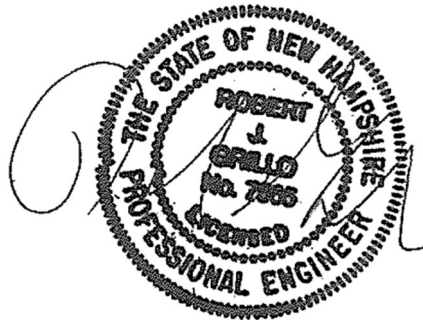


**DES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**

**Type I-A Modification to Solid Waste
Management Facility and Waiver Application
Stage VI Landfill Expansion
Update to Public Benefit Demonstration
North Country Environmental Services Landfill
581 Trudeau Road
Bethlehem, NH 03574**

**NHDES Permit #: DES-SW-SP-03-002
NHDES Site #: 198704033
Project Type: SW-LNDFILL
Project Number: 0021939**

Prepared For:
North Country Environmental Services
1855 VT Route 100
Hyde Park, VT 05655
Phone Number (802) 651-5454
RP Contact Name: John Gay
RP Contact Email: john.gay@casella.com



Prepared By:
CMA Engineers, Inc.
35 Bow Street
Portsmouth, NH 03801
Phone Number: (603) 431-6196
Contact Name: Robert J. Grillo, P.E.
Contact Email: rgrillo@cmaengineers.com

Date of Application: May 7, 2020



A Casella Company

1855 Route 100 • Hyde Park, VT 05655 p. 802.223.7045

May 7, 2020

Jaime M. Colby, P.E.
Solid Waste Management Bureau
Waste Management Division
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095

**Re: North Country Environmental Services, Inc., Landfill
Permit No. DES-SW-SP-03-002 - Type I-A Permit Modification
Application for Facility Expansion (Stage VI)**

Dear Ms. Colby:

Following your e-mail correspondence on April 30, 2020, North Country Environmental Services, Inc. (NCES) has revised Tables 5 and 6 within the Public Benefit section of the above-referenced application that was originally submitted on March 17, 2020. The following summarizes the revisions to the tables and related documents, which are enclosed and should replace the tables provided in the original submission.

Table 5 Revisions

In the original submittal of Table 5, we included historical data from 2003 to 2019 to demonstrate the tonnages of waste received by NCES from various sources. The values in the "TOTAL" column reflected cumulative data from 2003 to 2019, to simplify the size of the table for printing, only the quantities for 2016 to 2019 were shown in the table. Columns containing data for 2003 to 2015 were thus not visible in the final printed version of Table 5.

While addressing your comment regarding the footnotes to Table 5, NCES realized that some of the historical data for 2003 to 2016 miscalculated the beneficial use materials for a given year. In some cases, the beneficial use materials were inadvertently counted twice, as that sum was also included in the "Affiliates and Third Parties" row, while in other years the beneficial use materials were not counted at all.

NCES also discovered that formulas for calculating the total waste sourced from certain "Origins" in Table 5 required updating.

NCES has opted to narrow the scope of Table 5 to focus only on tonnages received from 2012 to 2019; these years are most representative of NCES's current operations, as they reflect the 2012 acquisition of transfer stations in Belmont, Allenstown, and Raymond. In making this change, eight origins were removed from the table as they did not provide waste to NCES during the revised time period: Alstead, Bartlett, Columbia, Keene, Litchfield, Meredith, Northumberland, and Rindge. NCES then reviewed and updated the formulas for the various origin points to ensure the accuracy of the sums provided in the far-right column and updated the calculations for beneficial use materials so that data is properly reflected in the updated table.

Finally, NCES inserted the two footnotes at the base of Table 5 that were inadvertently excluded from the original submission of Table 5.

Because the time period for this new version of Table 5 differs from that in the original submittal, NCES provides a revision to page 10 of Section VII of the application (attached), which reflects the revised date range for Table 5.

Table 6 Revision

Table 6 has been updated by removing the second footnote.

Please let us know if you have any questions regarding this letter and its attachments.

Sincerely,

NORTH COUNTRY ENVIRONMENTAL SERVICES, INC.



