

#3

Timothy J. Clougherty
Public Works Director

Owen P. Friend-Gray, P.E.
Deputy Public Works Director

Frederick J. McNeill, P.E.
Chief Engineer



Commission
Kathleen Sullivan, Chair
Arthur Gatzoulis, Co-Chair
Mark MacKenzie
Amber Nicole Cannan
Andre Parent

CITY OF MANCHESTER
Department of Public Works
Environmental Protection Division

Class III Wastewater Discharge Permit No. T-3001-2-24

In accordance with the provisions of the City of Manchester Sewer Use Ordinance, Article V, Section 52.051:

North Country Environmental Services (NCES) Landfill
581 Trudeau Road
Bethlehem, New Hampshire 03574

is authorized to discharge industrial wastewater from the above stated facility. This discharge consists of:

<u>Description</u>	<u>Gallons/Day</u>
<u>Landfill Leachate</u>	<u>30,000 gpd</u>

Compliance with this permit does not relieve the permittee of its obligation to comply with any applicable pretreatment requirements under local, State, or Federal laws, including such requirements that may become effective during the term of this permit.

Noncompliance with any term or condition of this permit including the provisions of Page 2 shall constitute a violation of the City's Sewer Use Ordinance and shall be subject to the penalty provisions of Article V, Section 52.999.

This permit shall become **Effective on:** February 1, 2024

This permit shall Expire on February 28, 2024

Christopher J. Crowley Permit Issued By (City)	<i>Christopher J. Crowley</i>	Pretreatment Coordinator EPD Title	<u>1/30/24</u> Date
Frederick J. McNeill, P.E. Authorization By (City)	<i>Frederick J. McNeill</i>	Chief Engineer EPD Title	<u>1/30/24</u> Date

igned acknowledges receipt of this permit and acknowledges that
uirements of the Manchester Sewer Use Ordinance Article V.

Authorized Representative Date

Manchester Temporary Industrial Discharge Permit

Manchester, New Hampshire 03103 • (603) 624-6595 • FAX: (603) 628-6234
www.manchesternh.gov • Website: www.manchesternh.gov

First Permit with Lab results

Standard Conditions

Changes in discharge - Any substantial change in the type of production, amount of flow or pollutant characteristics, or any increase in pollutant concentration, must receive prior review and approval by the City of Manchester, and the State of NH (if applicable).

Spills, potentially harmful dischargers - Immediate notification is required for any discharge which has the potential to cause a problem for the Wastewater Treatment Plant or the City's sewer system. This includes but is not limited to an accidental discharge of substances prohibited by the Sewer Use Ordinance or any slug loads or spills that may enter the public sewer.

During normal business hours 7:00 AM to 5:00 PM

• Industrial Monitoring Office	624-6513
• POTW Superintendent	624-6526
• Chief Engineer	624-6341
At all other times notify:	
• Wastewater Treatment Plant	624-6421

The notification shall include location of discharge, date and time thereof, type of waste, including concentration and estimated volumes, and any and all corrective actions taken. The permittee's notification in accordance with the requirements of this section does not relieve its obligation of other reporting requirements as may arise under local, State, or Federal laws.

Repermitting - If the permittee desires to continue to discharge after the expiration of this permit, it shall reapply on the application forms then in use at least thirty (30) days before this permit expires. Under no circumstances shall the permittee continue to discharge after the expiration of this permit.

Access by the City - The permittee shall allow authorized Environmental Protection Division personnel, upon presentation of proper credentials, unrestricted access for the purposes of inspection, investigation, and sampling of facilities discharges.

Sampling & Analytical Requirements - Any sampling, preservation, handling, and analytical testing methods must conform to the requirements as set out in 40 CFR Part 136.

Other Requirements - The conditions listed in this permit are not all inclusive. The City shall be notified if questions arise regarding the permittee's responsibilities under this permit or obligations under the Manchester Sewer Use Ordinance. The City reserves the right to make revisions to this permit in order to implement the requirements of the Ordinance.

