Colby, Jaime

From: Kimberly Crosby < Kimberly.Crosby@casella.com>

Sent: Friday, September 6, 2024 3:51 PM

To: Colby, Jaime; Daun, Mary

Cc: McKenna, Leah

Subject: NCES Incident Reported

Attachments: 9 6 2024 NCES Incident Report.pdf

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Good Afternoon -

Attached is the Incident Report for NCES. Please feel free to reach out if you should need additional information or have any questions.

Have a great weekend,

Kim Crosby, CES

Director of Environmental Compliance

Permits, Compliance & Engineering

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Incident Report Form for Solid Waste Management Facilities –

Permitted and Permit-Exempt Facilities



Waste Management Division, SWMB

RSA/Rule: Env-Sw 1005.09(c)

Instructions: Complete form in its entirety, utilizing additional pages, as necessary. Maps and diagrams are recommended for clarity. A written report is due within 5 working days of the incident / situation date. Form meets the requirements of Env-Sw 1005.09(c) for "written report" if completed in its entirety and submitted in accordance with submission timeframe requirements.

| Section I – General Information | | | |
|---|---|------------------------------------|--|
| 1. Date & Time of Incident / | 2. Date of Report Submission to | 3. Name of Person Preparing | |
| Situation: | NHDES: | Report: | |
| 09/09/2014-06/27/2024 | 9/6/2024 | Kim Crosby | |
| 4. Facility Name: | 5a. Affected Area Within Facility | 5b. Physical Address, Town / City: | |
| North Country Environmental | North Country Environmental | 581 Trudeau Road, Bethlehem, NH | |
| Services | Services | 03574 | |
| 6. NHDES SW Permit Number: 7. Permittee Name on Permit: | | 8. Mailing Address: | |
| DES-SW-SP-03-002 | North Country Environmental Services | P.O. Box 9 Bethlehem, NH 03574 | |

| | Section II – Parties Involved in Incident / Situation | | | |
|-------|---|------------------------|--------------|--|
| 9. Po | ersons: | | | |
| | Name: | Title: | Affiliation: | |
| a. | Joe Gay | Engineer | NCES | |
| b. | Kevin Roy | General Manager | NCES | |
| c. | Bruce Grover | Operations Manager | NCES | |
| d. | Kim Crosby | Director of Compliance | NCES | |
| e. | | | | |
| f. | | | | |

Section III - Details

10. The quantity and types of wastes and material(s) involved in the incident or situation and in the clean-up activities:

While conducting an investigation into the cause of increased flows in the landfill liner secondary system discussed in the June 24, 2024 Letter of Deficiency No. SWMB 24-006, Casella's investigators determined that the overliner for Stage IV, Phase I, which has both a primary and a secondary leachate collection system, had been penetrated via the drilling of landfill gas well GW-202 on February 7, 2024. The overliner was required as part of a Stage IV permit issued to NCES in 2003 because the underlying Stage I double liner did not include a geotextile overlay for enhanced leachate travel time because geotextile was not required when the Stage I liner was placed. In 2013, NCES applied for and received a waiver for an overliner for an adjacent lift of waste over the Stage I liner. Casella's investigators learned that NCES's on-site manager and its overseeing company engineer mistakenly concluded that in light of the 2013 waiver the existing overliner could be treated as decommissioned. The investigators also learned that beginning in 2014 and continuing until early this year NCES's landfill gas management consultant oversaw the installation of eleven LFG management wells (enumerated with installation

and decommissioning dates below) that penetrated both liners of the overliner sytem to extract LFG from the waste mass beneath the overliner. Casella's investigation also revealed that GW-202 has been pulling leachate from the waste mass underlying the overliner and discharging a significant portion of the leachate into the secondary collection system of the overliner. Because the sump for the overliner's secondary is plumbed to the Stage IV, Phase I, secondary, it is apparent that the placement and operation of GW-202 has been a substantial contributing factor to the increased leachate flows in the base liner system and particularly the Stage IV, Phase I, secondary. NCES will supplement this report and its response to the June 24, 2024, LOD, with a detailed explanation of how these gas wells have contributed to the increased leachate flows in the Stage IV, Phase I, secondary system.

| Well Number | Installation Date | Decommisioning Date |
|-------------|-------------------|--|
| GW-88 | 9/9/2014 | 12/2017 |
| GW-102 | 4/24/2015 | 3/2019 |
| GW-103 | 4/23/2015 | 12/2020 |
| GW-105 | 4/30/2015 | 7/2024 |
| GW-113 | 5/12/2016 | 10/2022 |
| GW-134 | 8/18/2018 | 5/2023 |
| GW-146 | 9/17/2020 | ACTIVE |
| GW-148 | 9/15/2020 | 2/2024 NOTE: GW-202 drilled as a replacement |
| GW-172 | 4/27/2023 | ACTIVE |
| GW-202 | 2/7/2024 | ACTIVE |
| GW-206 | 6/27/2024 | ACTIVE |

Of the eleven wells identified, 146, 172, 202 and 206, remain active for gas collection in the area of the overliner.

| 11. Measures employed to contain releases caused by th | ne incident or situation: |
|--|---------------------------|
|--|---------------------------|

| No release to the environment was caused by these incidents. As mentioned above, there is a double-liner system |
|--|
| beneath the overliner that is intact and functioning as designed. All secondary detection liquids are captured and |
| managed in the leachate collection system and transported off site for treatment. |

12. Assessment of actual or potential hazards to the environment, safety and human health related to the incident:

Casella's investigation has concluded that while liquid levels on the base liner secondary are exceeding an action level, the magnitude of the increase is within the hydraulic capacity of the systems. Additionally, the Stage I primary and secondary leachate systems are functioning properly, and leachate is being managed in a manner that has prevented a release to the environment. Leachate passing through the penetrations in the overliner have no pathway to the environment and are instead captured by the Stage I liner.

13. Measures the permittee has or intends to apply to reduce, eliminate, and prevent a recurrence of the incident or situation:

To reduce the secondary leachate flows in the areas of the gas wells discussed, NCES proposes to seal off wells 202, 146 and 148 via the use of a cement and bentonite grout mix to an elevation above the area of penetration. Sealing and grouting will put a thin grout down the center tube running down the entire column of each well. The grout mixture will push out of the perforated piping and into the stone pack around the edge of the overliner, sealing off the penetration area.

NCES will ensure that all personnel and third party contractors are notified of the existence and status of the overliner, i.e., that it is not out of service and must not be further damaged.

| 14. If measures not completed by time of report submission, expected | October 2024 |
|--|--------------|
| date of completion: | October 2024 |

| Section IV – Signatures | | | |
|-------------------------------|------------------------|--|----------------|
| 15a. Person Preparing Report: | | | |
| Name: | Title / Affiliation: | | Signature: |
| Kim Crosby | Director of Compliance | | Kim Crosby |
| Phone Number: | | | Email Address: |
| | | | |

| 15b. Permittee: | | | |
|--|------------------------|--|----------------|
| Name: | Title / Affiliation: | | Signature: |
| North Country Environmental Services, Inc. | Director of Compliance | | Kim Crosby |
| Phone Number: | | | Email Address: |
| | | | |

Form Submittal Instructions:

Submit the completed report in PDF via email to SolidWasteInfo@des.nh.gov.