feb. 8, Sanborn wrote to Wimsatt, "Should we provide Bryan with any feedback on this? I would think we would like to let him know we do have concerns about being directed on provisions of the ultimate rulemaking we will be conducting but I defer to you on that point."

On Thursday, Finkel sent an email to several New Hampshire legislators informing them of Casella's LTE, suggesting an investigation into the relationship between DES and Casella would be useful at the current time, and saying the emails show that DES asked Casella for permission to change language in SB 61 and was denied.

NCES In Bethlehem

As Casella pursues a new commercial landfill in Dalton, a recent letter to the company from DES indicates contaminants showing up in newer test wells that DES required at the North Country Environmental Services landfill, which the company is trying to keep open through 2026, when it is expected to reach capacity.

"Based on the detection of per- and polyfluoroalkyl substances (PFAS) above Ambient Groundwater Quality Standards (AGQS) in samples collected from the downgradient B-928 monitoring well couplet since installation, sampled in part as part of the post Initial Response Action (IRA) groundwater monitoring related to the May 2021 leachate release, additional sampling downgradient is required," James O'Rourke, of DES's Waste Management Division, wrote in a June 30 letter.

"The sampling is required to define the downgradient extent of PFAS impacts and confirm the validity of the Groundwater Management Zone (GMZ) associated with the former unlined landfill which was removed in the 1990s," said O'Rourke. "Given the topography on the river side of Muchmore Road, installation of additional monitoring wells in the downgradient area may not be feasible but should be evaluated. However, at this time, the sampling of the seep and spring locations in addition to the Permit monitoring will be required."

CLF Intervenes In Lawsuit Against DES

In May 2022, following an appeal by the Conservation Law Foundation, which opposes NCES landfill expansion, the New Hampshire Waste Management Council (WMC) found that Casella's Stage VI expansion approved by DES lacks a "substantial public benefit" required under RSA 149-M, New Hampshire's solid waste management statute, because it would be operating for most of its life during a time of landfill capacity excess in New Hampshire.

In September, Casella sued DES Commissioner Robert Scott on the grounds that DES's "recent departure from its decades-long construction of RSA 149-M:11 together with [the WMC's] administrative hearing officer's inconsistent construction of the same statute have clouded the statute's

meaning and created uncertainty about the requirements for obtaining a permit for solid waste disposal facilities in New Hampshire, including facilities owned or proposed by plaintiffs.”

“Both the department’s new construction and the hearing officer’s interpretation of RSA 149-M:11 render it violative of the dormant commerce clause of the United States Constitution,” wrote Casella’s attorneys, who ask the court to declare that 149-M:11 “has the meaning NHDES has given it since adoption of the statute in 1991 and until 2019 or, in the alternative, that RSA 149:M-11 is unconstitutional.”

The lawsuit is scheduled for a two-day bench trial at Merrimack Superior Court in November.

CLF argued it has several members who live close to NCES in Bethlehem and to the new proposed site in Dalton.

In June, over the objections of Casella, Judge John Kissinger granted CLF intervenor status, concluding that CLF “has a direct and apparent interest in this action and is not seeking to raise issues not related to the subject matter of this case.”

“CLF is a regular stakeholder in landfill permit applications,” wrote Kissinger. “It has an interest in the court’s determination of the proper interpretation of RSA 149-M:11 and whether the statute is unconstitutional.”

During a Q2 earnings call for investors on Friday, John Casella, in response to questions, said the Dalton proposal is moving forward from a permitting perspective, with “nothing really to report there ...”

Casella also said he has proposed to reopen the company’s landfill in Hardwick, Mass, where he said there is capacity for 20 years. A reopening would need to be approved by Hardwick voters through a zoning amendment.

Federal Lawsuit

Federal court documents viewed on Monday show a new filing in the Fair Labor Standards Act class action lawsuit brought against Casella in August 2021.

A third amended collective/class action complaint was filed on July 21, 2023.

According to the complaint, the action is to recover overtime wages, liquidated damages, and other applicable penalties pursuant to the Fair Labor Standards Act and the state laws of Maine, Massachusetts, New York, and Vermont.

The plaintiffs are current or former non-exempt employees who have worked as waste disposal drivers from August 2018 to the final disposition of the matter.

“During the relevant time period, Casella has knowingly and deliberately failed to compensate plaintiffs and the putative class members for all hours worked in excess of 40 each week on a routine and regular basis,” argue the plaintiffs’ attorneys.

According to a July 17 case entry, parties have reached a settlement in principle and hope to finalize their agreement in two to three weeks.



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Robert R. Scott, Commissioner

EMAIL ONLY

September 18, 2023

John Gay

Casella Waste Management, Inc.

1855 VT Route 100

Hyde Park, VT 05655

Subject: Bethlehem – North Country Environmental Services (NCES) Landfill
581 Trudeau Road, DES Site #198704033, Project #1737

Revised Application for Renewal Groundwater Management and Release Detection Permit, prepared by Sanborn, Head & Associates, Inc. (SHA), dated April 18, 2023

April 2023 Tri-Annual Water Quality Monitoring Results, prepared by SHA, dated May 31, 2023

November 2022 Water Quality Monitoring Results, prepared by SHA, dated January 5, 2023

July 2022 Tri-Annual/2022 Annual Water Quality Monitoring Results, prepared by SHA, dated September 6, 2022

Dear John Gay:

Please find enclosed Groundwater Management and Release Detection Permit Number **GWP-198704033-B-008**, as approved by the New Hampshire Department of Environmental Services (NHDES). This Permit is issued for a period of 5 years to monitor the groundwater at the subject site and is a renewal of your Permit that expired on April 11, 2023.

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., DES Site #198704033, Project #1737). NHDES prefers for documents to be submitted in an electronic format through the [OneStop database](#).

As defined under Condition #11 of the Permit, Summary Reports are required to be submitted annually in the month of September following the associated July monitoring rounds. Groundwater quality data transmittals for other monitoring rounds must, at a minimum, include a tabulated summary of analytical results, a current site plan, and laboratory data sheets.

Please note that the requirements of the site water quality monitoring program, as defined under Condition #11 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. NHDES notes the following changes have been incorporated into the monitoring schedule:

- Decommissioned monitoring wells MW-603, MW-801, B-102S/D, B-903U/L, B-904U/L, and B-914U/L have been removed from the Permit and replaced with wells B-929U, B-929L, B-930U, B-930L, B-931U, and B-931L.

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- Monitoring well couplet B-928U/D has been added to the Permit monitoring schedule.
- Sulfate has been added to the Permit monitoring schedule at select site monitoring wells.
- Per- and polyfluoroalkyl substances (PFAS) monitoring has been added to the Permit at monitoring wells MW-604, B-915D, B-916U/M/D, B-909, B-917U/D, B-917L, B-924L, and B-925L.
- Sampling and low-level analysis of 1,2-dibromoethane (ethylene dibromide [EDB]) and 1,2-dibromo-3-chloropropane (DBCP) has been included in the Permit monitoring schedule at site monitoring locations twice during the permit.

NHDES recommends that PFAS samples be analyzed using an isotope dilution method using LC/MS/MS for a broad suite of target analytes to evaluate the potential source(s), transport, and fate of PFAS impacts. NHDES encourages analysis of PFAS samples using the draft USEPA CWA Method 1633, noting that this method is subject to revision. Alternatively, NHDES will accept analysis following the protocols for PFAS by LC/MS/MS outlined in Table B-15 of the U.S. Department of Defense Quality Systems Manual 5.4 (or later version), or isotope dilution following methodologies based on USEPA Method 533 or USEPA Method 537.1. NHDES also recommends that analytical data summary tables and laboratory reports include both CAS Number and analyte names, with PFAS ordered by carbon chain length and split by families. NHDES recommends an expanded analytical list, which includes potential precursors, be utilized for PFAS monitoring events to provide the most informative picture possible of potential upgradient influences to site groundwater.

Please note that along with the submittal of documents through NHDES' OneStop website, NHDES is requesting that all PFAS analytical results be uploaded to NHDES' Environmental Monitoring Database (EMD). Please continue to upload future rounds of PFAS sampling to the EMD as they become available using NHDES' [Environmental Monitoring Database \(EMD\) Process for PFAS Data Collected at Waste Sites](#) guidance. Technical questions regarding EMD data uploads should be directed to Elijah Herman at (603) 271-2979 or Elijah.M.Herman@des.nh.gov.

Assessment Monitoring:

NHDES notes Volatile Organic Compounds (VOCs) have not been detected above laboratory reporting limits at MW-701 since April 2019 and at B-918M since August 2019. However, several PFAS continue to be detected, although at generally decreasing concentrations, at both locations. We note detected concentrations of other monitored landfill leachate indicator parameters at MW-701 and B-918M indicate generally stable concentrations and trends over time. Based on the monitoring well locations and analytical results, the groundwater impacts are consistent with residual impacts from previously identified and corrected leachate management issues and do not appear indicative of a new release from the landfill. However, assessment monitoring shall continue at MW-701 and B-918M on a quarterly basis as a result of the PFAS detections to confirm this premise. Sampling and analysis of PFAS, NHDES Waste Management Division Full List of Analytes for volatile organics, 1,4-dioxane (using a 0.25 micrograms per liter [ug/L] reporting limit), specific conductance @25°C, pH, temperature, and turbidity, nitrate, sulfate, Total Kjeldahl Nitrogen (TKN), chloride, iron, and manganese is required. NHDES notes if increasing trends of leachate indicator parameters are noted, or if PFAS concentrations do not continue to show downward trends, additional investigation and/or expanded monitoring may be required.

John Gay

DES #198704033

September 18, 2023

Page 3 of 3

Supplemental Site Investigation:

Please note the ongoing Supplemental Site Investigation (SSI) initiated to delineate the downgradient extent of groundwater impacts, initially noted in the area of the B-304 couplet wells, was addressed under separate cover in a June 30, 2023 letter by NHDES. The specific requirements discussed in the June 30, 2023 letter have not been incorporated into the Permit monitoring requirements under Condition #11. However, regular monitoring of the B-928 monitoring well couplet, installed in September 2021 as part of the SSI, has been included in the Permit monitoring schedule as noted above.

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

Sincerely,



James W. O'Rourke, P.G.

Waste Management Division

Tel: (603) 271-3116

Email: James.W.ORourke@des.nh.gov

cc: Timothy White, P.G., Sanborn, Head & Associates, Inc.
Bethlehem Board of Selectmen
Bethlehem Health Officer
Leah McKenna, SWMB Administrator, NHDES
Jaime Colby, P.E., SWMB/NHDES
Amy Renzi, P.G., HWRB State Sites Supervisor, NHDES

- Bromide; and
- Per- and polyfluoroalkyl substances (PFAS).

The surface water samples were analyzed by USEPA Method 1633 for the four PFAS analytes with New Hampshire groundwater standards (PFOA, PFOS, PFNA, and PFHxS).

For comparison to the SSI-required surface water results, samples from the three Ammonoosuc River locations (AR-1, AR-2, and AR-3) were also collected on August 22, 2023 for analysis for the same PFAS analytes.

The surface water sampling locations are shown on Figure 1. Tabulated surface water data are included in Appendices A and B. The field sampling form is included in Appendix C, and the laboratory reports are included in Appendix D.

Summary of Surface Water Results

Surface water results from July 2023 sampling, which included all analytes from NHDES' June 20, 2023 letter except PFAS and bromide, were reported in the July /2023 Annual Report. In July 2023, VOCs were not detected in surface water samples, and the results for other analytes in surface water were generally consistent with previous sampling events (refer to Table B.3 and Appendix C.2 of the July 2023/Annual report).

A summary of the PFAS and bromide results from the surface water locations in August 2023 is provided below:

PFAS

Of the eight surface water locations sampled for target four PFAS analytes, only two detections were recorded, both for PFOA:

- SF-1: PFOA = 3.70 ng/l
- S-101: PFOA = 3.05 ng/l

Although there is no surface water standard established in New Hampshire, for reference, we note that the two PFOA concentrations were less than the Ambient Groundwater Quality Standard (AGQS; 12 nanograms per liter [ng/l]).

The low level PFOA detections at SF-1 and S-101 are consistent with residual impacts from the former unlined landfill which have historically been documented in this area.

Bromide

Bromide was not detected in surface water samples collected from S-108, S-109, S-1, S-101, and SF-1 on August 22, 2023.

Closing

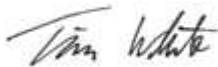
Together, the surface water results summarized in this letter report and the surface water results included in the July/Annual Report fulfill the requirements in NHDES' June 30, 2023 letter.

The results of the supplemental surface water monitoring indicated low-level PFOA detections at two locations (SF-1 and S-101), which are consistent with residual impacts from the former unlined landfill which have historically been well-documented in this area. PFAS target analytes were not detected in the Ammonoosuc River.

Based on the results of this supplemental surface water sampling, the limits of the GMZ are considered to be adequately monitored by the existing surface water monitoring network. We do not recommend additional surface water sampling as part of the SSI.

Please contact Tim White at Sanborn Head, or Joe Gay at NCES if you have any questions.

Very truly yours,
SANBORN, HEAD & ASSOCIATES, INC.



Timothy M. White, P.G.
Vice President



Matthew E. Estabrooks, P.E.
Senior Project Manager

TMW/MEE: tmw

FIGURE

Figure 1 Exploration Location Plan

APPENDICES

Appendix A – Surface Water Analytical Results
Appendix B – PFAS Surface Water Analytical Results
Appendix C – Field Sampling Summary Form
Appendix D – Analytical Laboratory Reports

cc: w/Appendices: Mr. Joe Gay, NCES
Mr. Kevin Roy, NCES
Town of Bethlehem

\\conserv1\shdata\1000s\1003.23\Source Files\SSI SW PFAS Ltr Rpt\20231006_SSI_NCES_SW_PFAS_ltr.docx

TABLE B.1
Summary of PFAS Surface Water Analytical Results
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
Permit No. GWP-198704033-B-008

Sample Location	Sample Date	Sample Type	Concentrations in ng/L				Total of Regulated PFAs
			Perfluoroalkyl Carboxylic Acids		Perfluoroalkyl Sulfonic Acids		
			Perfluorooctanoic Acid (PFOA) [7]	Perfluorononanoic Acid (PFNA) [8]	Perfluorohexanesulfonic Acid (PFHxS) [6S]	Perfluorooctanesulfonic Acid (PFOS) [8S]	
CAS Number			335-67-1	375-95-1	355-46-4	1763-23-1	-
GW-1 (AGQS)			12	11	18	15	
Seep S-1	08-22-2023	N	<1.92	<1.54	<1.4	<1.43	ND
SF-1	08-22-2023	N	3.70	<1.52	<1.39	<1.42	3.70
AR-1	08-22-2023	N	<1.92	<1.54	<1.4	<1.43	ND
AR-2	08-22-2023	N	<1.93	<1.54	<1.41	<1.44	ND
AR-3	08-22-2023	N	<1.96	<1.57	<1.43	<1.46	ND
S-101	08-22-2023	N	3.05	<1.52	<1.39	<1.42	3.05
S-108	08-22-2023	N	<1.93	<1.54	<1.41	<1.44	ND
S-109	08-22-2023	N	<1.99	<1.59	<1.45	<1.48	ND
QC_FB	08-22-2023	FB	<3.76	<3.01	<2.74	<2.8	ND

Sample ID: SF-1_20230822				EPA Method 1633						
Client Data				Laboratory Data						
Name:	Eastern Analytical, Inc.		Matrix:	Aqueous		Lab Sample:	2308236-02	Column:	BEH C18	
Project:	265509 NH 2089		Date Collected:	22-Aug-23 09:51		Date Received:	24-Aug-23 10:50			
Location:	265509									
Analyte	Conc. (ug/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution		
PFOA	0.00370	0.00190		B23I081	13-Sep-23	0.525 L	14-Sep-23 14:17	1		
PFHxS	ND	0.00139		B23I081	13-Sep-23	0.525 L	14-Sep-23 14:17	1		
PFNA	ND	0.00152		B23I081	13-Sep-23	0.525 L	14-Sep-23 14:17	1		
PFOS	ND	0.00142		B23I081	13-Sep-23	0.525 L	14-Sep-23 14:17	1		
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C8-PFOA	IS	111	20 - 150		B23I081	13-Sep-23	0.525 L	14-Sep-23 14:17	1	
13C3-PFHxS	IS	93.1	20 - 150		B23I081	13-Sep-23	0.525 L	14-Sep-23 14:17	1	
13C9-PFNA	IS	92.5	20 - 150		B23I081	13-Sep-23	0.525 L	14-Sep-23 14:17	1	
13C8-PFOS	IS	93.7	20 - 150		B23I081	13-Sep-23	0.525 L	14-Sep-23 14:17	1	

RL - Reporting limit

Results reported to RL.

