	<b>INSPECTION REPORT</b>	<b>New Hampshire Department of Environmental Services</b> <b>Waste Management Division</b> P.O. Box 95, 29 Hazen Drive Concord, NH 03302-0095 Phone: 603-271-2925 Fax: 603-271-2456
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<b>Facility/ Site Information</b>			
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	P.O. BOX 9 Bethlehem, NH 03574		
Contact	Name	Title	Telephone
Unannounced	N/A		
Facility Type / Waste Accepted	Other Permit No. / Date Issued		
Landfill (see permit for waste types accepted)	N/A		

<b>Visit Information</b>			
Date of Visit	October 28, 2020	NHDES Staff Conducting Site Inspection	Laurel Pushee Todd Moore
Time Arrival / Departure	5:40 a.m. - 08:10 a.m.	Weather	Overcast Mid -30's F Light breeze
Purpose of Inspection	Assess compliance with Permit Conditions (14)(d) and (14)(e) relevant to daily cover requirements at the working face and Condition (16) relevant to daily cover requirements in the Stage VI construction area.		
Photos Taken: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If yes, see photo log, Attachment A)			
Samples Collected: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, see sample collection log)			

**PARTICIPANTS (Name/Title of others present)**

Kevin Roy, NCES  
Bruce Grover, NCES

**FACILITY/ SITE DESCRIPTION**

NCES is an active solid waste lined landfill with an unlimited service area. The landfill was operating (receiving waste) on the day of the inspection. Construction activities associated with an expansion (Stage VI) were being performed on the day of the inspection.

**ACTIVITIES AND OBSERVATIONS**

The following is a summary of activities and observations made by NHDES staff during inspection of the NCES landfill on October 28, 2020. Additional observations related to NHDES's assessment of compliance are provided in attachments to this report. Copies of photographs taken by NHDES are included in Attachment A. NHDES obtained four photographs. NHDES staff intended to take more, but the camera was not working properly.

~05:35 a.m. NHDES staff Laurel Pushee arrived at the facility. The gate was closed and Ms. Pushee parked just

outside of the gate.

~05:45 NHDES staff Todd Moore arrived at the facility.

~05:50 NCES staff Kevin Roy and Bruce Grover arrived at the gate. NHDES personnel notified Mr. Roy of the purpose of the inspection. Mr. Roy agreed to the inspection and invited NHDES personnel into the facility. Mr. Roy, Mr. Grover and NHDES staff parked at the office trailer. Mr. Roy invited NHDES staff to enter the office and sign the visitors register before other staff starting arriving.

NHDES staff informed Mr. Roy that we wanted to:

- 1) see the working face before the daily cover was pulled back to assess compliance with daily cover requirements at the working face; and
- 2) see the construction area before work started to assess compliance with daily cover requirements in the construction area.

Mr. Roy agreed to the inspection. Mr. Roy drove an NCES truck up to the working face and NHDES staff followed in a NHDES vehicle.

~06:00 a.m. NHDES staff arrived at the working face. The working face was located in the approximate center of the level (relative to the side slopes) area on the top of the landfill. It was dark (before sunrise and under cloud cover), but headlamps/flashlights provided adequate light to assess compliance with daily cover requirements. Mr. Roy also maneuvered his truck so that the headlights helped light the working face.

NHDES staff, accompanied by Mr. Roy and Mr. Grover, inspected the cover of the working face. NHDES staff, Mr. Roy and Mr. Grover walked the entire perimeter of the working face, starting at the northeast corner and proceeding counter-clockwise. The covered area was approximately 60-feet wide by 120 feet long. A tarp was the primary cover material. One approximately 15-foot by 20-foot area of the tarp inside the perimeter was covered with soil. NHDES staff did not identify exposed waste around the perimeter of the tarp. When asked about the soil, Mr. Grover stated that the tarp had a hole, so NCES staff had placed soil over the area of the tarp that had the hole. NHDES staff observed that NCES used a tarp to cover the working face, and used soil to cover waste that would have been exposed through a hole in the tarp. NHDES did not observe exposed waste at the working face. See photographs in appendix A.

NHDES staff observed continuous background odor typical of an active landfill, with occasional more intense odors while walking the perimeter of the working face.

NHDES observed that the soil in the vicinity of the working face had some waste mixed in and visible at the surface. Mr. Roy indicated that it was caused from the pulling back of soil cover while uncovering the working face during previous daily operations. NHDES staff did not estimate the proportion of soil/waste or attempt to assess whether the soil cover amount of waste mixed in with the soil. NHDES did not evaluate or assess whether the soil cover in the vicinity of the working face was compliant with applicable solid waste operating requirements.

~06:20 a.m. NHDES staff, Mr. Roy and Mr. Grover left the working face, drove partway down the access road leading down of the top of the landfill in the southwest corner. The road was primarily being used by construction equipment and vehicles to access the Stage VI construction area. NHDES staff, accompanied by Mr. Roy and Mr. Grover, parked just west of the southeast corner of the landfill and walked westerly along the construction road to observe and inspect the construction area for compliance with daily cover requirements.