John Gay, Engineer
Permits, Compliance & Engineering

- c. Town Clerk, Town of Bethlehem
Board of Selectmen, Town of Bethlehem
NH Fish and Game Department
NH Department of Resources and Economic Development
NH Department of Justice/Office of Attorney General
Ms. Tracie Sales, NHDES Water Pollution Division
Ammonoosuc River Local Advisory Committee
NHDES Onestop

Table 5
Summary of NCES Waste Quantities by Source Location (2012 - 2019)

<u>Origin</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>TOTAL</u>
Allenstown & Surrounding Towns	0	42,538	70,504	80,507	68,388	66,499	53,182	69,700	451,318
Ashland, Town of	801	662	553	569	531	568	625	229	4,538
Bath, Town of	0	0	0	0	0	73	23	0	96
Bedford, Town of	7,542	7,643	7,590	1,137	0	0	0	0	23,912
Belmont Transfer & surrounding towns	0	19,530	22,090	22,107	39,066	51,536	52,220	51,519	258,069
Bethlehem, Town of	616	782	1,316	878	895	1,467	1,644	1,262	8,861
Candia, Town of	0	0	62	0	0	0	0	104	167
Carroll, Town of	278	343	319	312	331	1,001	996	1,041	4,620
Colebrook, Town of	0	466	25	0	0	0	0	0	490
Charlestown, Town of	1,327	1,237	881	1,231	1,098	1,263	1,462	1,425	9,925
Dalton, Town of	184	165	183	178	191	217	202	215	1,535
Franconia, Town of ¹	763	769	908	820	765	881	872	843	6,621
Goffstown, Town of	0	4,844	4,950	5,083	5,198	5,345	5,494	5,635	36,549
Groton, Town of	172	187	159	242	211	242	269	288	1,771
Hebron-Bridgewater Regional District	18	57	56	95	17	19	14	179	455
Henniker, Town of	0	0	0	0	0	0	63	0	63
Jackson, Town of	0	0	0	0	0	0	21	0	21
Jefferson	0	0	0	0	0	163	246	182	591
Lancaster, Town of	0	0	0	0	0	86	89	94	270
Lincoln/Woodstock, Town of	0	0	0	0	0	1,895	2,188	2,847	6,930
Lisbon, Town of	707	729	970	651	669	685	915	843	6,168
Littleton, Town of	1,380	1,667	1,715	1,814	1,470	1,857	2082.94	2,497	14,484
Manchester, City of	0	309	210	872	0	0	10	3,109	4,511
Milford, Town of	0	0	0	0	0	0	499	674	1,172
Monroe, Town of	0	0	0	0	0	25	0	18	43
Nashua, City of	0	0	1,185	0	0	1,095	4,746	0	7,026
Plymouth, Town of	1,018	1,001	1,051	1,095	1,137	1,255	1,260	1,316	9,131
Raymond and Surrounding Towns	0	14,105	16,125	24,860	27,075	23,127	25,434	21,877	152,602
Rumney, Town of ²	589	613	615	613	613	586	596	605	4,830
Sanbornton, Town of	459	493	490	528	276	273	0	0	2,519
Sunapee, Town of	1,600	1,658	1,611	1,621	1,580	1,612	1,648	1,696	13,026
Thornton, Town of ³	2,025	1,950	2,095	2,015	1,983	2,155	2,189	2,337	16,748
Waterville Valley, Town of	869	842	921	845	771	909	1,032	889	7,077

Table 5
Summary of NCES Waste Quantities by Source Location (2012 - 2019)

<u>Origin</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>TOTAL</u>
Whitefield, Town of	0	0	0	0	0	230	312	285	826
Wentworth, Town of	341	346	372	345	65	0	0	0	1,470
Wolfeboro, Town of	152	0	0	0	0	0	0	0	152
Affiliates and Third Parties	55,719	57,888	63,965	75,111	66,443	55,491	57,234	48,051	479,902
Beneficial Use Materials	16,403	20,320	19,979	19,395	32,926	17,296	13,947	13,729	153,996
<i>SUBTOTAL</i>	<i>92,963</i>	<i>181,145</i>	<i>220,899</i>	<i>242,924</i>	<i>251,699</i>	<i>237,853</i>	<i>231,515</i>	<i>233,488</i>	<i>1,692,484</i>

Table 5
Summary of NCES Waste Quantities by Source Location (2012 - 2019)

<u>Origin</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>TOTAL</u>
CONNECTICUT	0	0	0	26	19,418	6,493	12	71	26,020
MAINE	0	34,539	9,596	130	25	61	20	1,407	45,778
MASSACHUSETTS	33,027	77,856	89,107	86,258	144,784	113,389	114,951	106,521	765,892
NEW JERSEY	0	0	0	0	0	0	0	12	12
RHODE ISLAND	17	0	0	2,904	9,935	7,187	626	59	20,729
VERMONT	<u>6,173</u>	<u>11,604</u>	<u>11,883</u>	<u>11,846</u>	<u>7,146</u>	<u>6,946</u>	<u>5,161</u>	<u>5,277</u>	<u>66,034</u>
SUBTOTAL	<i>39,218</i>	<i>123,999</i>	<i>110,585</i>	<i>101,164</i>	<i>181,307</i>	<i>134,075</i>	<i>120,770</i>	<i>113,345</i>	<i>924,464</i>
TOTAL	132,181	305,144	331,484	344,088	433,006	371,928	352,285	346,833	2,616,948

1. Tri-Town Transfer Station in Franconia services the Towns of Franconia, Sugar Hill and Easton
2. Rumney has an agreement with the Town of Dorchester to use their transfer station
3. Thornton Transfer Station is shared with the Town of Campton. The Town of Ellsworth also uses this facility.

provisions requiring DES to coordinate the disposal of hazardous waste and other debris generated during a disaster. One such incident can dramatically affect the amount of the state's disposal capacity, and DES should take such contingencies into account in assessing the need for Stage VI.