Special Conditions

- The permit cycle is for a 4-week timeframe. The permittee shall maintain operation discharge logs and submit them to the City of Manchester Industrial Pretreatment Dept. (ccrowley@manchesternh.gov) Information that is required:
 - Total volume (gallons) of wastewater per tanker truck.
 - A representative pH sampler per tanker truck.
- The permittee must contact Operations (603-624-6421) before each discharge to determine a suitable time frame for discharge at the manhole between the two ash lagoons. See Attached Map.

3. For the permit cycle, the permittee must submit a second round of sampling results of a representative discharge loads. The following information is required:
 - A.) A Periodical Compliance Report (PCR) must be completed with a NH certified laboratory report.
 - B.) A copy of the certified laboratory results.
 - C.) Parameters to be tested are listed on TABLE 2. See page 3.
 - D.) Submit a hard copy of the PCR to: Attention Industrial Pretreatment Department, 300 Winston Street, Manchester NH 03103.
4. Fee will be \$4.28 per 1,000 gallons of discharged (see attached Price Policy Sheet). NCES Landfill fees will be collected once a total volume is totaled. Fees are subject to change depending of the strength of the second round of sampling.
5. Required sampling paperwork is attached.

TABLE 2

Scheduled Monitoring: Sampling and measurements as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit. Monitoring points shall not be changed without notification to and approval from the City of Manchester EPD office. The permittee shall collect and analyze representative samples not less frequently than the following:

Parameters	Monitoring Location	Type of Sample	Frequency
Flow	Log Books	Flow Readings	Per Discharge
pH	Tanker Truck	Grab sample	Per Discharge
Biochemical Oxygen Demand	Tanker Truck	Grab sample	See Special Conditions #3
Chemical Oxygen Demand	Tanker Truck	Grab sample	See Special Conditions #3
Total Metals: Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Nickel, Silver, Mercury, Zinc	Tanker Truck	Grab sample	See Special Conditions #3
Cyanide (T)	Tanker Truck	Grab sample	See Special Conditions #3
Total Toxic Organic – TTO (624)	Tanker Truck	Grab sample	See Special Conditions #3
PFAS (Method 1633)	Tanker Truck	Grab sample	See Special Conditions #3
Phenol	Tanker Truck	Grab sample	See Special Conditions #3
Oil & Grease 1664 HEM/SGT for Petroleum or Mineral origin	Tanker Truck	Grab sample	See Special Conditions #3
Oil & Grease 1664 HEM for Animal & Vegetable origin	Tanker Truck	Grab sample	See Special Conditions #3
Sulfate	Tanker Truck	Grab sample	See Special Conditions #3
Sulfide	Tanker Truck	Grab sample	See Special Conditions #3
Sulfite	Tanker Truck	Grab sample	See Special Conditions #3
Total Phosphorus	Tanker Truck	Grab sample	See Special Conditions #3

Timothy J. Clougherty
Public Works Director

Owen P. Friend-Gray, P.E.
Deputy Public Works Director

Frederick J. McNeill, P.E.
Chief Engineer



Commission
Kathleen Sullivan, Chair
Arthur Gatzoulis, Co-Chair
Mark MacKenzie
Amber Nicole Cannan
Andre Parent

CITY OF MANCHESTER
Department of Public Works
Environmental Protection Division

Class III Wastewater Discharge Permit No. T-3001-2-24

In accordance with the provisions of the City of Manchester Sewer Use Ordinance, Article V, Section 52.051:

North Country Environmental Services (NCES) Landfill
581 Trudeau Road
Bethlehem, New Hampshire 03574

is authorized to discharge industrial wastewater from the above stated facility. This discharge consists of:

<u>Description</u>	<u>Gallons/Day</u>
<u>Landfill Leachate</u>	<u>30,000 gpd</u>

Compliance with this permit does not relieve the permittee of its obligation to comply with any applicable pretreatment requirements under local, State, or Federal laws, including such requirements that may become effective during the term of this permit.

Noncompliance with any term or condition of this permit including the provisions of Page 2 shall constitute a violation of the City's Sewer Use Ordinance and shall be subject to the penalty provisions of Article V, Section 52.999.