NHDES staff observed an excavation, one side of which appeared to include exposed waste. Conditions were still dark. NHDES and NCES staff left the construction area and returned to the working face with the intent of returning to the construction area when the light improved.

~6:50 a.m. NHDES and NCES staff returned to the working face to observe removal of daily cover and start of waste placement operations for the day. Filling was proceeding in a west/southwesterly direction. NHDES staff observed NCES staff removing the tarp, running heavy equipment over the working face. Mr. Grover noted that the compactor operator attempts to provide additional compaction to the working face before starting filling operations for the day. NHDES staff observed the first few loads of waste being tipped and spread including sludge, construction & demolition debris, and MSW. Mr. Roy indicated that it is typical that the first load of the day is a sludge load.

~07:25 a.m. NHDES and NCES staff returned to the construction area to observe conditions in daylight. Daylight confirmed that the northern wall of an excavation located at and linear with the toe of slope consisted of exposed waste. NHDES observed typical landfill odors in the vicinity of the excavation. NHDES did not observe distinct odors specifically attributable to the open excavation/exposed waste.

NHDES and NHDES staff walked further west and moved up the slope to observe conditions at the western end of the construction area and stay clear of heavy equipment. Contractors were placing fill and slope armor rock at the southwestern corner of the landfill.

Other than the exposed waste in the above noted excavation area, NHDES did not observe any exposed waste in the construction area. Mr. Roy noted that the majority of waste excavation necessary for the construction was at the western-most end of the construction area and had been completed.

Brett Deyling, CMA was on-site observing construction activities and accompanied NHDES and NCES staff as we left the construction area.

~7:55 a.m. NHDES and NCES staff returned to the NCES office. NHDES staff noted that NHDES had completed inspection activities for the day and summarized the preliminary results: The working face daily cover appeared to be in compliance with daily cover requirements. Exposed waste in the construction excavation did not appear compliant with daily cover requirements.

~08:10 a.m. NHDES staff left the site.

#### **ATTACHMENTS**

Figure No. 1 – Field Sketch

Attachment A – Photograph Log

Attachment B –Compliance Assessment and Determination



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	10/28/2020	Photographer	Laurel Pushee
Camera Used	OLYMPUS		
Photograph Number	Description		
PA280001	Northeast corner of tarp over working face. No exposed waste visible. The waste visible in/on the ground surface next to the tarp consisted of litter/waste mixed in with cover soil. Looking southwest.		
PA280002	Same view and observations as photograph PA280001.		
PA280003	Northwest corner of tarp over working face. Soil cover over hole in tarp barely visible in upper right of photograph. Looking southeast.		
PA280004	Stage VI construction area. Description of features/conditions from right to left (north to south): Membrane intermediate cover on the slope of the existing landfill. The lower portion of the membrane cover had been removed. Soil cover exposed after removal of the membrane visible immediately downslope of the edge of the membrane. Linear excavation in the construction area. Exposed waste visible on the northern (right) wall of the excavation. Wood chip cover visible in the western end of the excavation (furthest from the viewer). Active construction road and construction area visible south and west (left and away from the viewer). The toe of the newly constructed berm on the southern side of the landfill on the far left. Looking west.		



Image No. PA280001  
Taken 10/28/2020 at NCES Landfill Bethlehem



Image No. PA280002  
Taken 10/28/2020 at NCES Landfill Bethlehem



Image No. PA280003  
Taken 10/28/2020 at NCES Landfill Bethlehem



Image No. PA280004  
Taken 10/28/2020 at NCES Landfill Bethlehem





North Country Environmental (NCES)



Imagery ©2020 Maxar Technologies, USDA Farm Service Agency, Map data ©2020 200 ft

**Attachment B**  
**Compliance Assessment and Determination: Daily Cover Requirements**

North Country Environmental Services, Inc. Landfill  
581 Trudeau Road, Bethlehem, NH  
Solid Waste Permit #DES-SW-SP-03-002  
Inspection Date: October 28, 2020

This document presents NHDES' assessment and determination of North Country Environmental Services, Inc.'s (NCES's) compliance, on October 28, 2020, with permit conditions for applying daily cover at two areas of the above-referenced landfill – one at the working face and one at the Stage VI construction area. This assessment is specific to the requirements of Conditions (14)(d), (14)(e) and (16)(b) of the facility's modified Solid Waste Permit DES-SW-SP-03-002 issued October 9, 2020 (Permit). It is based on NHDES' observations and discussions with landfill personnel during an on-site inspection of the landfill on October 28, 2020. See companion Inspection Report dated October 28, 2020 for details.

The assessments and determinations presented herein are shown as follows:

- Each requirement to which the assessment and determination applies, is shown for reference in *italic type*.
- For each requirement being assessed, the agency's related compliance assessment is shown in regular type/font.
- For each requirement being assessed, the agency's compliance determination is shown in **bold type**.

