

Facility/ Site Information					
Facility Name / Permit No.	NCES Landfill / DES-SW-SP-03-002				
Permittee	North Country Environmental Services, Inc. (NCES)				
Physical Address	581 Trudeau Road, Bethlehem, NH				
Mailing Address	1855 VT Route 100, Hyde Park, VT 05655				
Contact	Name	Title	Telephone		
NCES	John "Joe" Gay	Engineering Manager	(802) 236-5973		
Facility Type / Waste Accepted		Other Permit No. / Date Issued			
Lined Landfill / Solid Waste (see Permit for details)		GWP-198704033-B-007 / Revised October 19, 2018			

Visit Information					
Date of Visit	May 10, 2021	NHDES Staff Conducting Site Visit	Jaime Colby, NHDES-SWMB James O'Rourke, NHDES-WMD		
Time Arrival / Departure	10:00 AM – 12:30 PM	Weather	Sunny, 55-60°F		
Purpose of Site Visit	Follow-up on leachate spill reported on May 3, 2021				
Photos Taken: <u>X</u> Yes <u>No</u> (If yes, see photo log, Attachment A) Samples Collected: <u>Yes X</u> No (If yes, see sample collection log)					

PARTICIPANTS (Name/Title of others present)

John "Joe" Gay, Engineering Manager, NCES Kevin Roy, Division Manager, NCES Tim White, Project Director, Sanborn, Head & Associates, Inc. (Sanborn Head)

FACILITY/ SITE DESCRIPTION

The NCES landfill is a double-lined municipal solid waste landfill operating in Stage I through Stage VI, Phase I. Relevant to the purpose of this visit, the facility has a leachate collection system that includes three (3) pumping stations that remove leachate from the primary and secondary liner systems; and a leachate storage system consisting of two underground storage tanks (UST A and UST B), each approximately 30,000 gallons, and one aboveground storage tank (AST), approximately 150,000 gallons.

On Monday, May 3, 2021, NCES reported a leachate spill from the storage system. NHDES received the written incident report on Friday, May 7, 2021. See the facility record for additional details.

ACTIVITIES AND OBSERVATIONS

NHDES staff arrived onsite at approximately 10:00 AM. NCES, Sanborn Head, and NHDES staff proceeded to the leachate storage area in the northeastern portion of the site where the leachate release occurred between May 1 and 3, 2021. NCES staff described how the leachate appeared to overfill UST A, and discharge through an abandoned (but not decommissioned) pipe into an unused valve box numbered 401 (also described as a

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manhole or vault). A relatively smaller volume of leachate may have flowed out of valve box 401 westward through an abandoned (but not decommissioned) leachate force main previously used for Stage III; however, NCES estimates that the majority of leachate overtopped the valve box and flowed into the forebay of the adjacent Stormwater Pond No. 4. Two additional forcemains associated with the former leachate evaporator system were observed by NCES in valve box 401 to be reportedly capped and presumably unable to carry leachate away from the valve box.

NHDES observed an open excavation where valve box 401 and two forcemains running west were removed. See photographs P5100001 through P5100004. NHDES did not observe any apparent staining in the excavation, and Tim White reported that soil samples had been taken from the excavation and sent for laboratory analysis of leachate indicator parameters (metals, volatile organic compounds (VOCs), and Total Kjedal Nitrogen (TKN)). The results of the analytical testing were expected late Monday, May 10, or sometime Tuesday, May 11.

NHDES observed sediment removal activities from the forebay of Stormwater Pond No. 4. See photographs P5100005 and P5100010. NCES representatives stated that, during the prior week, liquid in the forebay was pumped out of the pond directly into tanker trucks or into the leachate storage system, and the western portion of the forebay was excavated to natural grades. Excavation activities were occurring in the southeastern portion of the forebay at the time of NHDES' site visit.