This permit shall become **Effective on:** February 1, 2024

This permit shall **Expire on** February 28, 2024

Christopher J. Crowley Permit Issued By (City)	<i>Christopher J. Crowley</i>	Pretreatment Coordinator EPD	1/30/24
		Title	Date
Frederick J. McNeill, P.E. Authorization By (City)	<i>Frederick J. McNeill</i>	Chief Engineer EPD	1/30/24
		Title	Date

Acknowledgement: The undersigned acknowledges receipt of this permit and acknowledges that this discharge is subject to the requirements of the Manchester Sewer Use Ordinance Article V.

Cosella Kevin Ray _____ 2/6/24
Company Name Authorized Representative Date

Revision 1/30/24

Manchester Temporary Industrial Discharge Permit

This permit is subject to the following:

NCES Landfill Landfill No.T-3001-2-24

Standard Conditions

Changes in discharge - Any substantial change in the type of production, amount of flow or pollutant characteristics, or any increase in pollutant concentration, must receive prior review and approval by the City of Manchester, and the State of NH (if applicable).

Spills, potentially harmful dischargers - Immediate notification is required for any discharge which has the potential to cause a problem for the Wastewater Treatment Plant or the City's sewer system. This includes but is not limited to an accidental discharge of substances prohibited by the Sewer Use Ordinance or any slug loads or spills that may enter the public sewer.

During normal business hours 7:00 AM to 5:00 PM

• Industrial Monitoring Office	624-6513
• POTW Superintendent	624-6526
• Chief Engineer	624-6341
At all other times notify:	
• Wastewater Treatment Plant	624-6421

The notification shall include location of discharge, date and time thereof, type of waste, including concentration and estimated volumes, and any and all corrective actions taken. The permittee's notification in accordance with the requirements of this section does not relieve its obligation of other reporting requirements as may arise under local, State, or Federal laws.

Repermitting - If the permittee desires to continue to discharge after the expiration of this permit, it shall reapply on the application forms then in use at least thirty (30) days before this permit expires. Under no circumstances shall the permittee continue to discharge after the expiration of this permit.

Access by the City - The permittee shall allow authorized Environmental Protection Division personnel, upon presentation of proper credentials, unrestricted access for the purposes of inspection, investigation, and sampling of facilities discharges.

Sampling & Analytical Requirements - Any sampling, preservation, handling, and analytical testing methods must conform to the requirements as set out in 40 CFR Part 136.

Other Requirements - The conditions listed in this permit are not all inclusive. The City shall be notified if questions arise regarding the permittee's responsibilities under this permit or obligations under the Manchester Sewer Use Ordinance. The City reserves the right to make revisions to this permit in order to implement the requirements of the Ordinance.

Special Conditions

1. The permit cycle is for a 4-week timeframe. The permittee shall maintain operation discharge logs and submit them to the City of Manchester Industrial Pretreatment Dept. (ccrowley@manchesternh.gov) Information that is required:
 - A.) Total volume (gallons) of wastewater per tanker truck.
 - B.) A representative pH sampler per tanker truck.
2. The permittee must contact Operations (603-624-6421) before each discharge to determine a suitable time frame for discharge at the manhole between the two ash lagoons. See Attached Map.

3. For the permit cycle, the permittee must submit a second round of sampling results of a representative discharge loads. The following information is required:
 - A.) A Periodical Compliance Report (PCR) must be completed with a NH certified laboratory report.
 - B.) A copy of the certified laboratory results.
 - C.) Parameters to be tested are listed on TABLE 2. See page 3.
 - D.) Submit a hard copy of the PCR to: Attention Industrial Pretreatment Department, 300 Winston Street, Manchester NH 03103.
4. Fee will be \$4.28 per 1,000 gallons of discharged (see attached Price Policy Sheet). NCES Landfill fees will be collects once a total volume is totaled. Fees are subject to change depending of the strength of the second round of sampling.
5. Required sampling paperwork is attached.