Sample ID: S-101_20230822				EPA Method 1633						
Client Data				Laboratory Data						
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	2308236-03	Column:	BEH C18			
Project:	265509 NH 2089	Date Collected:	22-Aug-23 10:04	Date Received:	24-Aug-23 10:50					
Location:	265509									
Analyte	Conc. (ug/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution		
PFOA	0.00305	0.00190		B23I081	13-Sep-23	0.526 L	14-Sep-23 14:31	1		
PFHxS	ND	0.00139		B23I081	13-Sep-23	0.526 L	14-Sep-23 14:31	1		
PFNA	ND	0.00152		B23I081	13-Sep-23	0.526 L	14-Sep-23 14:31	1		
PFOS	ND	0.00142		B23I081	13-Sep-23	0.526 L	14-Sep-23 14:31	1		
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution	
13C8-PFOA	IS	101	20 - 150		B23I081	13-Sep-23	0.526 L	14-Sep-23 14:31	1	
13C3-PFHxS	IS	90.8	20 - 150		B23I081	13-Sep-23	0.526 L	14-Sep-23 14:31	1	
13C9-PFNA	IS	96.1	20 - 150		B23I081	13-Sep-23	0.526 L	14-Sep-23 14:31	1	
13C8-PFOS	IS	92.5	20 - 150		B23I081	13-Sep-23	0.526 L	14-Sep-23 14:31	1	

RL - Reporting limit

Results reported to RL.



GRANITE STATE ANALYTICAL SERVICES, LLC.

22 Manchester Road, Unit 2, Derry, NH 03038
Phone (800) 699-9920 | (603) 432-3044 website www.granitestateanalytical.com

CERTIFICATE OF ANALYSIS FOR DRINKING WATER

DATE PRINTED: 11/09/2023
CLIENT NAME: Jon Swan

CLIENT ADDRESS: Ammonoosuc River SEEP
Bethlehem, NH 03574

SAMPLE ID #: 2310-04700-001
SAMPLED BY: Jon Swan

SAMPLE ADDRESS: Jon Swan
Ammonoosuc River SEEP
Bethlehem NH 03574

Legend	
Passes	✓
Fails EPA Primary	⊗
Fails EPA Secondary	▽
Fails State Guideline	✕
Attention	⚠

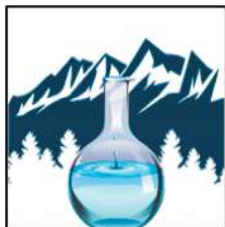
DATE AND TIME COLLECTED: 10/20/2023 10:00AM
DATE AND TIME RECEIVED: 10/20/2023 02:09PM
ANALYSIS PACKAGE: PFC-18-NoFB-alpha-NH
RECEIPT TEMPERATURE: ON ICE 7.8° CELSIUS

CLIENT JOB #:

Test Description	Result	Test Units	Pass /Fail	DQ Flag	RL	Limit	Method	Analyst	Date - Time Analyzed
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
4,8-dioxa-3H-perfluorononanoic acid*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
Date Extracted	-					No Limit	EPA 537.1	2062	11/01/2023 12:24AM
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
Perfluorobutanesulfonic Acid (PFBS)*	4.35	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
Perfluorodecanoic Acid (PFDA)*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
Perfluorododecanoic Acid (PFDoA)*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
Perfluoroheptanoic Acid (PFHpA)*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
Perfluorohexanesulfonic Acid (PFHxS)*	<2.00	ng/L	✓		2.00	18 ng/L	EPA 537.1	2062	11/01/2023 04:29PM
Perfluorohexanoic Acid (PFHxA)*	4.73	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM



Donald A. D'Anjou, Ph. D.
Laboratory Director



GRANITE STATE ANALYTICAL SERVICES, LLC.

22 Manchester Road, Unit 2, Derry, NH 03038
Phone (800) 699-9920 | (603) 432-3044 website www.granitestateanalytical.com

CERTIFICATE OF ANALYSIS FOR DRINKING WATER

DATE PRINTED: 11/09/2023
CLIENT NAME: Jon Swan
CLIENT ADDRESS: Ammonoosuc River SEEP
Bethlehem, NH 03574
SAMPLE ID #: 2310-04700-001
SAMPLED BY: Jon Swan
SAMPLE ADDRESS: Jon Swan
Ammonoosuc River SEEP
Bethlehem NH 03574

Legend	
Passes	✓
Fails EPA Primary	⊗
Fails EPA Secondary	▽
Fails State Guideline	✕
Attention	⚠

DATE AND TIME COLLECTED: 10/20/2023 10:00AM
DATE AND TIME RECEIVED: 10/20/2023 02:09PM
ANALYSIS PACKAGE: PFC-18-NoFB-alpha-NH
RECEIPT TEMPERATURE: ON ICE 7.8° CELSIUS

CLIENT JOB #:

Test Description	Result	Test Units	Pass /Fail	DQ Flag	RL	Limit	Method	Analyst	Date - Time Analyzed
Perfluorononanoic Acid (PFNA)*	<2.00	ng/L	✓		2.00	11 ng/L	EPA 537.1	2062	11/01/2023 04:29PM
Perfluorooctanesulfonic Acid (PFOS)*	<2.00	ng/L	✓		2.00	15 ng/L	EPA 537.1	2062	11/01/2023 04:29PM
Perfluorooctanoic Acid (PFOA)*	2.39	ng/L	✓		2.00	12 ng/L	EPA 537.1	2062	11/01/2023 04:29PM
Perfluorotetradecanoic Acid (PFTA)*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
Perfluorotridecanoic Acid (PFTTrDA)*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM
Perfluoroundecanoic Acid (PFUnA)*	<2.00	ng/L			2.00	No Limit	EPA 537.1	2062	11/01/2023 04:29PM



Donald A. D'Anjou, Ph. D.
Laboratory Director

Project Name: RESIDENTIAL

Lab Number: L2362688

Project Number: 2310-04700

Report Date: 11/02/23

SAMPLE RESULTS

Lab ID: L2362688-01
 Client ID: 2310-04700-001
 Sample Location: NH

Date Collected: 10/20/23 10:00
 Date Received: 10/20/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 133,537.1
 Analytical Date: 11/01/23 16:29
 Analyst: CAP

Extraction Method: EPA 537.1
 Extraction Date: 11/01/23 00:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorobutanesulfonic Acid (PFBS)	4.35		ng/l	2.00	0.617	1
Perfluorohexanoic Acid (PFHxA)	4.73		ng/l	2.00	0.617	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	2.00	0.617	1
Perfluoroheptanoic Acid (PFHpA)	1.37	J	ng/l	2.00	0.617	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.617	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	2.00	0.617	1
Perfluorooctanoic Acid (PFOA)	2.39		ng/l	2.00	0.617	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.617	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.617	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.617	1
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	2.00	0.617	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.617	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.617	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.617	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.617	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	2.00	0.617	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.617	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.617	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	104		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	100		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	95		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	91		70-130

Project Name: RESIDENTIAL

Lab Number: L2352334

Project Number: 2309-01083

Report Date: 09/22/23

SAMPLE RESULTS

Lab ID: L2352334-01
 Client ID: 2309-01083-001
 Sample Location: NH

Date Collected: 09/07/23 09:50
 Date Received: 09/08/23
 Field Prep: Not Specified

Sample Depth:

Matrix: Dw
 Analytical Method: 133,537.1
 Analytical Date: 09/15/23 19:45
 Analyst: CAP

Extraction Method: EPA 537.1
 Extraction Date: 09/15/23 00:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by EPA 537.1 - Mansfield Lab						
Perfluorobutanesulfonic Acid (PFBS)	0.634	J	ng/l	2.00	0.623	1
Perfluorohexanoic Acid (PFHxA)	1.75	J	ng/l	2.00	0.623	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		ng/l	2.00	0.623	1
Perfluoroheptanoic Acid (PFHpA)	0.784	J	ng/l	2.00	0.623	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.623	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA)	ND		ng/l	2.00	0.623	1
Perfluorooctanoic Acid (PFOA)	1.60	J	ng/l	2.00	0.623	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.623	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.623	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.623	1
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS)	ND		ng/l	2.00	0.623	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.623	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.623	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.623	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.623	1
11-Chloroeicosafuoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS)	ND		ng/l	2.00	0.623	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.623	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.623	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Perfluoro-n-[1,2-13C2]hexanoic Acid (13C-PFHxA)	94		70-130
Tetrafluoro-2-heptafluoropropoxy-[13C3]-propanoic acid (13C3-HFPO-DA)	91		70-130
Perfluoro-n-[1,2-13C2]decanoic Acid (13C-PFDA)	86		70-130
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	72		70-130

Groundwater Monitoring Report Cover Sheet

Site Name: **North Country Environmental Services, Inc. (NCES) Landfill**

Town: **Bethlehem, NH**

Permit #: **GWP-198704033-B-008**

Type of Submittal (Check all that apply)

Periodic Summary Report (year):

Data Submittal (month and year per Condition #7 of Permit): **November 2023**

Check each box where the answer to any of the following questions is "YES"

Sampling Results

During the most recent monitoring event, were any **new** compounds detected at any sampling point? **NO**

Well/Compound:

Are there any detections of contamination in drinking water that is untreated prior to use? **NO**

Well/Compound:

Do compounds detected exceed AGQS?

Was free product detected for the **first time** in any monitoring point? **NO**

Surface Water (*visible sheen*)

Groundwater (*1/8" or greater thickness*)

Location/Thickness:

Contaminant Trends

Do sampling results show an increasing concentration trend in any source area monitoring well? **Concentration trends are discussed in the text.**

Well/Compound:

Do sampling results indicate an **AGQS violation** in any of the GMZ boundary wells?

AGQS exceedances at monitoring wells for November 2023 are indicated below and are discussed in the report text.

Well/Compound:

Arsenic: B-919M, MW-802, MW-803 [inside GMZ]

Manganese: B-103S, B-103D, B-304DR, MW-802, MW-803, B-919M [inside GMZ];

B-926U [outside GMZ]

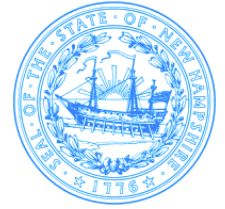
PFOA: B-304UR, B-928U [inside GMZ]

TABLE D.1
 Summary of PFAS Groundwater Analytical Results
 North Country Environmental Services, Inc.
 Bethlehem, New Hampshire
 Permit No. GWP-198704033-B-008

Sample Location	Sample Date	Sample Type	Concentrations in ng/L																								Total of Regulated PFAS	Total PFAS		
			Perfluoroalkyl Carboxylic Acids										Perfluoroalkyl Sulfonic Acids								Fluorotelomers			Perfluoroalkane Sulfonamides		Perfluoroalkane Sulfonoyl Substances				
			Perfluorobutanoic Acid (PFBA) [3]	Perfluoropentanoic Acid (PFPeA) [4]	Perfluorohexanoic Acid (PFHxA) [5]	Perfluoroheptanoic Acid (PFHpA) [6]	Perfluorooctanoic Acid (PFOA) [7]	Perfluorononanoic Acid (PFNA) [8]	Perfluorodecanoic Acid (PFDA) [9]	Perfluoroundecanoic Acid (PFUnA) [10]	Perfluorododecanoic Acid (PFDDA) [11]	Perfluorotridecanoic Acid (PFTTA) [12]	Perfluorotetradecanoic Acid (PFTeA) [13]	Perfluorohexanesulfonic Acid (PFHS) [45]	Perfluoroheptanesulfonic Acid (PFHPS) [55]	Perfluorooctanesulfonic Acid (PFOS) [65]	Perfluoroheptanesulfonic Acid (PFHpS) [75]	Perfluorooctanesulfonic Acid (PFOS) [85]	Perfluorononanesulfonic Acid (PFNS) [95]	Perfluorodecanesulfonic Acid (PFDS) [105]	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (4:2:2F7S)	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (6:2:2F9S)	1H,1H,2H,2H-Perfluorododecanesulfonic Acid (8:2:2F11S)	Perfluorooctanesulfonamide (FOSA)	N-methyl perfluorooctane sulfonamide (MeFOSA)	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EFOSAA)			N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	
CAS Number	375-22-4	2706-90-3	307-24-4	375-85-9	335-67-1	375-95-1	335-76-2	2058-94-8	307-55-1	72629-94-8	376-06-7	375-73-5	2706-91-4	355-46-4	375-92-8	1763-23-1	68259-12-1	335-77-3	757124-72-4	27619-97-2	39108-34-4	754-91-6	31506-32-8	2991-50-6	2355-31-9	-	-			
GW-1 (AGQS)			25.1	16.3	20.8	8.39	12	11				14.7	18	15																
B-928D	11/2/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-928D	7/11/2023	N	10.5	7.34	10.9	5.76	9.17	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<2.48	<4.96	<2.48	<2.48	<4.96
B-928D	11/6/2023	N	<2.130	<1070	<533	<533	<667	<533	<533	<533	<533	<473	<500	<487	<507	<497	<513	<513	<2000	<2000	<2020	<2050	<533	<533	<533	<533	<533	<533	<533	<533
B-929U	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-929U	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-929L	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-929L	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-930U	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-930U	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-930U	7/12/2023	N	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34	<2.34
B-930L	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-930L	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-9311U	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-9311U	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-9311U	7/12/2023	N	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95	<1.95
B-9311L	12/1/2022	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
B-9311L	3/20/2023	N	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
QC_FB	7/25/2017	FB	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04	<4.04
QC_FB	11/7/2017	FB	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53	<4.53
QC_FB	4/23/2018	FB	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31	<4.31
QC_FB	7/11/2018	FB	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33	<4.33
QC_FB	8/27/2018	FB	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32
QC_FB	11/5/2018	FB	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23	<4.23
QC_FB	4/22/2019	FB	<5.1	<5.1	<1.7	<0.85	<0.85	<1.7	<1.7	<1.7	<1.7	<0.85	<0.85	<0.85	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
QC_FB	7/9/2019	FB	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19	<4.19
QC_FB	8/5/2019	FB	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24	<4.24
QC_FB	11/4/2019	FB	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39	<4.39
QC_FB	11/6/2019	FB	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27	<4.27
QC_FB	1/7/2020	FB	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45	<4.45
QC_FB	4/20/2020	FB	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32	<4.32
QC_FB	7/16/2020	FB	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43	<4.43
QC_FB	11/2/2020	FB	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25	<4.25
QC_FB	1/13/2021	FB	<4.2																											



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Robert R. Scott, Commissioner

EMAIL ONLY

November 7, 2023

John Gay

Casella Waste Management, Inc.