*Requirements*

*Condition (16)(b) of the Permit requires that the permittee (NCES) operate the facility in compliance with Env-Sw 806. Env-Sw 806.03(c) specifies that: At landfills receiving MSW<sup>1</sup>, cover material shall be placed over all exposed waste no less frequently than at the end of each operating day.<sup>2</sup>*

*Condition (14)(d) of the Permit requires the permittee to implement the Odor Control Plan received March 24, 2020, with the revisions specified in Condition (28)(c) of the permit. The revisions stated in Condition (28)(c) include the requirement that the cover materials used during construction activities meet all of the same requirements for landfill cover specified in Env-Sw 806.03. Thus, Condition (14)(d) requires the permittee to place daily cover over all exposed waste during construction activities.*

*Condition(14)(e) of the Permit requires the use of cover materials during construction activities that meet all of the same requirements for landfill cover applied during operations, as specified in Env-Sw 806.03, including Env-Sw 806.03(c). Thus, Condition (14)(d) requires the permittee to place daily cover over all exposed waste during construction activities.*

Compliance Assessment

Working Face: As indicated in the inspection report to which this assessment is attached, NHDES staff did not observe exposed waste at the working face on the morning of October 28, 2020 before facility operations commenced, i.e., a tarp covered the waste and soil on top of the tarp cover a reported hole in the tarp. See photographs in Attachment A.

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<sup>1</sup> Municipal Solid Waste

<sup>2</sup> Referred to as "daily cover" in this assessment.

**Attachment B: Compliance Assessment and Determination – Daily Cover Requirements**

North Country Environmental Services, Inc. Landfill, Bethlehem, NH

Solid Waste Permit #DES-SW-SP-03-002

Inspection Date: October 28, 2020

**Stage VI Construction Area:** As indicated in the accompanying inspection report, NHDES inspected the Stage VI construction area and observed exposed waste along the majority of the north wall of an excavated area at the interface with Stage V. NHDES staff estimated the dimensions of the area of exposed waste to be approximately 60 feet long and ranging from 3 to 8 feet high. See photograph PA280004 in Attachment A.

**Compliance Determination**

**Working Face:**

- In compliance with Condition (16)(b) relative to placing cover over exposed waste at the end of the operating day prior to October 28, 2020.

**Stage VI Construction Area:**

- Not in compliance with Condition (14)(d) and (14)(e), relative to placing cover over exposed waste in the construction area in the same manner as required by Env-Sw 806.03, at the end of the construction day prior to October 28, 2020.


<b>Field Report</b>		Page No. 1 of 1
Facility Name: NCES Landfill		Report No. 1
Location: Bethlehem, NH	Arrival Time: 10:00 AM	Date: November 4, 2020
Permit No. DES-SW-SP-03-002	Departure Time: 12:05 PM	Weather: Sunny, 40-45°F
<p>Attend construction progress meeting #15. Present were:</p> <ul style="list-style-type: none"> <li>• Joe Gay, Kevin Roy, and Nicolai with NCES</li> <li>• Chris Davidson and Pat Clifford with J.A. McDonald, Inc., general contractor</li> <li>• Robbie Emery with RTD, liner contractor</li> <li>• Brett Deyling, with CMA Engineers, Inc.</li> <li>• Jaime Colby and Fred McGarry with NHDES</li> </ul> <p>Brett Deyling of CMA ran the meeting.</p> <ul style="list-style-type: none"> <li>• RTD is placing the liner and pulling it up the slope. The slope is currently thawing and muddy as a result of the thawing. NCES urged J.A. McDonald to place a temporary tarp to cover the slope to minimize frost penetration and the resulting muddy slope.</li> <li>• The waste excavation has been completed, and backfilled.</li> <li>• Density testing of the till subsoil will be conducted Thursday, Nov. 5. Approximately 2,000 density tests have been performed to date.</li> <li>• Testing of the geomembrane seams completed to-date will be conducted today.</li> <li>• The geomembrane should be completely placed by Sunday. Any snowfall will hold things up, and cold temperatures will slow the welding.</li> <li>• They plan to begin placement of the geocomposite Sunday or Monday (Nov. 8 or 9).</li> <li>• There is no plan at present for a winter shutdown, i.e. the plan is to continue work until the project is completed.</li> <li>• Horizons Engineering of Littleton will be on site tomorrow, Nov. 5, to survey the location of the anchor trench. There was discussion of the required accuracy of the survey and the horizontal control for the location of the anchor trench. NHDES instructed NCES to consult with its engineer of record regarding design tolerance.</li> <li>• There were no concerns regarding site safety.</li> <li>• There is a change order for the gas header.</li> <li>• There are no outstanding submittals requiring review and action by CMA.</li> </ul> <p>Following the meeting, representatives of NHDES, NCES, and J.A. McDonald walked the site. NHDES observed that the waste excavation had been backfilled. See attached photographs.</p>		
Field Representative: Fred McGarry, P.E.	Attachments: <input type="checkbox"/> None <input type="checkbox"/> Field Sketch <input checked="" type="checkbox"/> Other: Photos (6)	
Reviewed By: Jaime Colby, P.E.		



Photo No. DSC04794  
Taken November 4, 2020



Photo No. DSC04795  
Taken November 4, 2020



Photo No. DSC04796  
Taken November 4, 2020



Photo No. DSC04797  
Taken November 4, 2020



Photo No. DSC04798  
Taken November 4, 2020



Photo No. DSC04799  
Taken November 4, 2020