TABLE 2

Scheduled Monitoring: Sampling and measurements as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit. Monitoring points shall not be changed without notification to and approval from the City of Manchester EPD office. The permittee shall collect and analyze representative samples not less frequently than the following:

Parameters	Monitoring Location	Type of Sample	Frequency
Flow	Log Books	Flow Readings	Per Discharge
pH	Tanker Truck	Grab sample	Per Discharge
Biochemical Oxygen Demand	Tanker Truck	Grab sample	See Special Conditions #3
Chemical Oxygen Demand	Tanker Truck	Grab sample	See Special Conditions #3
Total Metals: Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Copper, Iron, Lead, Nickel, Silver, Mercury, Zinc	Tanker Truck	Grab sample	See Special Conditions #3
Cyanide (T)	Tanker Truck	Grab sample	See Special Conditions #3
Total Toxic Organic - TTO (624)	Tanker Truck	Grab sample	See Special Conditions #3
PFAS (Method 1633)	Tanker Truck	Grab sample	See Special Conditions #3
Phenol	Tanker Truck	Grab sample	See Special Conditions #3
Oil & Grease 1664 HEM/SGT for Petroleum or Mineral origin	Tanker Truck	Grab sample	See Special Conditions #3
Oil & Grease 1664 HEM for Animal & Vegetable origin	Tanker Truck	Grab sample	See Special Conditions #3
Sulfate	Tanker Truck	Grab sample	See Special Conditions #3
Sulfide	Tanker Truck	Grab sample	See Special Conditions #3
Sulfite	Tanker Truck	Grab sample	See Special Conditions #3
Total Phosphorus	Tanker Truck	Grab sample	See Special Conditions #3

Crowley,Chris

From: Crowley,Chris
Sent: Thursday, April 18, 2024 11:25 AM
To: McNeill, Fred; Robinson, Robert; St Armand,David; Lundsted,Benjamin
Subject: RE: Leachate Disposal PFAS sampling results vs NHDES Drinking water limits
Attachments: Manchester PFAS data Feb 2024.pdf

Hello Fred,

Attached is the lab results for the wastewater Leachate Landfill we took back in February 2014.

The NHDES Drinking water quality limits are in the table below, limits are in Part Per Trillion.

Parameter	Drinkwater limits
PFNA	11 ppt
PFHxS	18 ppt
PFOA	12 ppt
PFOS	15 ppt

Reviewing the leachate lab results, are below and all the parameters exceed the drinking water standard.

Parameter	Landfill Results ng/l	Landfill Results ppt		Landfill Results ug/l	Landfill Results ppb
PFNA	125 ng/l	125 ppt	exceeds	0.125 ug/l	0.125 ppb
PFHxS	4,240 ng/l	4,240 ppt	exceeds	0.425 ug/l	0.425 ppb
PFOA	1870 ng/l	1,870 ppt	exceeds	1.87 ug/l	1.87 ppb
PFOS	281 ng/l	281 ppt	exceeds	0.281 ug/l	0.281 ppb

As you asked Clark, we need to know if the leachate is treated or not.

Would you like me to write up a new permit and under the special conditions request another round of PFAS sampling?

Please let me know your thoughts.

Thanks,
Chris

Christopher J. Crowley

Pretreatment Supervisor
City of Manchester, Environmental Protection Division
300 Winston Street, Manchester NH. 03103
(W) 603-624-6513 (C) 603-235-6627

From: McNeill, Fred <fmcneill@manchesternh.gov>
Sent: Wednesday, April 17, 2024 4:40 PM
To: Crowley,Chris <CCrowley@manchesternh.gov>
Cc: Lundsted,Benjamin <blundsted@manchesternh.gov>; Crowley,Chris <CCrowley@manchesternh.gov>
Subject: FW: Leachate Disposal

As discussed, please below.....

Thanks,

From: McNeill, Fred
Sent: Wednesday, April 17, 2024 12:16 PM
To: 'Clark James' <anthony.james@casella.com>
Cc: Robinson, Robert <RRobinson@manchesternh.gov>; St Armand,David <dstarmand@manchesternh.gov>;
Loiselle,Harry <hloiselle@manchesternh.gov>; Gonyea,Jarrod <jgonyea@manchesternh.gov>
Subject: RE: Leachate Disposal

Clark,

We are in receipt of your voice mail and email below....

We are recommending approval to our management. To confirm, will this leachate now have PFAS removed when it is discharged to Manchester?