RSA 149-M:11, III(a), authorizes DES to consider the overall impact upon the state's waste management and disposal resources of any decision on an application for new capacity in the state. Continued operation of the NCES facility through 2026 will help the state to ameliorate the effects of net waste imports on its long-range capacity planning and will avoid the stepped-up depletion of the state's disposal capacity if NCES were to cease operations in 2021. These considerations support the conclusion that Stage VI will assist in meeting both a short-term and long-term need for waste disposal in New Hampshire.

3.3.2 Type, Size, and Location of Stage VI

3.3.2.1 Type and Size of the Facility

The estimated disposal capacity provided by Stage VI is 1,241,000 cubic yards. At an estimated waste density of 1,520 pounds per cubic yard, Stage VI provides capacity for about 943,000 tons of waste. The estimated total of Stage VI capacity would provide about 5.3 years of capacity at the projected fill rate of 175,000 TPY through 2026. If the Stage VI capacity is permitted, NCES can commit to operating the facility through at least December 31, 2026 and will make capacity available for New Hampshire generated solid waste throughout the entire operating life of the Stage VI facility.

3.3.2.2 Location of the Facility and the NCES “Wasteshed”

The NCES landfill is located in the north central portion of the state. The landfill is accessed through nearby U.S. Routes 2, 3, and 302, and Interstate Routes 93 and 91. These major roadways provide efficient transportation of waste generated in the region and state to NCES. Table 5 presents a list of waste quantities received by the NCES landfill from various points of origin in the state since 2012. Figure 1 shows the locations of these towns, many of which are in northern or central portions of the state.

On average, NCES has had first party contracts with 21 New Hampshire municipalities per year over the last ten years. The following 24 municipalities sent their waste directly to NCES for disposal through curbside programs in 2018, utilizing either with their own transportation vehicles, Casella Waste Systems, Inc. (“CWS”) affiliate hauling services, or third party haulers.

Ashland	Dorchester	Hebron-Bridgewater Regional District	Plymouth
Bath	Easton	Lincoln/Woodstock	Rumney
Bethlehem	Ellsworth	Lisbon	Sugar Hill
Campton	Franconia	Littleton	Sunapee
Charlestown	Goffstown	Manchester (sludge)	Thornton
Dalton	Groton	Nashua (sludge)	Waterville Valley

Table 6

Municipalities Directing Waste to NCES through CWS Transfer Stations in Southern New Hampshire ⁽¹⁾

<u>Allenstown Transfer</u>	<u>Belmont Transfer</u>		<u>Raymond Transfer</u>
Allenstown	Alexandria	Tamworth	Atkinson
Amherst	Alton	Thornton	Brentwood
Antrim	Andover	Tilton	East Kingston
Auburn	Ashland	Tuftonboro	Exeter
Barrington	Barnstead	Wakefield	Fremont
Bedford	Belmont	Warren	Greenland
Bow	Boscawen	Waterville Valley	Hampstead & E
Candia	Bridgewater		Hampstead
Chester	Bristol		Hampton
Chichester	Brookfield		Hampton Falls
Danville	Campton		Hollis
Deerfield	Canterbury		Kensington
Derry	Center Harbor		Kingston
Dover	Concord		Madbury
Dunbarton	Danbury		Newfields
Durham	Effingham		Newington
Epping	Franklin		Newmarket
Epsom	Freedom		Newton
Farmington	Gilford		North Hampton
Greenfield	Gilmanton		Plaistow
Hooksett	Groton		Portsmouth
Hudson	Hebron		Raymond
Lee	Henniker		Rochester
Litchfield	Hill		Rollinsford
Londonderry	Hillsborough		Rye
Manchester	Holderness		Sandown
Merrimack	Hopkinton		Seabrook
Middleton	Laconia		Somersworth
Milford	Lincoln		South Hampton
Nashua	Loudon		Stratham
New Boston	Madison		
New Castle	Meredith		
New Durham	Moultonborough		
Northwood	New Hampton		
Nottingham	Northfield		
Pelham	Ossipee		
Salem	Pembroke		
Strafford	Pittsfield		
Weare	Plymouth		
Windham	Rumney		
	Salisbury		
	Sanbornton		
	Sandwich		

(1) Based on information provided on inbound loads and third-party haulers: as well as Raymond and Salem Hauling. Hauling data collected at time of service.