1855 VT Route 100

Hyde Park, VT 05655

Subject: Bethlehem - North Country Environmental Services (NCES) Landfill, 581 Trudeau Road, NHDES Site #198704033, Project #1737

2023 Summary of Water Quality Monitoring Results and Submittal of July 2023 Monitoring Results, prepared by Sanborn, Head & Associates, Inc. (SHA), dated August 24, 2023

Supplemental Site Investigation - Surface Water PFAS Sampling Data Transmittal, prepared by SHA, dated October 6, 2023

Dear John Gay:

The New Hampshire Department of Environmental Services (NHDES) has reviewed the above-referenced documents for the NCES Landfill, as submitted on your behalf by SHA. The Summary Report was prepared to comply with the ongoing monitoring and reporting requirements of the site Groundwater Management and Release Detection Permit GWP-198704033-B-008 (the Permit) and the Data Transmittal provides an update to the Supplemental Site Investigation (SSI) initiated to investigate groundwater impacts in the area of the B-304 wells as originally required in our February 17, 2021 letter.

Based on review of the most-recent Groundwater Release Detection Permit water quality data provided, we note that the monitoring results generally remain consistent with recent prior findings and indicate that the landfill liner system appears to be functioning properly. Results of Assessment Monitoring of past incidents and the ongoing SSI investigation within the Groundwater Management Zone (GMZ) for the former unlined landfill, which is monitored via the site's Groundwater Management Permit, have also been reviewed. Based on our review of the above submittals, we developed the comments that follow below. Comments requiring a response from Casella and/or SHA are summarized in ***bold/italicized font***.

As part of the ongoing SSI, additional sampling downgradient of the B-928 monitoring well couplet was required in NHDES' June 30, 2023 letter to define the downgradient extent of polyfluoroalkyl substances (PFAS) impacts and confirm the validity of the GMZ. Sampling and analysis of landfill leachate parameters, including PFAS, was required. PFAS analytical results were submitted in the October 6, 2023 SSI Data Transmittal with the remainder of the analytical data having been submitted with the August 24, 2023 Summary Report.

As discussed in the Data Transmittal, analytical results of surface water sampling conducted in August 2023 indicate detections of PFAS are limited to perfluorooctanoic acid (PFOA) at the S-101 seep and down-slope SF-1 locations, at concentrations of 3.05 nanograms per liter (ng/L) and 3.70 ng/L respectively. We note there are no surface water standards for PFOA at this time; however, for reference purposes, and as noted in the Data Transmittal, the Ambient Groundwater Quality Standard (AGQS) for PFOA is 12 ng/L. As discussed in SHA's submittal, analytical results from other surface water

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seep sampling locations did not indicate detections of PFAS above laboratory reporting limits; notably this includes the "Main Seep" S-1 location. NHDES' June 30, 2023 letter required sampling of five surface water locations S-108, S-109, S-1, S-101, and SF-1 to define the downgradient extent of PFAS impacts and confirm the validity of the GMZ; we note three additional surface water sampling locations along the Ammonoosuc River (AR-1, AR-2, and AR-3) were included in the above sampling program. The surface water samples collected up- and downstream of the facility from the Ammonoosuc River also did not indicate detectable concentrations of PFAS above laboratory reporting limits. The results of other parameters analyzed for from the river and surface water seep sample locations were generally consistent with recent monitoring results with no volatile organic compounds (VOCs) or 1,4-dioxane detected above laboratory reporting limits.

Within the GMZ for the former unlined landfill, the data presented in the Summary Report shows continued variability in PFAS concentrations at the B-304 and B-928 monitoring well couplets during the monitoring period, at times exceeding AGQS, with detected concentrations of PFOA at B-304DR increasing during the monitoring rounds. We note the available groundwater elevation data is suggestive of a downward vertical gradient, which appears to be evident in recent PFAS analytical data from the B-304 monitoring well couplet (e.g., increasing contaminant concentrations in the deeper well). We also note first time detections of perfluorooctane sulfonic acid (PFOS) and perfluorobutane sulfonic acid (PFBS) were noted at MW-604 below applicable AGQS during the July 2023 round. PFOA has been consistently detected at MW-604, at or below AGQS, since it was first analyzed for during a May 2021 sampling event. The total number and concentrations of PFAS detected at MW-604 have been generally consistent over time with a slight decrease in concentrations of total PFAS since July 2021. We note Condition #11 of the Permit requires PFAS analysis from the MW-604 monitoring well during the November sampling round.

Supplemental Site Investigation:

The surface water seeps, which have been interpreted to be an outward expression of groundwater at the site, and the river have been utilized as sampling points to monitor groundwater conditions in the downgradient regulatory extent of the GMZ for the former unlined landfill. Except for manganese, which has a long-term precedent and is analyzed as a total concentration (including dissolved and suspended solids), the surface water seeps do not indicate detected concentrations of contaminants above AGQS; and as such, the downgradient limits of the GMZ appear to be appropriately defined at this time. However, exceedances of AGQS, variability of the concentrations of detected impacts at the B-928 and B-304 monitoring well couplets and detected contaminant concentrations in samples from the monitoring well network within and adjacent to the GMZ (such as the B-927 triplet) require further investigation and evaluation. As discussed in previous correspondence, the presence of potential historical contaminant sources including the former unlined landfill, former and current leachate management infrastructure, and past landfill leachate releases contribute to the complexity of evaluating monitoring results in this portion of the site. Given the presence of the lined landfill, it is critical to continue to evaluate how potential historical sources and site infrastructure influence monitoring results to update the Conceptual Site Model that informs ongoing release detection monitoring of the lined landfill as required by Env Or-700.

In consideration of the above, please provide a work plan that includes the following:

1. An updated hydrogeologic evaluation of the northeastern portion of the site incorporating recent and historical data. The purpose would be to provide an updated understanding of the

hydrogeology of the area and better inform evaluation of the influence of past, present, and potential future impacts to groundwater in this portion of the site. The focus area should include the GMZ and areas adjacent to it, including monitoring wells such as the B-927 triplet and former B-914 couplet. The evaluation is to include updated geologic cross-sections incorporating data from newly installed or relocated monitoring wells with historic data and a compilation of current and former boring and monitoring well installation logs.

2. As noted earlier in the letter, an apparent downward gradient and increasing contaminant concentrations with depth have been noted at the B-304 couplet that raise the question of impacts potentially being transported downgradient in deep overburden groundwater that is not monitored nor has not been historically investigated at the site. As part of the work plan, please propose locations for deep monitoring wells to improve understanding of deep geologic strata, evaluate potential historical impacts, and to and improve the ability to monitor groundwater for release detection purposes from the lined landfill across the northeastern portion of the site. Pairing of deep monitoring wells with shallower existing well locations may be favorable for data collection but is not intended to be a requirement.
3. Provide a detailed evaluation on the influence of Pond #4 on groundwater, both hydrologically and chemically over the short-term and long-term. The following potential influences should be considered: 1) Groundwater mounding beneath the pond and the effects this may have on localized hydraulic head and contaminant fate and transport downgradient of the pond; 2) The potential for stormwater in the pond to contain contaminants and therefore contribute to the groundwater contaminant plume via discharge from the pond to the subsurface; and 3) The potential for stormwater in the pond to not contain contaminants and therefore dilute the groundwater contaminant plume via discharge from the pond to the subsurface.
4. The investigation should provide discussion and evaluation of former leachate and stormwater management infrastructure, operations and operational incidents, and past construction activities as potential source and/or influences on groundwater in the northeastern portion of the site. A timeline of construction activities and identified incidents should be compiled, mapped, and included with the submittal.

The above items have been identified by NHDES as required to inform the Conceptual Site Model but are not intended to limit the potential updates to it. If additional lines of investigation or data are identified by SHA that could also improve the Conceptual Site Model they should be proposed as part of the work plan. ***Please provide a work plan to inform/update the Conceptual Site Model within 90 days of the date of this letter.***

Assessment Monitoring:

Detected concentrations of PFAS and other landfill leachate indicator parameters at MW-701 and B-918M indicate generally stable or decreasing concentrations and trends over time. Based on the monitoring well locations and analytical results, the groundwater impacts are generally consistent with residual impacts from previously identified and corrected leachate management issues and do not appear indicative of a new release from the landfill. NHDES notes manganese was detected at MW-701 at concentrations above AGQS throughout the reporting period, although concentrations decreased during the July 2023 round. We also note 1,4-dioxane was detected, for the first time since April 2019, at a concentration equal to the laboratory reporting limit of 0.25 micrograms per liter (ug/L) during the July 2023 round. Assessment monitoring at MW-701 and B-918M is required to continue on a quarterly basis

John Gay

NHDES Site #198704033

November 7, 2023

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to continue to track detected impacts and confirm the current trends. Sampling and analysis of PFAS, NHDES Waste Management Division Full List of Analytes for volatile organics, 1,4-dioxane (using a 0.25 ug/L reporting limit), specific conductance @25°C, pH, temperature, and turbidity, nitrate, sulfate, Total Kjeldahl Nitrogen (TKN), chloride, iron, and manganese is required. NHDES notes if increasing trends of landfill leachate indicator parameters are noted, **additional investigation and/or expanded monitoring may be required.**

Other Reporting Comments:

Analytical results from the river and **surface water seep monitoring** locations have historically been compared to AGQS to evaluate the extent of upgradient groundwater impacts. However, surface water standards should also be evaluated and presented on the surface water analytical tables for applicable analytes. ***Please include surface water standards on surface water analytical result tables as part of future report submittals.***

As discussed above, manganese has been detected above the current AGQS at some surface water seep locations historically. Although appropriate for surface water sampling per the Permit, we note manganese has been analyzed as a total concentration. To allow for more direct comparison of seep samples to upgradient groundwater results, which are analyzed and reported as dissolved concentrations, metals analysis of the seep monitoring locations for both total and dissolved concentrations should be considered with an evaluation of the potential long-term inclusion of both analyses in the Permit monitoring schedule. ***Please provide recommendations for a round or rounds of dissolved metals analysis at the surface water seep monitoring locations with the next Permit submittal.***

We note surface water seeps have been included on some geologic cross-sections as the surficial expression of groundwater along the river slope. The seeps do not appear to have been included in calculating groundwater contours historically. ***Please evaluate incorporating surface water seep elevations into the generation of groundwater contour plans for future reporting.***

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

Sincerely,



James W. O'Rourke, P.G.

Waste Management Division

Tel: (603) 271-3116

Email: James.W.ORourke@des.nh.gov

ec: Timothy White, P.G., Sanborn, Head & Associates, Inc.
Bethlehem Board of Selectmen
Bethlehem Health Officer
Leah McKenna, Administrator, SWMB/NHDES
Jaime Colby, P.E., SWMB/NHDES
Jeffrey Marts, P.G., Administrator, HWRB/NHDES

properties. As a result, if claims for liabilities were asserted against us based upon ownership of an acquired property, we might be required to pay significant sums to settle it, which could adversely affect our financial results and cash flows. For information regarding our business acquisitions, see Note 5, *Business Combinations* to our consolidated financial statements included under Item 8. "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

The waste industry is subject to extensive government regulations, including environmental laws and regulations, and we incur substantial costs to comply with such laws and regulations. Failure to comply with environmental or other laws and regulations, as well as enforcement actions and litigation arising from an actual or perceived breach of such laws and regulations, could subject us to fines, penalties, and judgments, and impose limits on our ability to operate and expand.

We are subject to potential liability and restrictions under environmental laws and regulations, including potential liability and restrictions arising from or relating to the transportation, handling, recycling, generation, treatment, storage and disposal of wastes, the presence, release, discharge or emission of pollutants, and the investigation, remediation and monitoring of impacts to soil, surface water, groundwater and other environmental media including natural resources, as a result of the actual or alleged presence, release, discharge or emission of hazardous substances, pollutants or contaminants on, at, under or migrating from our properties, or in connection with our operations. The waste management industry has been and will continue to be subject to regulation, including permitting and related financial assurance requirements, as well as attempts to further regulate the industry, including efforts to regulate and limit the emission of greenhouse gases to ameliorate the effect of climate change. Our solid waste operations are subject to a wide range of federal, state and, in some cases, local environmental, odor and noise and land use restrictions. If we are not able to comply with the requirements that apply to a particular facility or if we operate in violation of the terms and conditions of, or without the necessary approvals or permits, we could be subject to administrative or civil, and possibly criminal, fines and penalties, and we may be required to spend substantial capital to bring an operation into compliance, to temporarily or permanently discontinue activities, and/or take corrective actions, possibly including removal of landfilled materials. Those costs or actions could be significant to us and affect our results of operations, cash flows, and available capital. In addition, the potential for increased regulation of PFAS and other emerging contaminants could lead to increased compliance and remediation costs, or litigation risks, which could adversely impact our financial condition and results of operations. Future regulation changes may also require us to modify, supplement, or replace equipment or facilities at a substantial cost.

Environmental and land use laws and regulations also affect our ability to expand and, in the case of our solid waste operations, may dictate those geographic areas from which we must, or, from which we may not, accept solid waste. Those laws and regulations may limit the overall size and daily solid waste volume that may be accepted by a solid waste operation. If we are not able to expand or otherwise operate one or more of our facilities because of limits imposed under such laws, we may be required to increase our utilization of disposal facilities owned by third-parties, which could reduce our revenues and/or operating margins.

We have historically grown through acquisitions and expect to make additional acquisitions in the future. We have tried and will continue to try to evaluate and limit environmental risks and liabilities presented by businesses to be acquired prior to the acquisition. It is possible that some liabilities may prove to be more difficult or costly to identify or address than we anticipate. It is also possible that government officials responsible for enforcing environmental laws and regulations may believe an issue is more serious than we expect, or that we will fail to identify or fully appreciate an existing liability before we become responsible for addressing it. Some of the legal sanctions to which we could become subject could cause the suspension or revocation of a permit, prevent us from, or delay us in, obtaining or renewing permits to operate or expand our facilities, or harm our reputation.

In addition to the costs of complying with environmental laws and regulations, we incur costs in connection with environmental proceedings and litigation brought against us by government agencies and private parties. We are, and may be in the future, a defendant in lawsuits brought by parties alleging environmental damage, including natural resource damage, personal injury, and/or property damage or impairment, or seeking to impose civil penalties or injunctive relief or overturn or prevent the issuance of an operating permit or authorization, all of which may result in us incurring significant liabilities.