NCES indicated that on or about Friday, April 30, prior to the leak occurring, there had been a 3-inch storm event which caused increased flow within the leachate system. NCES and Sanborn Head reported that the spilled leachate was less odorous and more dilute in color than typical leachate. Sanborn Head hypothesized that the leachate that was spilled may have been highly diluted by the influx of water from the rain event, accounting for the diluted smell and appearance, and possibly resulting in lower contaminant concentrations than are typically observed with landfill leachate.

NHDES observed standing water in the Stormwater Pond No. 4 aftbay, and downstream of the aftbay outlet structure and level spreader. See photographs P5100005 and P5100009 through P5100011. Joe Gay stated that NCES also intends to pump water out of and remove sediment from the aftbay.

Jaime Colby noted that the incident report, received by NHDES on May 7, 2021, stated that sediments were being used as alternative daily cover (ADC) at the landfill, and reminded NCES that they should only be used for that activity if they meet the performance standards (see Env-Sw 806.03). NCES stated that the sediments did not exhibit odors and were suitable for use as daily cover.

NCES, Sanborn Head, and NHDES staff walked over to the main seep (approximately sampling location no. S-1), and had a general discussion of the aesthetic restoration that took place several years ago. NCES, Sanborn Head, and NHDES staff also proceeded to the active face and observed Stage VI, Phase I filling activities, and had a general discussion about waste filling and waste types being disposed.

ATTACHMENTS

Figure No. 1 – Field Sketch Attachment A – Photograph Log

Figure No. 1: Field Sketch

Site Visit: May 10, 2021

North Country Environmental Services, Inc. (NCES) Landfill, 581 Trudeau Road, Bethlehem, NH Prepared by J. Colby, NHDES-SWMB

Note: The locations of NHDES staff observations indicated on this field sketch should be considered approximate. The field sketch area is focused on the northeast portion of the facility showing the leachate storage system and Stormwater Pond No. 4. Observations were made during a site visit on May 10, 2021.

Stormwater Pond No. 4

aftbay.

Stormwater Pond No. 4 plunge pool, swale, and level spreader.

Stormwater Pond No. 4 forebay (western) excavated before site visit

Approximate location of excavation for abandoned forcemains and valve box

Valve Box 401

Approximate location of Leachate UST A and UST B Stormwater Pond No. 4 forebay being excavated during site visit.

> Leachate Aboveground Storage Tank (AST)

> > 300 ft

Google Earth

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Waste Management Division

Solid Waste Management Bureau

29 Hazen Drive, Concord, NH 03301 (603) 271-2925 Fax (603) 271-2456

Attachment A - Photograph Log

Facility Information	
Facility Permit No.	DES-SW-SP-03-002
Name	North Country Environmental Services, Inc. (NCES) Landfill
Physical Address Inspected	581 Trudeau Road, Bethlehem, NH

Photograph Information					
Date of Photographs	May 10, 2021	Photographer	J. Colby, NHDES-SWMB		
Camera Used	Olympus Tough TG-6				
Photograph Number	Description				
P5100001	Excavation to remove valve box 401 and forcemains, looking east				
P5100002	Excavation to remove valve box 401 and forcemains, looking east				
P5100003	Excavation to remove valve box 401 and forcemains capped in place – one to the former leachate evaporator and one to UST A – looking northeast				
P5100004	Excavation to remove valve box 401 and forcemains capped in place, looking west				
P5100005	Excavating sediments from Stormwater Pond No. 4, looking northeast				
P5100006	Looking down southern manhole of UST A, Stage III discharging				
P5100007	Looking down southern manhole of UST A, Stage III discharging				
P5100008	Leachate loadout structure, pad and AST, looking southeast				
P5100009	Stormwater Pond No. 4 level spreader and swale, looking north				
P5100010	Stormwater Pond No. 4, looking east-northeast				
P5100011	Stormwater Pond No. 4 level spreader and swale, looking north				













Photograph No. P5100007 Date Taken: May 10, 2021

Berlay

Photograph No. P5100008 Date Taken: May 10, 2021

AmeriGas

WATER





