

From: [Daun, Mary](#)
To: [Joe Gay](#)
Cc: [Kevin Roy](#); [Colby, Jaime](#)
Subject: June 12, 2024 NCES site visit
Date: Thursday, June 13, 2024 2:24:00 PM
Attachments: [NCES site visit report 6-12-2024.pdf](#)

Hi Joe,

Attached is your copy of the NHDES report regarding the NCES site visit on 6/12/2024. If you are unable to open the attached document or require a paper copy, please contact me as shown below. Please let me know if you have any questions.

Thank you,

Mary F. Daun, P.E.
Solid Waste Management Bureau
NH Department of Environmental Services
Phone: (603) 271-8573
mary.f.daun@des.nh.gov

	Site Visit Report	New Hampshire Department of Environmental Services Waste Management Division P.O. Box 95, 29 Hazen Drive Concord, NH 03302-0095 Phone: 603-271-2925 Fax: 603-271-2456
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Facility/ Site Information	
Facility Name/ Permit No.	North Country Environmental Services Inc / DES-SW-SP-03-002
Permittee	North Country Environmental Services Inc.
Physical Address	581 Trudeau Road, Bethlehem, NH
Mailing Address	1855 VT Route 100, Hyde Park, VT 05665
Facility Type / Waste Types Accepted	Other Permit No. / Date Issued
Lined Landfill / Mixed MSW, C&D, Contaminated Soil, Ash, Other Waste Types	Groundwater Permit: GWP-198704033

Visit Information			
Date of Visit	6/12/2024	NHDES Staff Conducting Site Visit	Mary Daun, Jaime Colby
Time Arrival / Departure	10:18AM / 12:45PM	Weather	Cloudy, 71 - 76°F
Purpose of Site Visit	Construction Meeting for CAP 4 and Site Visit		
Photos Taken: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (see end of report)			

PARTICIPANTS (Name/Title of others present)

Joe Gay, NCES
Kevin Roy, NCES
Bruce Grover, NCES
Hunter Whitcomb, J.A. McDonald
Rachel Hastings, E.I., Horizons Engineering
Brett Deyling, P.E., CMA Engineers

FACILITY / SITE DESCRIPTION

North Country Environmental Services, Inc. (NCES) owns and operates a solid waste landfill (facility) of the same name at 581 Trudeau Road in Bethlehem, NH. The facility consists of a double-lined landfill and associated infrastructure managing non-hazardous wastes from an unlimited service area. Leachate is collected in sumps located on the liner system, pumped to on-site leachate storage tanks, and trucked to wastewater treatment facilities. The landfill operates an active landfill gas management system consisting of a collection system and flares.

SITE VISIT SUMMARY

NHDES arrived at the facility at 10:18 am for a construction meeting and proceeded to the main office. Participants of the meeting are listed above. The construction meeting Cap 4 Agenda is attached. Discussions included updates on the project status for Cap 4 as well as the remaining punch list items for Stage VI, Phase II. The installation of the litter fence for Stage VI, Phase II will be completed this week. The status of the geosynthetics for Cap 4 was also discussed. The geosynthetics are currently being tested and will be shipped once test results are approved. CMA expects geosynthetics to be installed approximately starting in mid-July, weather dependent. There was a brief discussion of including compost in the topsoil. If changes to the topsoil specification are needed, NCES will document the design changes in the biweekly construction reports. There

was also a brief discussion on the compaction and density testing for the slope of Cap 4. Compaction will be completed with a static loader. Joe Gay stated that compaction testing is not typically done for the cap due to the geometry, however, Brett Deyling believed that it was a requirement of the approved Specifications. Joe Gay stated that they will circle back on it.

NHDES staff, Joe Gay, Kevin Roy, Hunter Whitcomb, and Brett Deyling proceeded on a site walk clockwise around the landfill, primarily to view the work on Cap 4. A stormwater down chute located in Stage V, near Pump Station #1, was reworked within the past week, and other areas on the Stage V slope were repaired or needed repair. In areas of erosion, waste was not observed. See photographs. Intermediate cover was observed over the Cap 4 area. The swale at the toe of the Cap 4 area slope was also cleared of sediment within the past week due to erosion from recent rainstorms. The slope of Cap 4 is about 2.7H:1V. A gas header pipe with a pitch issue was excavated and reset on the northeast side of the landfill, in the Cap 4 area. NHDES staff observed waste on top of the intermediate cover in this area. NCES stated that they would cover it in the afternoon of the same day.