The conduct of our businesses is also subject to various other laws and regulations administered by federal, state and local governmental agencies, including tax laws, employment laws, privacy laws and competition laws, among others. New laws, regulations or governmental policy and their related interpretations, or changes in any of the foregoing, including taxes or other limitations on our services, may alter the environment in which we do business.

In certain jurisdictions, we are subject to compliance with specific obligations under competition laws due to our competitive position in those jurisdictions. Failure to comply with these obligations could subject us to enforcement actions or financial penalties which could have a material adverse effect on our business.

The increasing focus on PFAS and other emerging contaminants may lead to increased compliance and remediation costs and litigation risks, which could adversely impact our financial condition and results of operations.

The regulatory environment for PFAS is rapidly evolving, with increasing demands for enhanced environmental monitoring programs and advanced treatment technologies to mitigate PFAS contamination. Risks to the Company related to PFAS include regulatory risks, including the proposed designation by the EPA of PFAS as hazardous substances, which could create Superfund liabilities under CERCLA for all downstream recipients of PFAS, including passive receivers such as our landfills, the establishment of federal and state drinking water standards and surface water criteria which set low thresholds for impacts to drinking water and surface water, the risk that states in which we operate will require stringent monitoring of PFAS at our landfills, the risk of material increases in landfill leachate treatment costs due to mandatory pre-treatment or otherwise, the risk that existing remedial sites will become more complex and that closed landfills will be under enhanced regulatory scrutiny, the risk that biosolids management will be impacted by restrictions on end uses and the risk that pre-existing land application sites will be determined to contain PFAS. Any such liability is likely to be uninsurable, with no coverage likely under our pollution or product liability policies.

We may be unable to obtain or maintain required permits or to expand existing permitted capacity of our landfills, which could decrease our revenue and increase our costs.

We are required to obtain government permits to operate our facilities, including all of our landfills. There is no guarantee that we will be able to obtain the requisite permits and, even if we could, that any permit (and any existing permits we currently hold) will be renewed or modified as needed to fit our business needs. Localities where we operate generally seek to regulate some or all landfill and transfer station operations, including siting and expansion of operations. The laws and regulations adopted by municipalities in which our landfills and transfer stations are located may limit or prohibit the expansion of a landfill or transfer station, as well as the amount of solid waste that we can accept at the landfill or transfer station on a daily, quarterly or annual basis, and any effort to acquire or expand landfills and transfer stations, which typically involves a significant amount of time and expense. In addition, state laws applicable to certain of our landfills require that the state determine whether acceptance at the landfill of waste not generated within the state provides a substantial public benefit. In addition, the potential for increased regulation of PFAS and other emerging contaminants could also lead to increased financial impacts such as additional capping requirements, increased closure/post-closure care costs and obligations, enhanced leachate treatment requirements, waste disposal limits, and transport limitations.

Despite our best efforts, we may not be successful in obtaining new landfill or transfer station sites or expanding the permitted capacity of any of our current landfills and transfer stations. If we are unable to develop additional disposal and transfer station capacity, our ability to achieve economies of scale from the internalization of our waste stream will be limited. If we fail to receive new landfill permits or renew existing permits, we may incur landfill asset impairment and other charges associated with accelerated closure. See Note 13, *Commitments and Contingencies* to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K for disclosure about legal matters impacting our permitting efforts. Given our current expected run rate and remaining available capacity at our NCES Landfill in Bethlehem, New Hampshire, we may consume all remaining permitted capacity at our NCES Landfill during the fiscal year ending December 31, 2027 ("fiscal year 2027"). Based on currently available information, we believe that it is unlikely that the landfill under development by us in Dalton, New Hampshire will be fully permitted, constructed and operational by the end of fiscal year 2027.

Fluctuations in commodity prices and diminished markets for recyclable materials that we sell to customers may adversely affect our results of operations and cash flows.

Our processing business involves the purchase and sale of recyclable materials, some of which are priced on a commodity basis. Our results of operations and cash flows may be adversely affected by falling purchase or resale prices or market requirements for recyclable materials. The resale and purchase prices of, and market demand for, recyclable materials are subject to changes in economic conditions and numerous other factors beyond our control, which may result in decreased demand of recyclable materials and lower commodity prices. Global and domestic factors such as recycling commodity inventory levels, inflation, consumer spending and economic activity levels may result in lower recycling commodity prices. The recycling commodity markets continue to see ongoing price volatility. Significant price fluctuations may adversely affect our results of operations and cash flows in the form of higher operating costs or lower revenues. Although many of our recycling contracts require the respective municipalities to absorb some of the impact of declining commodity prices, these contracts have had the impact of significantly increasing the costs to municipalities for continuing to offer recycling services to their customers. In the event that the costs of such services become excessive, such municipalities could discontinue their recycling programs altogether, which could materially affect our financial results. See Item 7A, "Quantitative and Qualitative Disclosure About Market Risk" of this Annual Report on Form 10-K for further discussion over the impacts of commodity prices on our operations.



For Immediate Release:

Extensive Chemical Analyses of Private Drinking Water Wells Surrounding the Casella-Proposed Forest Lake Landfill Site Show No PFAS Contamination

-Property owners have now established water-quality baselines ahead of the potential introduction of “forever chemicals” into a currently-pristine environment.

Dalton, NH: Over the course of the summer and early fall of 2023, 25 privately-owned drinking water wells in the North Country towns of Dalton, Whitefield, Littleton, and Bethlehem were tested for the presence of each of 18 different PFAS contaminants. Results from the accredited testing laboratory have revealed that 450 of the 450 different tests of the wells, surrounding the vicinity of the Casella-proposed “Granite State Landfill” development, have no detectable levels for any of these so-called “forever chemicals,” including the 6 PFAS compounds listed under the March 14, 2023 EPA-proposed National Primary Drinking Water Regulation (NPDWR)¹:

- perfluorooctanoic acid (PFOA)
- perfluorooctane sulfonic acid (PFOS)
- perfluorononanoic acid (PFNA)
- hexafluoropropylene oxidedimer acid (HFPO-DA, also known as GenX)
- perfluorohexane sulfonic acid (PFHxS)
- perfluorobutane sulfonic acid (PFBS).

The detection limit of the method used is 2 nanograms per liter, or 2 parts per trillion (ppt). The federal EPA has proposed to limit several of these chemicals in drinking water to below 4 ppt, and current New Hampshire limits range from 12 to 18 ppt.

Finding a wide area completely free of PFAS is **unusual and noteworthy**, as the U.S. Geological Survey has recently tested nearly 1,000 locations across the country and concluded that nearly half of all drinking water supplies in the nation contain at least one PFAS compound.²

PFAS are known to damage the immune, circulatory, and endocrine systems, and some are suspected carcinogens. These lab results are an important development in the ongoing struggle between local property owners and Casella Waste Systems. The Vermont-based

corporation is proposing a new landfill in the Town of Dalton NH, sited in hyper-porous sand approximately 2500 feet from the water's edge of Forest Lake and bordering Forest Lake State Park. A typical landfill can produce over one *billion* gallons of leachate (“garbage juice”) over its lifetime, containing on the order of 15,000 ppt of total PFAS.³

Similar water testing was recently conducted at Alder Brook, bordering the proposed landfill site towards the southwest. Wetlands surrounding the proposed landfill site drain into the Alder Brook watershed, which then discharges into the Ammonoosuc River, upstream of the Town of Littleton. Those lab results revealed no detectable levels for each of the 18 different PFAS compounds.

Forest Lake itself was tested in 2020, in order to establish baselines for lake water quality under the potential threat of contamination from the proposed landfill project. Testing confirmed that Forest Lake itself is a pristine lake. It had no detectable levels for 6 PFAS chemicals, nor any detectable levels of more than 180 different metals, solvents, and pesticides. *E. coli* levels in Forest Lake are among the lowest in the entire state.

The water tests were conducted by Granite State Analytical Services, an independent analytical laboratory accredited by the New Hampshire Department of Environmental Services.

Contacts:

Jon Swan, Founder
[Save Forest Lake](#)
SaveForestLake@yahoo.com
(603) 991-2078

Sarah Doucette
[North Country Alliance for Balanced Change](#)
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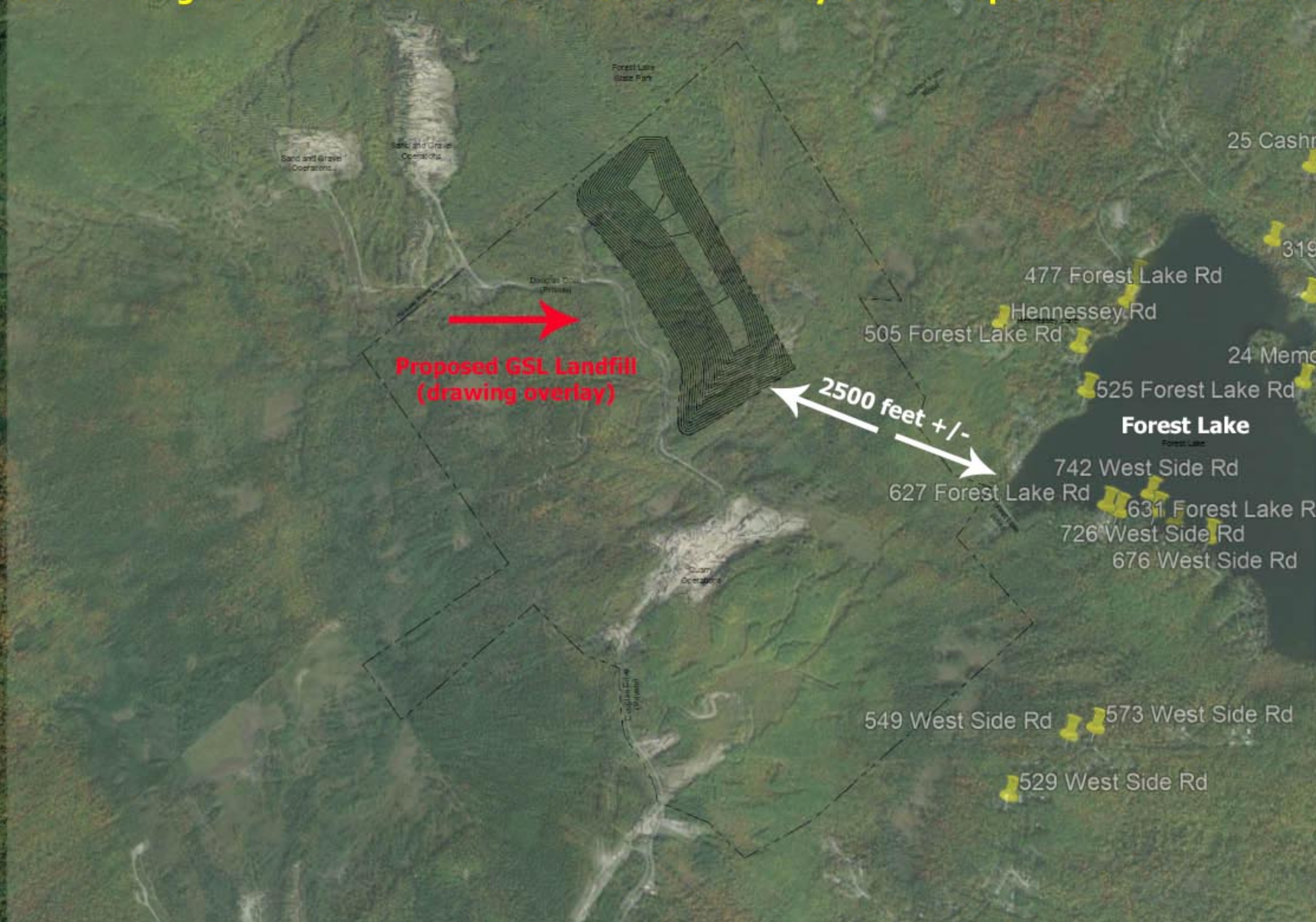
Fred Anderson, President
[Forest Lake Association](#)
fra676@mapc.com
(917) 584- 3242

¹ EPA Proposed PFAS National Primary Drinking Water Regulation (March 14, 2023)

² [Per- and polyfluoroalkyl substances \(PFAS\) in United States tapwater: Comparison of underserved private-well and public-supply exposures and associated health implications](#)

³ Lang, JR, et al., *Environmental Science & Technology*, 2017, pp. 2197-2205; DOI: [10.1021/acs.est.6b05005](https://doi.org/10.1021/acs.est.6b05005)

Private Drinking Water Wells Tested For PFAS In The Vicinity Of The Proposed GSL Landfill Development



**Proposed GSL Landfill
(drawing overlay)**

2500 feet +/-

Forest Lake

1322 Manns Hill Rd

Alder Brook

ZERO Detections For PFAS Contamination

Wells Tested For 18 PFAS Compounds, ZERO Detections



Eastern Analytical, Inc.

professional laboratory and drilling services

Tim White
 Sanborn, Head & Associates, Inc. (NH)
 20 Foundry Street
 Concord , NH 03301



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 200387
 Client Identification: Dalton | PFAS / 1003.16
 Date Received: 9/13/2019

Dear Mr. White :

Enclosed please find the report of analysis for the above identified project.
 As discussed, analyses were subcontracted and are listed as follows:

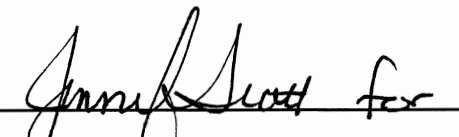
Analysis: Subcontract - Perfluorinated Compounds EPA 537 (9
 Compounds) Vista

Subcontractor Lab: Vista Analytical Laboratory

A complete copy of the report is attached. This report may not be reproduced except in full,
 without the written approval of the laboratory.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,



 Lorraine Olashaw, Lab Director

10.3.19

 Date

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 # of pages (excluding cover letter)



SAMPLE CONDITIONS PAGE

EAI ID#: 200387

Client: **Sanborn, Head & Associates, Inc. (NH)**

Client Designation: **Dalton | PFAS / 1003.16**

Temperature upon receipt (°C): 3.1

Received on ice or cold packs (Yes/No): Y

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
200387.01	MW-1_20190912	9/13/19	9/12/19	aqueous		Adheres to Sample Acceptance Policy
200387.02	MW-6_20190912	9/13/19	9/12/19	aqueous		Adheres to Sample Acceptance Policy
200387.03	MW-18_20190912	9/13/19	9/12/19	aqueous		Adheres to Sample Acceptance Policy
200387.04	MW-21U_20190913	9/13/19	9/13/19	aqueous		Adheres to Sample Acceptance Policy
200387.05	FB-1_20190913	9/13/19	9/13/19	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitability, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.

Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.

All results contained in this report relate only to the above listed samples.