Many thanks,

Frederick J. McNeill, P.E.
Chief Engineer
Environmental Protection Division
Department of Public Works
City of Manchester
300 Winston Street
Manchester, NH 03103

Office: (603) 624-6341
Cell: (603) 235-6626
Email: FMcNeill@ManchesterNH.gov

From: Clark James <anthony.james@casella.com>
Sent: Wednesday, April 17, 2024 8:11 AM
To: McNeill, Fred <fmcneill@manchesternh.gov>
Subject: [External Email] Leachate Disposal

Good Morning, Fred,

Casella's NCES landfill located in Bethlehem continues to struggle with excess leachate and insufficient treatment capacity. I was planning to discuss this topic with your team in the next few weeks as part of an agenda when we discuss renewing and extending our back-up disposal agreement. However, NCES is in dire need of disposal capacity right now. Is there any chance that the City could issue another temporary permit to accept three loads/day for a three-week period? At that point, Casella could reapply for disposal of leachate generated by NEWSVT, which will have undergone treatment to remove PFAS, which was our original plan. Unfortunately, the combination of wet weather, the landfill construction sequence and a shortfall of capacity at Concord WWTP necessitate more immediate measures.

I recognize this is a sticky topic with the City given the scrutiny of WWTP operations, but hope that we can work together to help bridge the immediate shortfall in capacity until we have time to discuss and develop a longer-term plan that addresses the City's concerns about treating emerging contaminants.

Please let me know at your earliest convenience.

Best Regards,

Clark James

Get [Outlook for iOS](#)

CONFIDENTIALITY NOTICE The information contained in this communication is confidential, may constitute inside information, may be attorney-client privileged and is intended only for the use of the named recipient. If the reader of this e-mail message is not the intended recipient, or the employee or agent responsible for delivery of the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is prohibited. If you have received this e-mail in error, please notify the sender immediately by telephone at +1 800-292-0297 x3606.

The Right-To-Know Law (RSA 91-A) provides that most e-mail communications, to or from City employees and City volunteers regarding the business of the City of Manchester, are government records available to the public upon request. Therefore, this email communication may be subject to public disclosure.

TABLE 3
Summary of Monitoring Data – Tank B Leachate - PFAS
North Country Environmental Services, Inc.
Bethlehem, New Hampshire
February 13, 2024

Group	Analyte	CAS Number	Units	Tank_B
				2/13/2024
Perfluoroalkyl Carboxylic Acids	Perfluorobutanoic acid (PFBA) [3]	375-22-4	ng/L	1,320
	Perfluoropentanoic acid (PFPeA) [4]	2706-90-3	ng/L	776
	Perfluorohexanoic acid (PFHxA) [5]	307-24-4	ng/L	3,190
	Perfluoroheptanoic acid (PFHpA) [6]	375-85-9	ng/L	554
	Perfluorooctanoic acid (PFOA) [7]	335-67-1	ng/L	1,870
	Perfluorononanoic acid (PFNA) [8]	375-95-1	ng/L	125
	Perfluorodecanoic acid (PFDA) [9]	335-76-2	ng/L	88.9
	Perfluoroundecanoic Acid (PFUnA) [10]	2058-94-8	ng/L	<8.00
	Perfluorododecanoic acid (PFDoA) [11]	307-55-1	ng/L	<8.00
	Perfluorotridecanoic Acid (PFTrA) [12]	72629-94-8	ng/L	<8.00
Perfluorotetradecanoic Acid (PFTeA) [13]	376-06-7	ng/L	<8.00	
Perfluoroalkyl Sulfonic Acids	Perfluorobutanesulfonic acid (PFBS) [4S]	375-73-5	ng/L	2,540
	Perfluorohexanesulfonic acid (PFHxS) [6S]	355-46-4	ng/L	424
	Perfluoroheptanesulfonic Acid (PFHpS) [7S]	375-92-8	ng/L	<7.00
	Perfluorooctanesulfonic acid (PFOS) [8S]	1763-23-1	ng/L	281
	Perfluorodecanesulfonic acid (PFDS) [10S]	335-77-3	ng/L	<7.00
Perfluoroalkane Sulfonamides	Perfluorooctanesulfonamide (PFOSA)	754-91-6	ng/L	17.8

Notes:

1. Samples were collected by Sanborn Head personnel and were analyzed by Enthalpy (formerly Vista) Analytical Laboratory (Enthalpy) of El Dorado Hills, California by USEPA Method 1633. Vista 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.