NHDES staff, Joe Gay, Kevin Roy, and Brett Deyling then proceeded to Pump Station No. 3, where Bruce Grover joined the group. NHDES asked several questions about the primary sump transducer that was recently replaced at this location. NHDES asked about the testing/calibration of the transducer before installation. NCES stated that the transducer was installed by the electrician, and they did not know what type of testing was performed before installation. NHDES also asked how NCES knew that the original transducer was malfunctioning. NCES stated that they observed that the pump would turn on, but there was no flow in the pipes (as noted by a liquid flowing noise). NCES staff also stated that the transducer was located about six inches above the sump floor, and they changed the automated switch for the pump to start when the transducer reads 20 inches. At the time of the site visit, NHDES staff noted the panel readout for the transducer to initially be at about 13 inches and the pump turned on when the transducer reading reached about 20 inches. The secondary sump transducer was reading 24.7 inches. See pictures below.

NHDES staff asked about the flow directions from the leachate sumps. NCES staff stated that all pump stations direct the leachate to UST A. NCES was not sure where Pump Station No. 4 was sent first, either to Pump Station No. 2 or to UST A. From UST A, leachate is then directed to UST B, then to the AST. NCES is capable of pumping leachate out of each tank individually. The group also discussed where leachate was directed during construction of Stage VI, Phase II. A temporary leachate header was directed to the header in Stage VI Phase I, where leachate would then go to Pump Station No. 1. The sump pump was operated using a generator at this location. During the construction period, Bruce Grover stated that manual readings of the control panels were taken daily for the leachate at the Pump Station No. 3 location, in part, because the station was not connected to the SCADA system. NHDES staff asked for copies of these readings.

Joe Gay stated that NCES intends to get back to NHDES by Friday, June 14, 2024, on the question posed in NHDES' email on June 10, 2024 regarding a discrepancy in the leachate management data. Specifically, the report indicates about 4 million gallons of leachate was pumped to storage, and 2 million gallons of leachate was shipped off-site.

Following the discussion at Pump Station No. 3, the group then returned to the main office. At the office, NHDES staff reiterated the request for copies of the daily measurements taken by facility staff of the panel at Pump Station No. 3 during the construction period of Stage VI, Phase II. NCES staff stated that they would email the measurements to NHDES. NHDES staff stated that they would like the information by the end of the day. NHDES also requested the daily tank level, sump level, and flow data from June 5 through June 12. NCES staff obtained paper copies of this information from the scale house and provided them to NHDES.

Joe Gay then described how the data for sump levels and flow rates are processed for the quarterly report. Sanborn, Head & Associates, Inc. pulls the data from the telemetry system and provides it to NCES. NCES then compiles the data into spreadsheets for submittal to NHDES. NCES staff stated that SCADA system data is now viewed on a daily basis.

Jaime Colby stated that NHDES is very concerned with the data provided in the last several quarterly reports. Joe Gay stated his belief that some of the high secondary flow rates were due to construction at Stage VI, Phase II. Jaime Colby asked Joe Gay how long it typically takes for the liner systems to drain construction waters once construction is complete. Joe Gay stated that, in his experience, it might take 3 to 12 months. Joe Gay also asked what the best way was to obtain NHDES agreement that increased flows in the secondary liner system were due to construction. NHDES stated that they would look into it, but that written correspondence was best such as by email or letter.

NCES also had questions about the incident reporting requirements. Specifically, NCES staff asked how to report an ongoing incident. NHDES staff stated that they would discuss the reporting requirement internally and then get back to NCES. There was also a brief discussion on prior leachate storage management practices at NCES.

NHDES departed the site at 12:45 pm.