References include:

- 1) EPA 600/4-79-020, 1983
- 2) Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd Edition or noted Revision year.
- 3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- 4) Hach Water Analysis Handbook, 4th edition, 1992

Sample ID: MW-1 20190912				PFAS Isotope Dilution Method								
Client Data				Laboratory Data								
Name:	Eastern Analytical, Inc.		Matrix:	Aqueous			Lab Sample:	1903144-01		Column:	BEH C18	
Project:	200387 NH 5379		Date Collected:	12-Sep-19 11:32			Date Received:	17-Sep-19 10:25				
Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution			
PFBA	375-22-4	ND	5.06		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
PFPeA	2706-90-3	ND	5.06		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
PFBS	375-73-5	ND	5.06		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
PFHxA	307-24-4	ND	5.06		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
PFHpA	375-85-9	ND	5.06		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
PFHxS	355-46-4	ND	5.06		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
PFOA	335-67-1	ND	5.06		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
PFNA	375-95-1	ND	5.06		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
PFOS	1763-23-1	ND	5.06		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution			
13C3-PFBA	IS	101	60 - 130		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
13C3-PFPeA	IS	96.0	60 - 150		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
13C3-PFBS	IS	68.4	60 - 150		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
13C2-PFHxA	IS	82.4	70 - 130		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
13C4-PFHpA	IS	99.6	60 - 150		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
13C3-PFHxS	IS	82.3	60 - 130		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
13C5-PFNA	IS	92.6	50 - 130		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
13C2-PFOA	IS	87.5	60 - 130		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			
13C8-PFOS	IS	71.9	60 - 130		B9I0176	19-Sep-19	0.0989 L	29-Sep-19 09:15	1			

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: MW-6 20190912 **PFAS Isotope Dilution Method**

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	1903144-02	Column:	BEH C18
Project:	200387 NH 5379	Date Collected:	12-Sep-19 12:35	Date Received:	17-Sep-19 10:25		

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.79		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
PFPeA	2706-90-3	ND	4.79		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
PFBS	375-73-5	ND	4.79		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
PFHxA	307-24-4	ND	4.79		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
PFHpA	375-85-9	ND	4.79		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
PFHxS	355-46-4	ND	4.79		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
PFOA	335-67-1	ND	4.79		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
PFNA	375-95-1	ND	4.79		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
PFOS	1763-23-1	ND	4.79		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	98.5	60 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
13C3-PFPeA	IS	98.2	60 - 150		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
13C3-PFBS	IS	61.5	60 - 150		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
13C2-PFHxA	IS	75.6	70 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
13C4-PFHpA	IS	96.8	60 - 150		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
13C3-PFHxS	IS	81.1	60 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
13C5-PFNA	IS	96.6	50 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
13C2-PFOA	IS	88.4	60 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1
13C8-PFOS	IS	85.1	60 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:26	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: **MW-18** 20190912

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	1903144-03	Column:	BEH C18
Project:	200387 NH 5379	Date Collected:	12-Sep-19 12:50	Date Received:	17-Sep-19 10:25		

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.81		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
PFPeA	2706-90-3	ND	4.81		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
PFBS	375-73-5	ND	4.81		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
PFHxA	307-24-4	ND	4.81		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
PFHpA	375-85-9	ND	4.81		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
PFHxS	355-46-4	ND	4.81		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
PFOA	335-67-1	ND	4.81		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
PFNA	375-95-1	ND	4.81		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
PFOS	1763-23-1	ND	4.81		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	100	60 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
13C3-PFPeA	IS	90.7	60 - 150		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
13C3-PFBS	IS	69.1	60 - 150		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
13C2-PFHxA	IS	86.3	70 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
13C4-PFHpA	IS	90.6	60 - 150		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
13C3-PFHxS	IS	83.0	60 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
13C5-PFNA	IS	89.1	50 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
13C2-PFOA	IS	91.0	60 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1
13C8-PFOS	IS	92.3	60 - 130		B9I0176	19-Sep-19	0.104 L	29-Sep-19 09:36	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

Sample ID: **MW-21U** 20190913

PFAS Isotope Dilution Method

Client Data				Laboratory Data			
Name:	Eastern Analytical, Inc.	Matrix:	Aqueous	Lab Sample:	1903144-04	Column:	BEH C18
Project:	200387 NH 5379	Date Collected:	13-Sep-19 10:30	Date Received:	17-Sep-19 10:25		

Analyte	CAS Number	Conc. (ng/L)	RL	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
PFBA	375-22-4	ND	4.87		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
PFPeA	2706-90-3	ND	4.87		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
PFBS	375-73-5	ND	4.87		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
PFHxA	307-24-4	ND	4.87		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
PFHpA	375-85-9	ND	4.87		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
PFHxS	355-46-4	ND	4.87		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
PFOA	335-67-1	ND	4.87		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
PFNA	375-95-1	ND	4.87		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
PFOS	1763-23-1	ND	4.87		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1

Labeled Standards	Type	% Recovery	Limits	Qualifiers	Batch	Extracted	Samp Size	Analyzed	Dilution
13C3-PFBA	IS	56.4	60 - 130	H	B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
13C3-PFPeA	IS	94.5	60 - 150		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
13C3-PFBS	IS	66.0	60 - 150		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
13C2-PFHxA	IS	83.6	70 - 130		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
13C4-PFHpA	IS	97.5	60 - 150		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
13C3-PFHxS	IS	86.5	60 - 130		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
13C5-PFNA	IS	98.4	50 - 130		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
13C2-PFOA	IS	89.9	60 - 130		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1
13C8-PFOS	IS	93.0	60 - 130		B9I0176	19-Sep-19	0.103 L	29-Sep-19 09:47	1

RL - Reporting limit

Results reported to RL.

When reported, PFHxS, PFOA, PFOS, MeFOSAA and EtFOSAA include both linear and branched isomers. Only the linear isomer is reported for all other analytes.

CHAIN-OF-CUSTODY RECORD

EAI ID# **200387**

Page 1

1903144 1.09°C

Sample ID	Date Sampled	Matrix	aParameters	Sample Notes
MW-1_20190912	9/12/2019 11:32	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)	
MW-6_20190912	9/12/2019 12:35	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)	
MW-18_20190912	9/12/2019 12:50	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)	
MW-21U_20190913	9/13/2019 10:30	aqueous	Subcontract - Perfluorinated Compounds EPA Method 537 (9 Compounds)	

EAI ID# **200387**

Project State: NH

Project ID: 5379

Company Vista Analytical Laboratory

Address 1104 Windfield Way

Address El Dorado Hills, CA 95762

Account #

Phone # (916) 673-1520

Results Needed: Preferred Date: Standard

RUSH Due Date: _____

QC Deliverables

A A+ B B+ C MA MCP

Notes about project:

Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

Please report Sulfonic Acids

PO #: 50743

EAI ID# **200387**

Data Deliverable (circle)

Excel NH EMD EQUIS ME EGAD

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by:

[Signature] 9/12/19 10:00 URS

Relinquished by *[Signature]* Date/Time 09/17/19 10:25 Received by *[Signature]*

Relinquished by _____ Date/Time _____ Received by _____

Eastern Analytical, Inc. 25 Chenell Dr. Concord, NH 03301

Phone: (603)228-0525

1-800-287-0525

customerservice@easternanalytical.com

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damages arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of you as a subcontract lab, your officers, agents or employees

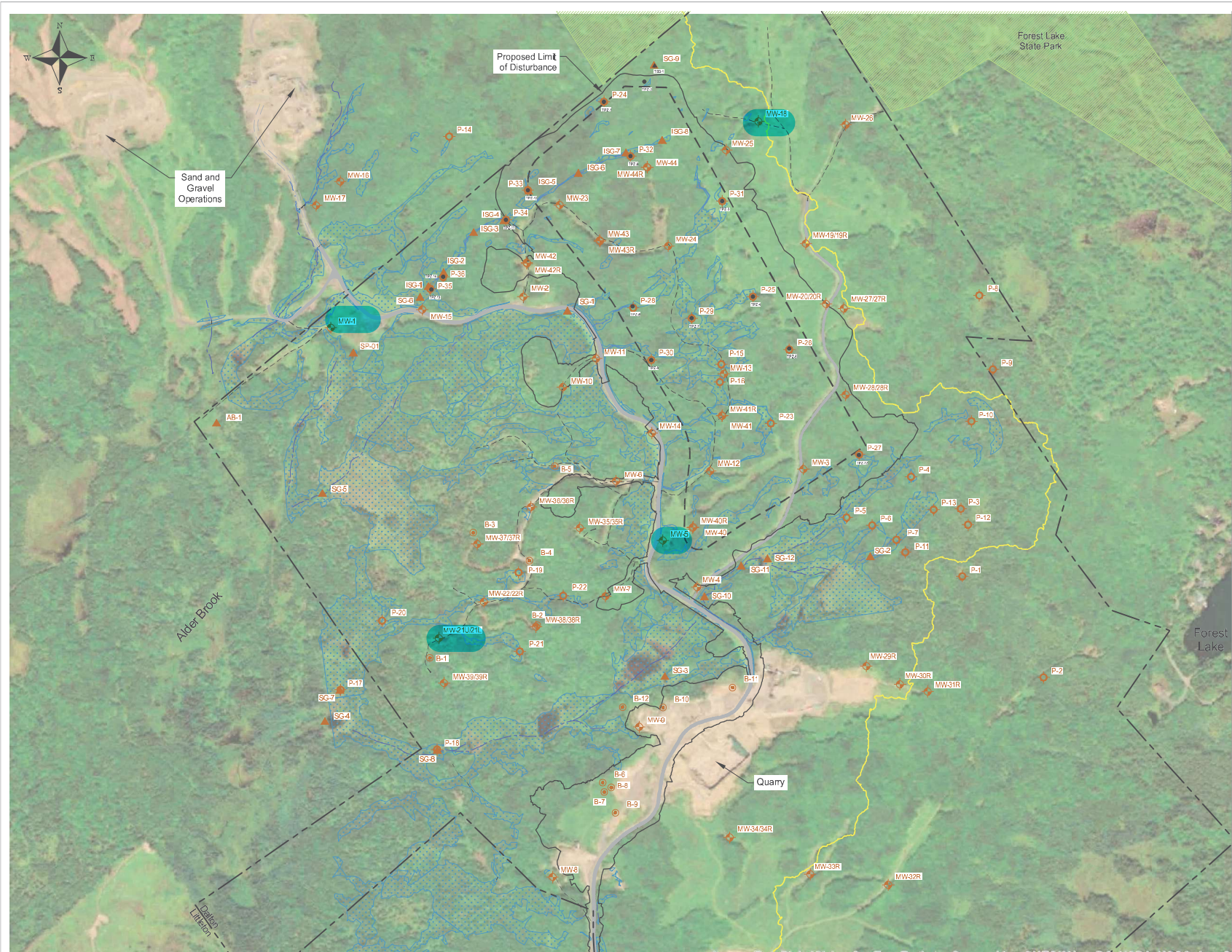


Figure 3B
Site Features and Sampling Location Plan
 Aerial Imagery
 Hydrogeologic Report

Granite State Landfill
 Dalton, New Hampshire

Drawn By: E Wright
 Designed By: L Corenthall
 Reviewed By: T. White
 Project No: 1003.24
 Date: July 2023

Figure Narrative

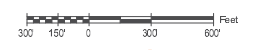
This figure depicts the locations of monitoring wells, piezometers, soil borings, and surface water gauging stations installed as part of site characterization activities. Also indicated on the plan are locations of key site features.

Notes

1. Aerial basemap provided by ArcGIS Online.
2. Locations of monitoring wells, piezometers, soil borings, and surface water gauging stations were surveyed by Horizons Engineering.
3. Refer to the Wetlands Application for additional information regarding wetland type, etc. Proposed landfill and disturbance limits were provided by CMA Engineers. Refer to previous figures for additional notes.

Legend

- Project property line
- - - Proposed landfill limit
- Proposed limit of disturbance
- Yellow line Alder Brook/Hatch Brook catchment
- Blue dotted area Wetland
- Blue dashed line Perennial stream (within mapped wetland area)
- Blue dashed line Intermittent stream (within mapped wetland area)
- Grey line Gravel road
- Grey line Skid road
- Green circle with crosshair MW-1 Monitoring well
- Orange triangle SG-1 Surface water staff gauge/sampling location
- Orange circle with crosshair P-1 Piezometer location
- Orange circle with dot B-1 Geotechnical soil boring
- U Indicates upper overburden well
- L Indicates lower overburden well
- R Indicates bedrock well
- Black circle with crosshair 1924 Temporary piezometer (decommissioned)
- Black triangle with crosshair 1944 Temporary staff gauge (decommissioned)



9. Bypass and Residual Waste (Env-Sw 1105.13(g))

Waste	Total Quantity Generated	Quantity Shipped to NH Destination(s)	Quantity Shipped to Out-of-State Destination(s)
Bypass Waste	tons	tons	tons
Residual Waste	tons	tons	tons
Leachate	7,767,937 gallons	8,771,696 gallons	33,900 gallons

10. Facilities Producing Certified Waste-Derived Products (Env-Sw 1105.13(h))

Type of Waste-Derived Product Produced	Quantity Produced	Quantity Distributed for Use	Estimated Quantity Stored at Facility as of December 31
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons

I certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to Env-Sw 1500.

OR

I CAN NOT certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to Env-Sw 1500, and have attached a detailed explanation of the situation and actions taken or being taken to remedy the problem.

11. Other Activities Taking Place at the Facility

<input type="checkbox"/> Burn Pile	<input type="checkbox"/> Refrigerant Removal	<input type="checkbox"/> Swap Shop
<input type="checkbox"/> Food Waste Composting	<input type="checkbox"/> Leaf & Yard Waste Composting	<input type="checkbox"/> Other:
<input type="checkbox"/> Used Oil Collection	<input type="checkbox"/> Sharps Collection	<input type="checkbox"/> Other:
<input type="checkbox"/> Used Oil Burner: EPA ID No. NHD		
Universal Waste Collection		
<input type="checkbox"/> Antifreeze	<input type="checkbox"/> Batteries (Rechargeable)	<input type="checkbox"/> Fluorescent Lamps
<input type="checkbox"/> Batteries (Automotive)	<input type="checkbox"/> Cathode Ray Tubes (CRTs)	<input type="checkbox"/> Mercury-Containing Devices

12. Summary and Assessment of Environmental Monitoring (Env-Sw 1105.13(j))

None required and none undertaken.

None required, but environmental monitoring was undertaken voluntarily. A summary and assessment of the environmental monitoring is attached.

Environmental monitoring is required by this facility's permit and/or the Solid Waste Rules. A summary is:

Attached to this report; or

Provided in the following documents previously submitted to NHDES as indicated below:

Date Submitted

Title of Document

Type of Monitoring

9. Bypass and Residual Waste (Env-Sw 1105.13(g))

Note: Please refer to the Guidance Sheet for definitions of bypass waste and residual waste.

Waste	Total Quantity Generated	Quantity Shipped to NH Destination(s)	Quantity Shipped to Out-of-State Destination(s)
Bypass Waste	tons	tons	tons
Residual Waste	tons	tons	tons
Leachate	7,565,448 gallons	7,410,995 gallons	530,378 gallons

10. Facilities Producing Certified Waste-Derived Products (Env-Sw 1105.13(h))

Type of Waste-Derived Product Produced	Quantity Produced	Quantity Distributed for Use	Estimated Quantity Stored at Facility as of December 31
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons

I certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to Env-Sw 1500.