PHOTOGRAPHS



PXL_20240612_150344151: Stormwater downchute in Stage V, near Pump Station No. 1



PXL_20240612_150436038: Stormwater Pond near Stage V, sediment observed in forebay



PXL_20240612_150657128: Stage V Slope erosion/repair



PXL_20240612_150815453: Cap 4 area with intermediate cover



PXL_20240612_150844222PANO: Cap 4 area with intermediate cover



PXL_20240612_151001465: Cap 4 area with intermediate cover



PXL_20240612_151157977: Cap 4 area with waste visible where gas header pipe was excavated and re-pitched



PXL_20240612_151811737PANO: Cap 4 area



PXL_20240612_151932547: Stormwater swale near Cap 4 area



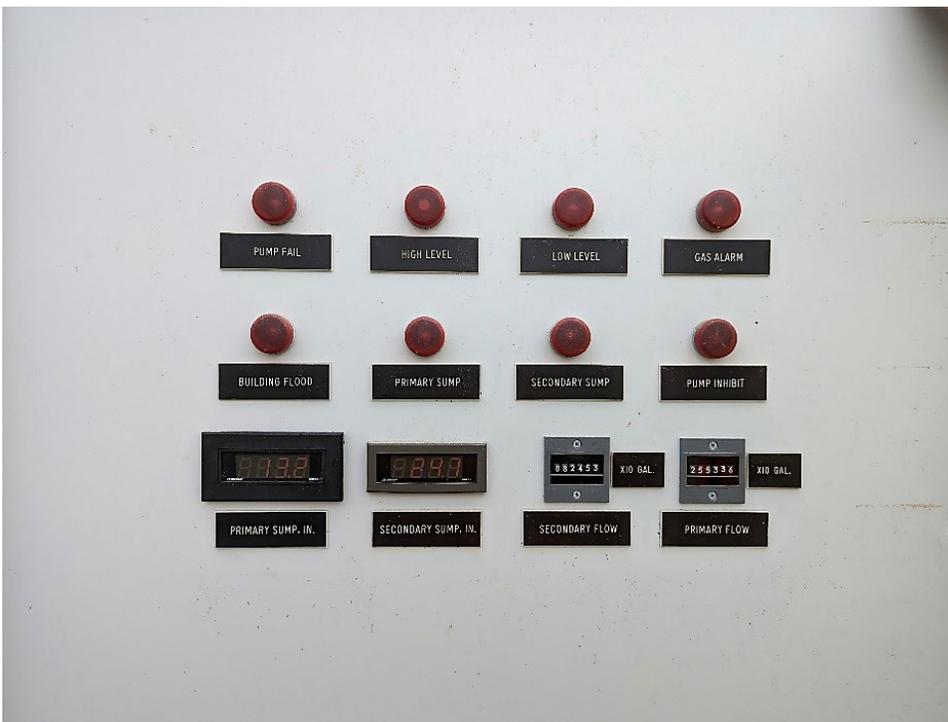
PXL_20240612_152401532: Pump Station No. 4



PXL_20240612_152406410: Pump Station No. 2



PXL_20240612_153108195: Pump Station No. 3



PXL_20240612_153857327: Pump Station No. 3 Panel Display

PROGRESS MEETING #3 AGENDA

PROJECT: *North Country Environmental Services – Cap 4*
CMA #1262

MEETING DATE: Wednesday June 12, 2023, 10 AM

Invited:

NCES:	Joe Gay, E.I., Kevin Roy
J.A. McDonald, Inc.:	Pat Clifford, Hunter Whitcomb
CMA Engineers, Inc.:	Brett Deyling, P.E.
Horizons Engineering:	Rachel Hastings, E.I.
NHDES:	Jaime Colby

1. **Erosion Control**

2. **Project Status**

- Stage VI Phase II Punchlist
 - Litter Fence
 - Fence bottom must touch ground
 - Guardrail
 - Road Gravel
 - Fabric tails above rip rap north of pump station
- Grading
- Drawings
 - As-builts
- Pipe Pitch Issue

3. **Work Schedule and Operations**

- Schedule for project
- Materials Processing

4. **Site Safety**

- Owner, engineer, and contractor will coordinate work so as to protect workers. This will include any instances where contractor is working downslope of owner.
- North perimeter road safety.

5. **Change Orders**

- No change orders to date.

6. **Submittals**

- No additional submittals anticipated.

7. **Next Meeting**

- The next meeting is scheduled for June 26th at 10AM.

8. **Additional Comments**

- Transition from work area to existing intermediate cover.
- Lessons Learned impact to Cap 4 Project.
- Compost mixture in topsoil

- Density testing on slope.
- Site walk