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<input type="checkbox"/> Used Oil Collection	<input type="checkbox"/> Sharps Collection	<input type="checkbox"/> Other:
<input type="checkbox"/> Used Oil Burner: EPA ID No. NHD		
Universal Waste Collection		
<input type="checkbox"/> Antifreeze	<input type="checkbox"/> Batteries (Rechargeable)	<input type="checkbox"/> Fluorescent Lamps
<input type="checkbox"/> Batteries (Automotive)	<input type="checkbox"/> Cathode Ray Tubes (CRTs)	<input type="checkbox"/> Mercury-Containing Devices

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Attached to this report; or

Provided in the following documents previously submitted to NHDES as indicated below:

Date Submitted

Title of Document

Type of Monitoring

9. Bypass and Residual Waste (Env-Sw 1105.13(g))

Note: Please refer to the instructions for definitions of bypass waste and residual waste.

Waste	Total Quantity Generated	Quantity Shipped to NH Destination(s)	Quantity Shipped to Out-of-State Destination(s)
Bypass Waste	tons	tons	tons
Residual Waste	tons	tons	tons
Leachate	8190236 gallons	7992895 gallons	97174 gallons

10. Facilities Producing Certified Waste-Derived Products (Env-Sw 1105.13(h))

Type of Waste-Derived Product Produced	Quantity Produced	Quantity Distributed for Use	Estimated Quantity Stored at Facility as of December 31
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons

I certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to Env-Sw 1500.

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<input type="checkbox"/> Used Oil Collection	<input type="checkbox"/> Sharps Collection	<input type="checkbox"/> Other:
<input type="checkbox"/> Used Oil Burner: EPA ID No. NHD		
Universal Waste Collection		
<input type="checkbox"/> Antifreeze	<input type="checkbox"/> Batteries (Rechargeable)	<input type="checkbox"/> Fluorescent Lamps
<input type="checkbox"/> Batteries (Automotive)	<input type="checkbox"/> Cathode Ray Tubes (CRTs)	<input type="checkbox"/> Mercury-Containing Devices

12. Summary and Assessment of Environmental Monitoring (Env-Sw 1105.13(j))

- None required and none undertaken.
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Environmental monitoring is required by this facility's permit and/or the Solid Waste Rules. A summary is:

- Attached to this report; or
- Provided in the following documents previously submitted to NHDES as indicated below:

Date Submitted	Title of Document	Type of Monitoring
----------------	-------------------	--------------------

8. Estimated Quantity of Waste Stored at the Facility as of December 31, 2020 [[Env-Sw 1105.13\(i\)](#)]

Type of Waste	Quantity Onsite as of Dec. 31	Type of Waste	Quantity Onsite as of Dec. 31
Ash	tons	Infectious Waste	tons
Asbestos	tons	Municipal Solid Waste	tons
Bulky Waste	tons	Recyclable Materials	tons
C&D Debris	tons	Scrap Metal	tons
Contaminated Soil	tons	White Goods	tons
Electronic Waste	tons	Other:	
Food Waste	tons	Other:	

9. Bypass and Residual Waste [[Env-Sw 1105.13\(g\)](#)]

Note: Please refer to the instructions for definitions of bypass waste and residual waste.

Waste	Total Quantity Generated	Quantity Shipped to NH Destination(s)	Quantity Shipped to Out-of-State Destination(s)	Quantity Stored Onsite as of December 31
Bypass Waste	tons	tons	tons	tons
Residual Waste	tons	tons	tons	tons
Leachate	9,097,295 gallons	9,091,897 gallons	5,398 gallons	161,056 gallons

10. Facilities Producing Certified Waste-Derived Products [[Env-Sw 1105.13\(h\)](#)]

Type of Waste-Derived Product Produced	Quantity Produced	Quantity Distributed for Use	Estimated Quantity Stored Onsite as of December 31
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons

I certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to [Env-Sw 1500](#).

OR

I CAN NOT certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to [Env-Sw 1500](#), and have attached a detailed explanation of the situation and actions taken or being taken to remedy the problem.

11. Other Activities Taking Place at the Facility

<input type="checkbox"/> Burn Pile	<input type="checkbox"/> Refrigerant Removal	<input type="checkbox"/> Other:
<input type="checkbox"/> Household Hazardous Waste Collection	<input type="checkbox"/> Swap Shop	<input type="checkbox"/> Other:
<input type="checkbox"/> Leaf & Yard Waste Composting	<input type="checkbox"/> Collection of Used Oil for Recycle	<input type="checkbox"/> Other:
<input type="checkbox"/> Used Oil Burner: EPA ID No. NHD		
Universal Waste Collection		
<input type="checkbox"/> Antifreeze	<input type="checkbox"/> Batteries (Rechargeable)	<input type="checkbox"/> Fluorescent Lamps
<input type="checkbox"/> Batteries (Automotive)	<input type="checkbox"/> Cathode Ray Tubes (CRTs)	<input type="checkbox"/> Mercury-Containing Devices

8. Estimated Quantity of Waste Stored at the Facility as of December 31, 2021 [Env-Sw 1105.13(i)]

Type of Waste	Quantity Onsite as of Dec. 31	Type of Waste	Quantity Onsite as of Dec. 31
Ash	tons	Infectious Waste	tons
Asbestos	tons	Municipal Solid Waste	tons
Bulky Waste	tons	Recyclable Materials	tons
C&D Debris	tons	Scrap Metal	tons
Contaminated Soil	tons	White Goods	tons
Electronic Waste	tons	Other:	
Food Waste	tons	Other:	

9. Bypass and Residual Waste [Env-Sw 1105.13(g)]

Note: Please refer to the instructions for definitions of bypass waste and residual waste.

Waste	Total Quantity Generated	Quantity Shipped to NH Destination(s)	Quantity Shipped to Out-of-State Destination(s)	Quantity Stored Onsite as of December 31
Bypass Waste	tons	tons	tons	tons
Residual Waste	tons	tons	tons	tons
Leachate	11,410,376 gallons	11,410,376 gallons	0 gallons	47,850 gallons

10. Facilities Producing Certified Waste-Derived Products [Env-Sw 1105.13(h)]

Type of Waste-Derived Product Produced	Quantity Produced	Quantity Distributed for Use	Estimated Quantity Stored Onsite as of December 31
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons

I certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to [Env-Sw 1500](#).

OR

I CAN NOT certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to [Env-Sw 1500](#), and have attached a detailed explanation of the situation and actions taken or being taken to remedy the problem.

11. Other Activities Taking Place at the Facility

<input type="checkbox"/> Burn Pile	<input type="checkbox"/> Refrigerant Removal	<input type="checkbox"/> Other:
<input type="checkbox"/> Household Hazardous Waste Collection	<input type="checkbox"/> Swap Shop	<input type="checkbox"/> Other:
<input type="checkbox"/> Leaf & Yard Waste Composting	<input type="checkbox"/> Collection of Used Oil for Recycle	<input type="checkbox"/> Other:
<input type="checkbox"/> Used Oil Burner: EPA ID No. NHD		
Universal Waste Collection		
<input type="checkbox"/> Antifreeze	<input type="checkbox"/> Batteries (Rechargeable)	<input type="checkbox"/> Fluorescent Lamps

8. Estimated Quantity of Waste Stored at the Facility as of December 31, 2022 [Env-Sw 1105.13(i)]

Type of Waste	Quantity Onsite as of Dec. 31	Type of Waste	Quantity Onsite as of Dec. 31
Ash	tons	Infectious Waste	tons
Asbestos	tons	Municipal Solid Waste	tons
Bulky Waste	tons	Recyclable Materials	tons
C&D Debris	tons	Scrap Metal	tons
Contaminated Soil	tons	White Goods	tons
Electronic Waste	tons	Other:	
Food Waste	tons	Other:	

9. Bypass and Residual Waste [Env-Sw 1105.13(g)]

Note: Please refer to the instructions for definitions of bypass waste and residual waste.

Waste	Total Quantity Generated	Quantity Shipped to NH Destination(s)	Quantity Shipped to Out-of-State Destination(s)	Quantity Stored Onsite as of December 31
Bypass Waste	tons	tons	tons	tons
Residual Waste	tons	tons	tons	tons
Leachate	gallons	8,408,042 gallons	0 gallons	105,578 gallons

10. Facilities Producing Certified Waste-Derived Products [Env-Sw 1105.13(h)]

Type of Waste-Derived Product Produced	Quantity Produced	Quantity Distributed for Use	Estimated Quantity Stored Onsite as of December 31
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons
	tons	tons	tons

I certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to Env-Sw 1500.

OR

I CAN NOT certify that all waste-derived products distributed by the facility for use met the applicable standards for distribution and use pursuant to Env-Sw 1500, and have attached a detailed explanation of the situation and actions taken or being taken to remedy the problem.

11. Other Activities Taking Place at the Facility

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<input type="checkbox"/> Household Hazardous Waste Collection	<input type="checkbox"/> Swap Shop	<input type="checkbox"/> Other:
<input type="checkbox"/> Leaf & Yard Waste Composting	<input type="checkbox"/> Collection of Used Oil for Recycle	<input type="checkbox"/> Other:
<input type="checkbox"/> Used Oil Burner: EPA ID No. NHD		
Universal Waste Collection		
<input type="checkbox"/> Antifreeze	<input type="checkbox"/> Batteries (Rechargeable)	<input type="checkbox"/> Fluorescent Lamps
<input type="checkbox"/> Batteries (Automotive)	<input type="checkbox"/> Cathode Ray Tubes (CRTs)	<input type="checkbox"/> Mercury-Containing Devices

DISPOSAL OF NON-HAZARDOUS LANDFILL LEACHATE AGREEMENT

Agreement made this the 17TH day of November, 2022, by and between **North Country Environmental Services, Inc.** (hereinafter called "NCES") with a usual place of business at 581 Trudeau Road, Bethlehem, New Hampshire 03574, and the **City of Concord**, (hereinafter called "City") a municipal corporation with its usual place of business at 41 Green Street, Concord, New Hampshire 03301.

WITNESSETH

Whereas, NCES has approached the City requesting consideration for the disposal of non-hazardous landfill leachate; and

Whereas, the City is the owner of a municipal wastewater treatment plant and has the capacity and requisite permits for treating and disposing of such leachate, pursuant to applicable statutes, ordinances and regulations;

Now therefore in consideration of the mutual promises and covenants set forth herein, the parties hereto agree as follows:

1. **Term.** This agreement shall be for a term of two (2) years commencing on January 1, 2023 and terminating on December 31, 2025 at 11:59 pm. This agreement may be renewed and/or amended thereafter for additional terms as mutually agreed to by the parties.
2. **Volume and Discharge.** NCES agrees to deliver, utilizing tanker trucks, and the City agrees to accept for treatment and disposal, non-hazardous landfill leachate in full compliance with all conditions as detailed in the City of Concord issued industrial discharge permits for each individual source. All deliveries shall be made between the hours of 7:30 A.M. and 3:30 P.M., excluding Saturdays, Sundays and City recognized holidays, to the City's Hall Street Wastewater Treatment Plant ("Plant"). NCES shall provide manifest documents for each load delivered, indicating the source and volume of each delivery. Discharge of non-hazardous landfill leachate shall be at a location designated by the City.
3. **Permit and Testing.** NCES agrees to pay for all associated costs to comply with the analytical testing schedule as specified in Section 16 and Schedule A of the Permit To Discharge, Industrial Wastewater To The Municipal Sewer System Transported Waste, Permit No. H34 ("Permit"), attached hereto as Exhibit A. NCES shall be in compliance with all of the terms and conditions of the Permit have a valid permit under its name upon delivery of non-hazardous landfill leachate to the Plant.
4. **Approvals.** NCES agrees to comply with the conditions of all required permits and all Federal, State and City rules and regulations, including but not limited to Chapter 9 of the Code of Ordinances of the City of Concord.

5. Changed Conditions. In the event the U. S. Environmental Protection Agency (EPA) or any other regulatory agency having jurisdiction here categorizes sanitary landfill operations as a Federal Pretreatment Category, NCES recognizes that modified pollutant limitations are probable and will, if developed, be enforced by the City.
6. Suspension or Termination at Discretion of the City. The City reserves the right to suspend or terminate the treatment of non-hazardous landfill leachate if necessary to protect the operational integrity of Plant processes or other reason as the City deems appropriate. Upon notification, NCES will immediately cease deliveries of non-hazardous leachate until and unless further notification is given by the City that deliveries may resume.
7. Fees. The following treatment/disposal fee schedule shall be conditioned upon NCES's delivery of at least eighty (80) percent of its non-hazardous landfill leachate it produces at the NCES landfill located in Bethlehem, NH to the City's Hall Street Wastewater Treatment Plant:
 - A. NCES: \$0.0575/gal.
 - B. Waste USA Landfill: \$0.0575/gal.
8. Accounting. NCES shall provide the City with an accounting of its annual production of non-hazardous landfill leachate it produces at the NCES Landfill in Bethlehem, NH, which shall occur on May 31, 2023 and May 31, 2024 or a time otherwise acceptable to the City to confirm delivery of 80 % of the non-hazardous landfill leachate it produces. To the extent that NCES delivers less than 80 percent of non-hazardous landfill leachate it produces at NCES Landfill in Bethlehem, NH to the City's Hall Street Wastewater Treatment Plant, NCES shall pay \$0.0790/gal for each gallon delivered to the Wastewater Treatment Plant, which payment shall be prorated for the applicable year, and any additional payment shall be made within thirty (30) days following NCES' delivery of the annual accounting of the non-hazardous landfill leachate which NCES produces at the NCES Landfill in Bethlehem, NH to the City.
9. Billing. The City shall bill NCES monthly, based on the per gallon charges set forth in paragraph 6 and the volumes indicated on the manifest documents (see Section 2) which accompany each leachate delivery. All fees properly invoiced by the City shall be paid by NCES within 30 days. After 30 days, interest at the rate of 1.5% per month (18% per annum) shall be added. Failure to pay any amounts due within 60 days shall be cause for termination of this agreement. However, termination for non-payment shall not preclude the City from enforcing collection of any amount due hereunder.
10. Fee Increase. On January 1, 2024, the leachate treatment/disposal fees will be increased to \$0.0600 per gallon for both NCES and Waste USA Landfill.

March 20, 2023

Kristin Noel
City of Concord, New Hampshire
Wastewater Treatment Facility
General Service Department
125 Hall Street
Concord, NH 03301-3228

**RE: North Country Environmental Services, Inc.
Landfill Facility – Bethlehem, New Hampshire
City of Concord Leachate Discharge Permit (#H34)
Annual Leachate Report, 2023**

Dear Ms. Noel:

NCES (North Country Environmental Services, Inc.) writes to submit the Annual Leachate Data Package as required within Section 16 of the above referenced permit.

Should you have any questions, please do not hesitate to contact me at (802) 651-5454.

Sincerely,

NORTH COUNTRY ENVIRONMENTAL SERVICES, INC.



Lindsey Menard
Permits, Compliance & Engineering

Enclosure

c. Kevin Roy, NCES
John Gay, NCES



Eastern Analytical, Inc.

professional laboratory and drilling services

Matt Estabrooks
Sanborn, Head & Associates, Inc. (NH)
20 Foundry Street
Concord, NH 03301



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 254402

Client Identification: NCES | Leachate PFAS | 2637.09

Date Received: 1/4/2023

Dear Estabrooks :

Enclosed please find the report of analysis for the above identified project. As discussed, analyses were subcontracted and are listed as follows:

Analysis: Subcontract - PFAS EPA Method 1633 (24 Compounds)

Subcontractor Lab: Eurofins / Lancaster Laboratories

A complete copy of the report is attached. This report may not be reproduced except in full, without the written approval of the laboratory.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director

1.25.23

Date

Detection Summary

Client: Eastern Analytical
Project/Site: 254402

Job ID: 410-111396-1

Client Sample ID: Tank_B_20230104

Lab Sample ID: 410-111396-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	2300		200	ng/L	1		1633	Total/NA
Perfluoropentanoic acid (PFPeA)	1570		100	ng/L	1		1633	Total/NA
Perfluorohexanoic acid (PFHxA)	3820		50.0	ng/L	1		1633	Total/NA
Perfluoroheptanoic acid (PFHpA)	822		52.0	ng/L	1		1633	Total/NA
Perfluorooctanoic acid (PFOA)	2510		64.0	ng/L	1		1633	Total/NA
Perfluorononanoic acid (PFNA)	140		50.0	ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2500		30.0	ng/L	1		1633	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	474		57.0	ng/L	1		1633	Total/NA
Perfluorooctane sulfonate (PFOS)	290		50.0	ng/L	1		1633	Total/NA
6:2 Fluorotelomer sulfonic acid	645		250	ng/L	1		1633	Total/NA
NMeFOSAA	562		120	ng/L	1		1633	Total/NA
NEtFOSAA	256		70.0	ng/L	1		1633	Total/NA

Client Sample ID: FB-PFAS-02_20230104

Lab Sample ID: 410-111396-2

No Detections.

5

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

TABLE 2
Summary of Monitoring Data – Tank B Leachate - PFAS
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
January 2023

Group	Analyte	CAS Number	Units	Method 1633	Method 1633
				Tank_B	Field Blank
				1/4/2023	1/4/2023
Perfluoroalkyl Carboxylic Acids	Perfluorobutanoic Acid (PFBA) [3]	375-22-4	ng/L	2,300	<8.00
	Perfluoropentanoic Acid (PFPeA) [4]	2706-90-3	ng/L	1,570	<4.00
	Perfluorohexanoic Acid (PFHxA) [5]	307-24-4	ng/L	3,820	<2.00
	Perfluoroheptanoic Acid (PFHpA) [6]	375-85-9	ng/L	822	<2.00
	Perfluorooctanoic Acid (PFOA) [7]	335-67-1	ng/L	2,510	<2.00
	Perfluorononanoic Acid (PFNA) [8]	375-95-1	ng/L	140	<2.00
	Perfluorodecanoic Acid (PFDA) [9]	335-76-2	ng/L	<50.0	<2.00
	Perfluoroundecanoic Acid (PFUnA) [10]	2058-94-8	ng/L	<50.0	<2.00
	Perfluorododecanoic Acid (PFDoA) [11]	307-55-1	ng/L	<50.0	<2.00
	Perfluorotridecanoic Acid (PFTrDA) [12]	72629-94-8	ng/L	<50.0	<2.00
	Perfluorotetradecanoic Acid (PFTeA) [13]	376-06-7	ng/L	<50.0	<2.00
Perfluoroalkyl Sulfonic Acids	Perfluorobutanesulfonic Acid (PFBS) [4S]	375-73-5	ng/L	2,500	<2.00
	Perfluoropentanesulfonic Acid (PFPeS) [5S]	2706-91-4	ng/L	<50.0	<2.00
	Perfluorohexanesulfonic Acid (PFHxS) [6S]	355-46-4	ng/L	474	<2.00
	Perfluoroheptanesulfonic Acid (PFHpS) [7S]	375-92-8	ng/L	<40.0	<2.00
	Perfluorooctanesulfonic Acid (PFOS) [8S]	1763-23-1	ng/L	290	<2.00
	Perfluorononanesulfonic Acid (PFNS) [9S]	68259-12-1	ng/L	<40.0	<2.00
	Perfluorodecanesulfonic Acid (PFDS) [10S]	335-77-3	ng/L	<50.0	<2.00
Fluorotelomers	1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	757124-72-4	ng/L	<170	<8.00
	1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	27619-97-2	ng/L	645	<8.00
	1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	39108-34-4	ng/L	<260	<8.00
Perfluoroalkane Sulfonamides	Perfluorooctanesulfonamide (PFOSA)	754-91-6	ng/L	<50.0	<2.00
Perfluoroalkane Sulfonyl Substances	N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	ng/L	562	<4.00
	N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	2991-50-6	ng/L	256	<2.00

Notes:

1. Samples were collected by Sanborn Head personnel and were analyzed by Eurofins Lancaster Laboratories Environmental Testing, LCS. (Lancaster) of Lancaster, Pennsylvania by USEPA Draft Method 1633. Lancaster was subcontracted through Eastern Analytical, Inc. (EAI) of Concord, New Hampshire.
2. Results are presented in nanograms per liter (ng/L) which are equivalent to parts per trillion (ppt).
3. "<" indicates the analyte was not detected above the listed laboratory reporting limit.
4. [3] = number of carbons in the alkyl chain for perfluorinated carboxylic acids (PFCAs). The carbon included in the carboxylic functional group is non-fluorinated and the remaining carbons (i.e., alkyl chain) are fluorinated.
[4S] = number of carbons in the alkyl chain for perfluorinated sulfonic acids (PFSA). All of the carbons are fluorinated.



ANALYTICAL REPORT

Lab Number:	L2268789
Client:	City of Concord 125 Hall St. Concord, NH 03301
ATTN:	Kristin Noel
Phone:	(603) 230-3854
Project Name:	BETHLEHEM LEACHATE
Project Number:	TRANSPORTED WASTE PF
Report Date:	01/05/23

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: BETHLEHEM LEACHATE

Lab Number: L2268789

Project Number: TRANSPORTED WASTE

Report Date: 01/05/23

SAMPLE RESULTS

Lab ID: L2268789-01

Date Collected: 12/01/22 08:35

Client ID: BETHLEHEM LEACHATE

Date Received: 12/07/22

Sample Location: BETHLEHEM

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Extraction Method: ALPHA 23528

Analytical Method: 134,LCMSMS-ID

Extraction Date: 12/28/22 12:22

Analytical Date: 01/04/23 18:07

Analyst: PS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluoroheptanoic Acid (PFHpA)	772		ng/l	50.0	--	1
Perfluorohexanesulfonic Acid (PFHxS)	722		ng/l	50.0	--	1
Perfluorooctanoic Acid (PFOA)	2060		ng/l	50.0	--	1
Perfluorononanoic Acid (PFNA)	94.6		ng/l	50.0	--	1
Perfluorooctanesulfonic Acid (PFOS)	236		ng/l	50.0	--	1
Perfluorodecanoic Acid (PFDA)	54.5		ng/l	50.0	--	1
PFAS, Total (6)	3940		ng/l	50.0	--	1

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	84		60-129
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	107		71-134
Perfluoro[13C8]Octanoic Acid (M8PFOA)	100		62-129
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	118		59-139
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	100		69-131
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	101		62-124



ANALYTICAL REPORT

Lab Number:	L1931121
Client:	City of Concord 125 Hall St. Concord, NH 03301
ATTN:	Tom Neforas
Phone:	(603) 230-3857
Project Name:	PFAS-ANNUAL
Project Number:	PFAS SCREENING
Report Date:	07/31/19

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



Project Name: **PFAS-ANNUAL**
 Project Number: **PFAS SCREENING**

Lab Number: L1931121
 Report Date: **07/31/19**

SAMPLE RESULTS

Lab ID: L1931121-04
 Client ID: **LEACHATE LANDFILL**
 Sample Location: HALL ST WWTT

Date Collected: 07/15/19 13:40
 Date Received: 07/16/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 06:04
 Analyst: JW

Extraction Method: EPA 537
 Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	1740		ng/l	50.0	--	1
Perfluoropentanoic Acid (PFPeA)	1270		ng/l	50.0	--	1
Perfluorobutanesulfonic Acid (PFBS)	1690		ng/l	50.0	--	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	50.0	--	1
Perfluorohexanoic Acid (PFHxA)	2780		ng/l	50.0	--	1
Perfluoropentanesulfonic Acid (PFPeS)	67.5		ng/l	50.0	--	1
Perfluoroheptanoic Acid (PFHpA)	812		ng/l	50.0	--	1
Perfluorohexanesulfonic Acid (PFHxS)	822		ng/l	50.0	--	1
Perfluorooctanoic Acid (PFOA)	2290		ng/l	50.0	--	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	788		ng/l	50.0	--	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	50.0	--	1
Perfluorononanoic Acid (PFNA)	140		ng/l	50.0	--	1
Perfluorooctanesulfonic Acid (PFOS)	411		ng/l	50.0	--	1
Perfluorodecanoic Acid (PFDA)	85.1		ng/l	50.0	--	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	133		ng/l	50.0	--	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	50.0	--	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	586		ng/l	50.0	--	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	50.0	--	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	50.0	--	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	50.0	--	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	322		ng/l	50.0	--	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	50.0	--	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	50.0	--	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	50.0	--	1
PFOA/PFOS, Total	2700		ng/l	50.0	--	1



Project Name: **PFAS-ANNUAL**
 Project Number: **PFAS SCREENING**

Lab Number: L1931121
 Report Date: **07/31/19**

SAMPLE RESULTS

Lab ID: L1931121-02
 Client ID: **EFFLUENT-PENACOOK**
 Sample Location: HALL ST WWTT

Date Collected: 07/11/19 13:00
 Date Received: 07/16/19
 Field Prep: Not Specified

Sample Depth:
 Matrix: Water
 Analytical Method: 122,537(M)
 Analytical Date: 07/26/19 05:48
 Analyst: JW

Extraction Method: EPA 537
 Extraction Date: 07/24/19 07:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	7.84		ng/l	1.78	--	1
Perfluoropentanoic Acid (PFPeA)	13.1		ng/l	1.78	--	1
Perfluorobutanesulfonic Acid (PFBS)	4.55		ng/l	1.78	--	1
1H,1H,2H,2H-Perfluorohexanesulfonic Acid (4:2FTS)	ND		ng/l	1.78	--	1
Perfluorohexanoic Acid (PFHxA)	45.8		ng/l	1.78	--	1
Perfluoropentanesulfonic Acid (PFPeS)	ND		ng/l	1.78	--	1
Perfluoroheptanoic Acid (PFHpA)	3.75		ng/l	1.78	--	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	1.78	--	1
Perfluorooctanoic Acid (PFOA)	4.84		ng/l	1.78	--	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	13.2		ng/l	1.78	--	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	1.78	--	1
Perfluorononanoic Acid (PFNA)	4.34		ng/l	1.78	--	1
Perfluorooctanesulfonic Acid (PFOS)	2.15		ng/l	1.78	--	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	1.78	--	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	1.78	--	1
Perfluorononanesulfonic Acid (PFNS)	ND		ng/l	1.78	--	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	1.78	--	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	1.78	--	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	1.78	--	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	1.78	--	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	1.78	--	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	1.78	--	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	1.78	--	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	1.78	--	1
PFOA/PFOS, Total	6.99		ng/l	1.78	--	1

Dalton: Casella Wants To Negotiate With Town, Selectmen Say No

Public Hearing On Draft Zoning Ordinance Scheduled For Dec. 9

Robert Blechl

Nov 25, 2020



A public hearing has been scheduled for Dec. 9 on Dalton's proposed zoning ordinance, but with COVID-19 health and safety guidelines, it won't look like the town's July 2019 hearing on emergency temporary zoning, pictured here. (File photo by Robert Blechl)

As a public hearing on Dec. 9 nears on Dalton's draft zoning ordinance, which will go to a final vote at a town meeting in March, Dalton selectmen told Casella Waste Systems they wouldn't negotiate the company's proposed host community agreement (HCA) until it files a local zoning application.

That did not sit well with Casella representatives, who are pushing selectmen to talk and are charging them with not being fully transparent with residents.

Shortly after the company presented the HCA to the town on Aug. 31 — an agreement it says would provide the town with \$71 million in payments and services during 25 years, including \$2 million a year in direct payments — selectmen sought a legal opinion from the town attorney to determine if Casella will need to file a zoning application with the town in addition to the permits it is filing with the state.



At a special town meeting in July 2019, in response to a proposed 180-acre landfill near Forest Lake State Park, Dalton residents passed emergency temporary zoning, allowed under New Hampshire statute until it lapses after the second annual town meeting, voters approve a permanent ordinance, or voters continue with an additional year of temporary zoning.

In a Nov. 2 letter to Casella Engineer John Gay, Casella Division Manager Kevin Roy, Casella Regional Vice-president Brian Oliver, and Dalton property owner, Douglas Ingerson Jr., the Dalton Board of Selectmen said, "Upon consultation with town legal counsel, the Select Board has determined that submission of a land-use plan/building plan zoning application is required under the provisions of the emergency temporary zoning ordinance enacted by the citizens of Dalton."

They said, “The Select Board will not consider or commence negotiation of a host community agreement until a zoning application has been submitted. The town will not finalize such an agreement without appropriate zoning approvals in place.”

In a Nov. 16 response letter, Oliver said the planned landfill is in the early state permitting process. Casella does not yet own the Ingerson property, and the planning board is proposing a new ordinance for the town meeting. It is unclear what the town’s zoning regulations will look like six months from now.

It is also undetermined what form of approval a landfill would need from the town, said Oliver, who asked the board, in its role as a zoning enforcement officer, to inform the company if it believes a variance or a special exception would be required, and to explain the reasoning.

The New Hampshire Department of Environmental Services regulates the siting, construction, and operation of landfills. Local land use regulation is substantially limited by the state’s regulatory framework and cannot have an exclusionary effect, said Oliver.

(Several New Hampshire Supreme Court rulings do give towns authority, such as the authority to designate a landfill district and determine how large it can be. Casella sought a 100-acre expansion to Bethlehem’s 61-acre landfill district through an amendment to that town’s zoning, but Bethlehem voters twice rejected it, thus prompting the company to look to Dalton for a new landfill site).

In his letter, Oliver said Dalton’s current draft ordinance does not appear to address land-filling as a use. Depending on how the ordinance is interpreted, it either allows land-filling as a matter of right or special exception or purports to prohibit it.

“Negotiation of the HCA gives the town the opportunity to obtain contractual terms that are outside of its regulatory authority,” wrote Oliver. “This is not something we are going to resolve by exchanging letters.”

Now that the board has taken a position, he said the company renews its suggestion to discuss attorneys about the scope of the town’s zoning authority so Casella and the town can better understand each other’s interpretation of the law and identify any issues in dispute.

“We ask that as officials elected to represent the entire town, you consider your decision to

impose conditions on further discussion of the draft HCA,” Oliver said to selectmen. “In our conversations with many of your constituents, a recurring theme is that the board has not given the public its perspective on the terms of the HCA ... There is no legal or logical reason to defer public discussion or negotiation of the draft agreement until the zoning issue is resolved, and imposing artificial conditions on simply having discussions and hearing from the public reduces the opportunity for Dalton residents to gather the information they need to fully understand this project.”

Public Hearing And Ordinance

On Sunday, the Dalton Board of Selectmen issued a press release regarding the public hearing to consider the proposed zoning ordinance. It is scheduled for 6 p.m. Dec. 9.

Because of the coronavirus pandemic, in-person participation will be limited at the town hall, and masks and social distancing will be required.

Those wanting to attend in-person must sign up online or in-person at the town hall. If attendance exceeds safety limits, a second hearing might be held.

The hearing will also be available remotely for those wanting to participate, and log-in information will be posted on the town web site.

Most recently updated on Friday, a copy of the ordinance is available on the town web site.

Comments can be submitted during and before the public hearing.

The introduction to the 20-page ordinance is based on the town's 2011 master plan.

It states that Dalton is a rural, residential community and should remain so into the future. The town is largely a community of single-family homes, which should be the core of its future development pattern. Future development should be consistent with and seek to protect Dalton's rural character and natural environment.

"Limited commercial and industrial development may be good for the town in order to diversify the tax base and reduce taxes on homeowners if appropriately sited and accompanied by information from the applicant showing no foreseeable undue hazards," Dalton planners wrote in the draft ordinance.

The ordinance does not have a specific section on landfills or mentions them by name.

The rural residential district land use regulations state, "No use shall be permitted, which shall cause undue noise, traffic, dust, pollution, emission, adverse effect on adjacent properties, etc."

All new construction, single-family homes, manufactured homes, residential additions, and home-based businesses meeting certain criteria, such as the business being a secondary use of the property and carried on by an occupant of the residence, would need a zoning permit.

Home-based businesses that do not involve customers at its location would not need a zoning permit.

Permitted by special exception, after a public hearing, would be small businesses with a maximum of 25 employees and have a proposed use that would not cause "hazard to health, property values or safety through fire, traffic, unsanitary conditions or through excessive noise, vibration, odor or other nuisance feature."

Section 1 Pre-Application Meeting Summary

This section includes the following components:

Section	Contents	Comments
1.1	November 2023 Pre-Application Meeting Minutes	In accordance with Env-Wt 311.06(j), responses to comments received at the November 16, 2023 Pre-Application Meeting have been incorporated into this application.
1.2	NHDES August 2023 Letter	In accordance with Env-Wt 311.06(j), responses to comments received in the letter dated August 18, 2023 have been incorporated into Sections 8 and 9 of this application.
1.3	NHDES Wetlands Bureau Site Visit Minutes	--
1.4a	Dalton Conservation Commission Notice	Notification was made to the Dalton Conservation Commission. In accordance with Env-Wt 311.06(h), comments were not received from the Dalton Conservation Commission in regard to this application.
1.4b	Bethlehem Conservation Commission Notice	Notification was made to the Bethlehem Conservation Commission. In accordance with Env-Wt 311.06(h), comments were not received from the Bethlehem Conservation Commission in regard to this application.
1.4c	Ammonoosuc River Local Advisory Committee (LAC) Notice	Notification was made to the Ammonoosuc River LAC. In accordance with Env-Wt 311.06(i), comments were not received from the Ammonoosuc River LAC in regard to this application.

Section 1.4a

Dalton Conservation Commission Notice

C|W|B
CLEVELAND, WATERS AND BASS
ATTORNEYS AT LAW

BRYAN K. GOULD, ESQUIRE

GOULDB@CWBPA.COM

June 8, 2023

Jon Swan, Chairman
Dalton Conservation Commission
756 Dalton Road
Dalton, NH 03598

Dear Mr. Swan:

Our client Granite State Landfill, LLC (“GSL”), anticipates filing an application for a wetlands permit with the New Hampshire Department of Environmental Services later this year in connection with its development of a landfill in Dalton. The Dalton Conservation Commission (“DCC”) visited the proposed landfill site during the pendency of GSL’s previous application for a wetlands permit, but the DCC requested a second visit while vegetation was growing. GSL and the DCC were unable to reach agreement on the terms under which a second visit could take place so it was never scheduled.

In light of GSL’s impending application, the company wishes to extend the DCC an opportunity to visit the site while the weather is still warm. Ideally, we would like to schedule the visit to take place before the end of June.

There are two conditions to this site visit. First, because of your many confrontations with and personal attacks upon Mr. Ingerson, he will not allow you on the property. Mr. Ingerson has agreed that the rest of the DCC can participate in the site visit, however. Second, there will be no disturbance of the property allowed. This means there will be no digging or sampling of any kind at the site.

If these conditions are acceptable to the DCC please have the vice-chair or another representative of the commission contact John Gay at John.Gay@casella.com to make the arrangements.

Very truly yours,

/s/ Bryan K. Gould

Bryan K. Gould, Esq.

cc: Walter Mitchell, Esq.
Jo Beth Dudley, Chair, Dalton Board of Selectmen
Carol Sheltry, Dalton Selectman
Thomas Dubreuil, Dalton Selectman
Rene Pelletier, NHDES

RE: GSL June Site Visit**Bryan Gould** <gouldb@cwbp.com>

Thu 6/22/2023 5:21 PM

To: Conservation Chair <conservationChair@townofdalton.com>
Cc: Conservation Commission <conservationcommission@townofdalton.com>; Selectmen <selectmen@townofdalton.com>; Pelletier, Rene <rene.j.pelletier@des.nh.gov>; Trowbridge, Philip <philip.r.trowbridge@des.nh.gov>; Mike Wimsatt <michael.wimsatt@des.nh.gov>; Planning Board <planningboard@townofdalton.com>; walter@mitchellmunigroup.com <walter@mitchellmunigroup.com>; McClammer@aol.com <mclammer@aol.com>; Richard Laton <wlaton@earthforensics.com>; neesbats@comcast.net <neesbats@comcast.net>

 1 attachments (4 MB)

1101-Site Plan (Aerial).pdf;

Mr. Swan:

Thank you for your response.

I am writing to ensure that the purpose of my letter was clear.

The law does not require that an applicant for a wetlands permit allow the municipal conservation commission to inspect the site. We know that NHDES prefers that applicants allow such a site visit, however. The DCC already visited Mr. Ingerson's property during the pendency of GSL's first application, but it expressed a desire to visit during a period of active vegetative growth. With a new application being filed soon, we wanted to give the DCC an opportunity to see the site at the time of year it had previously requested.

While it is true that there is not yet an application pending, the DCC does not need an application to look at the wetlands in the vicinity of the project. The project's consultants have nevertheless prepared the attached plan view of the extent of disturbance contemplated by the forthcoming application to give the DCC some further context for a site visit should it choose to conduct one.

It is, of course, the DCC's prerogative not to take advantage of this opportunity to conduct a site visit, but because this will likely be the only chance the DCC will have before its comments are due on the application to visit the site while there is active vegetative growth, we want to be sure that the DCC has considered the implications of declining the invitation.

If the DCC reconsiders and will abide by the conditions in my June 8 letter please notify Mr. Gay or me promptly.

Finally, your email implies that the DCC expects to bring a "team of wetlands scientists" on the site visit. The lack of any requirement in the law that an applicant allow access to the site makes a visit by individuals who are not members of the local commission an even greater accommodation. GSL is prepared to allow the DCC to be accompanied by a single consulting expert, but absent a compelling reason it will not agree to more than one.

Sincerely,

Bryan Gould

From: Conservation Chair <conservationChair@townofdalton.com>**Sent:** Wednesday, June 14, 2023 6:26 AM**To:** Bryan Gould <gouldb@cwbp.com>**Cc:** Conservation Commission <conservationcommission@townofdalton.com>; Selectmen

<selectmen@townofdalton.com>; Pelletier, Rene <rene.j.pelletier@des.nh.gov>; Trowbridge, Philip <philip.r.trowbridge@des.nh.gov>; Mike Wimsatt <michael.wimsatt@des.nh.gov>; Planning Board <planningboard@townofdalton.com>; walter@mitchellmunigroup.com; McClammer@aol.com; Richard Laton <wlaton@earthforensics.com>; neesbats@comcast.net

Subject: GSL June Site Visit

Good Morning Mr. Gould:

I have received your letter of June 8, 2023, expressing your desire to schedule a June inspection of the proposed landfill development site in Dalton. In light of the fact that there is no current application on file for a wetlands permit with the New Hampshire Department of Environmental Services (NHDES), I do not see the benefit of a site visit at this time. The Dalton Conservation Commission and its team of wetlands scientists would have no framework in which to inspect the property.

Should you have detailed documentation to share, I would be more than happy to bring your proposal before the commission for consideration. If not, we will coordinate a site visit with Mr. Gay when a wetlands permit application is submitted to NHDES, giving us a better understanding of the scope of the proposed development.

Thank you!

Jon Swan, Chairman
Town of Dalton Conservation Commission
756 Dalton Road
Dalton, NH 03598
(603) 991-2078 (cell)
[Dalton Conservation Commission Website](#)



Coming up:

Leah Hart, Land Conservation Project Manager and John Plummer, Regional Stewardship Manager for The Society for the Protection of New Hampshire Forests, land conservation presentation, Tuesday June 20, 2023, 6:30pm. Have family property you'd like to see conserved? Join us to learn more!

Town of Dalton NRI Presentation by Elisa Lawson of Watershed to Wildlife, September 19, 2023, 6:30pm

October: Dalton Fall BioBlitz, date TBD
November: Dalton Roadside Cleanup, date TBD



ESTABLISHED 1975

GRANITE STATE LANDFILL, LLC

1855 VT Route 100 • Hyde Park, VT 05655 p. 802.651.5454 f. 802.888.7931

November 28, 2023

Antonio T. Rosa Jr. & Cindy L. Rosa
106 Peters Lane
Rockfall, CT 06481
Dalton Tax Map 407 – Lot 1.2

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

**RE: Granite State Landfill, LLC
New Hampshire Department of Environmental Services
Water Division, Land Resources Management
Standard Dredge and Fill Wetlands Permit Application**

Dear Antonio T. Rosa Jr. & Cindy L. Rosa,

Pursuant to RSA 482-A and the New Hampshire Wetland Rules, you are notified that Granite State Landfill, LLC, (“GSL” or the “Applicant”) will be filing an application with the New Hampshire Department of Environmental Services (“NHDES”) for a Standard Dredge and Fill Wetlands Permit on or about November 30, 2023 (the “Application”). The Application, if approved, would permit necessary wetland filling that would allow for the construction of a landfill and support infrastructure, to be situated approximately a mile from the NH Route 116 entrance of Douglas Drive in Dalton, NH (the “Landfill Project”).

The Landfill Project includes a landfill approximately 70 acres in size, and support infrastructure (soil berms, access roads, truck scales, wastewater tanks, piping, a gas flare, operations office, maintenance building, stormwater ponds, etc.) encompassing a total area of disturbance of approximately 147 acres. The Landfill Project proposes improvements to Douglas Drive and to the Douglas Drive entrance at NH Route 116. Wetland disturbance related to the Landfill Project includes a total area of 10.9 acres and is described in further detail in the Application.

The mailing address for the Applicant is: Granite State Landfill, LLC, 1855 Vermont Route 100, Hyde Park, VT 05655. The current owner of the Landfill Project property is Mr. Douglas Ingerson, Jr. Copies of the Application will be available for review at the Town of Dalton Municipal Office, 756 Dalton Road, Dalton, NH, the Town of Bethlehem Municipal Office, 2155 Main Street, Bethlehem, NH, and the NHDES Wetlands Bureau, at 29 Hazen Drive, Concord, NH.

Sincerely,

GRANITE STATE LANDFILL, LLC

John Gay, E.I.
Permits, Compliance & Engineering

Dalton Conservation Commission GSL Site Visits

Jo Beth Dudley <jbdudley@townofdaltonnh.gov>

Fri 2/9/2024 7:00 PM

To:gouldb@cwbp.com <gouldb@cwbp.com>;John.Gay@casella.com <John.Gay@casella.com>
Cc:rene.j.pelletier@des.nh.gov <rene.j.pelletier@des.nh.gov>;Conservation Commission
<conservationcommission@townofdalton.com>;Conservation Chair <conservationchair@townofdaltonnh.gov>;Selectmen
<selectmen@townofdalton.com>;Planning Board <planningboard@townofdaltonnh.gov>;Town Admin
<townadmin@townofdaltonnh.gov>

Dear Mr. Gould and Mr. Gay:

It has come to the attention of the Dalton Select Board that **no response** to the Dalton Conservation Commission request for site visits to the site of the proposed Granite State Landfill has been received.

The Select Board reiterates the Dalton Conservation Commission (DCC) request for two site visits as outlined in their request dated January 15, 2024 (see below).

Kindly provide approval of this request not later than Monday, February 19, 2024, to allow the DCC time to engage the services of participating experts for the site visits.

Thank you in advance for your prompt attention to this matter.

Sincerely,

--- Jo Beth Dudley
Dalton Select Board, Chair

From: Conservation Chair <conservationchair@townofdaltonnh.gov>

Date: Monday, January 15, 2024 at 3:29 PM

To: 'gouldb@cwbp.com' <gouldb@cwbp.com>, Joe Gay <John.Gay@casella.com>

Cc: Pelletier, Rene <rene.j.pelletier@des.nh.gov>, Selectmen
<selectmen@townofdalton.com>, Conservation Commission
<conservationcommission@townofdalton.com>, Planning Board
<planningboard@townofdaltonnh.gov>, Town Admin <townadmin@townofdaltonnh.gov>

Subject: Dalton Conservation Commission GSL Site Visits

Mr. Gould and Mr. Gay:

I write to **request two site visits** for the revised GSL project; the first to occur in mid-to-late May, 2024, and the second in mid-June, 2024, in order to evaluate the property site and the project, as detailed in the submitted permit applications to NHDES. Participating will be a wetlands scientist, a hydrologist, a bat biologist, and a member of the Dalton Conservation Commission.

We will require the following:

1. All wetlands and impact areas are to be clearly staked in the field before each site visit, including all potential, future stages and phases of the landfill development, including Douglas Drive and RT116, as well as all other foreseeable projects within the vicinity of the proposed project.
2. Our retained wetlands scientist will bring one field assistant to the site visit.
3. Soil will be evaluated with a hand auger. No soil will be removed from the property.

- 4. Our retained hydrologist has requested to walk the boundaries between the site and the lake. He may opt to deploy an Unmanned Aerial Vehicle, for which he is licensed.
- 5. Our retained bat biologist has no specific requests, other than site access.
- 6. Photographs will most likely be taken by all in attendance.

Jon Swan, Chairman
 Town of Dalton Conservation Commission
 756 Dalton Road
 Dalton, NH 03598
 (603) 991-2078 (cell)
[Dalton Conservation Commission Website](#)



Coming up:

Tuesday, January 16, 2024: UNH Speaker Presentation, "Growing A Pollinator Garden", 6PM

Tuesday, February 20, 2024 NHDES and GSA "What's In Your Water" Private Well Testing Presentation, 6PM

*Public Meetings: Anyone, not just local residents, may attend, take notes, record and photograph the meeting. However, except as required in a public hearing, the public has no guaranteed right to speak. RSA 91-A:2

https://www.nhmunicipal.org/sites/default/files/uploads/documents/public_meetings_governmental_records.pdf

**In order to save time during public meetings, and to ensure accuracy in response, the Dalton Conservation Commission requests that all comments and questions from the public be submitted to the DCC email address*

[http://Granite%20State%20Landfill%20LLC%20State%20Permitting]Granite State Landfill LLC State Permitting

Documents