



NORTH COUNTRY ENVIRONMENTAL SERVICES, INC.
 501 SOUTH STREET, BOX E, SUITE 302, BOW, NH 03304
 603/225-0579 VT WATS 800/883-8877
 FAX 603/225-0967

BA 6/27

June 25, 1996

Ms. Pamela H. Sprague
 State of New Hampshire
 Department of Environmental Services
 6 Hazen Drive
 Concord, NH 03302-0095



**RE: NCES Stage II - Phase I / Permit No. DES-SW-89-009
 Approval to Commence Operation**

Dear Pamela:

Condition 10 of the above referenced approval requires that MSW ash be disposed at our facility in accordance with the provisions of the permittees' approved demonstration project. We believe that the intent of this condition is to allow us to continue to dispose of the MSW ash in Stage II, consistent with operational procedures outlined in the demonstration project's approval. Should this not be consistent with the state's intent, please notify us immediately.

Should you have any questions, please do not hesitate to call me at (802)223-7220.

Sincerely,

NORTH COUNTRY ENVIRONMENTAL SERVICES, INC.

Larry B. Lackey

Larry B. Lackey, Vice President
 Permits, Compliance and Engineering

- cc: James W. Berg, State of New Hampshire
- John W. Casella, New England Waste Services, Inc.
- James W. Bohlig, North Country Environmental Services, Inc.
- Robert A. Watts, North Country Environmental Services, Inc.
- Donald Monahan, North Country Environmental Services, Inc.

Beth Lehem

TOWN: _____
 PROJECT: *N.C.E.S. Stage 2*
 LETTER/DATA/PERMIT/FA/OTHER: _____



WC: FYI file BA 6/5

NORTH COUNTRY ENVIRONMENTAL SERVICES, INC.
 501 SOUTH STREET, BOX E, SUITE 302, BOW, NH 03304
 603/225-0579 VT WATS 800/883-8877
 FAX 603/225-0967

May 31, 1996

TOWN: BETHLEHEM
 PROJECT: NCES-STAGE II LF
 LETTER TYPE: PERMIT/FA/OTHER

Mr. James W. Berg, Waste Management Specialist III
 Waste Management Compliance Bureau
 Department of Environmental Services
 6 Hazed Drive, P.O. Box 95
 Concord, NH 03302-0095

**RE: North Country Environmental Services, Inc. (NCES)
 Bethlehem, New Hampshire
 NHDES Site Visit - April 30, 1996**



Dear Jim:

This letter is a follow-up to previous correspondence, with regard to your site visit on April 30, 1996. Under comment 5 of your May 1, 1996 letter, you requested that sampling and analysis be done from an area just below Detention Pond #2 on our site. As requested under comment 5, NCES provided to the Department, analytical results under cover of a letter dated May 10, 1996 and the balance of analytical was given to you during your site visit on May 14, 1996. In both cases, Robert Watts provided the information. To ensure the Department has a hard copy of the results, they have been enclosed for your records.

In accordance with comment 5 of your May 1, 1996 letter, NCES obtained two samples of water ponded at the outlet of Detention Pond #2 to the west of the landfill. These samples were submitted to Eastern Analytical, Inc. (EAI) of Concord, New Hampshire, for analysis for pH, COD, chloride, nitrate, nitrite, bromide, TKN, volatile organic compounds (VOC's), drinking water metals, iron, manganese, ammonia, BOD, phosphorus and coliform bacteria. Analysis for metals were for total metals (non-filtered).

Reviewing the report, you will note that 2-butanone (MEK) was the only parameter above ambient groundwater quality standards. We have since re-sampled and analyzed for VOC's and found that in the latest samples, MEK was below the ambient groundwater quality standards. I have enclosed a copy of those results for your information. Results of laboratory testing indicate elevated total coliform. Coliform bacteria are in fecal matter of birds and animals. A possible source of the elevated coliform could be runoff containing feces of birds and other animals. Data in a 1983 report prepared by the New Hampshire Water Supply and Pollution Control Division entitled "Durham Urban Runoff Program, 1983" presents a summary of a runoff water quality study which included an evaluation of the presence of total coliform. The study noted the presence of elevated coliform in storm water and receiving waters from following storm events and attributed the elevated coliform to surface runoff of animal feces. In addition to runoff, there are generally several piles of animal feces found around the area in question.

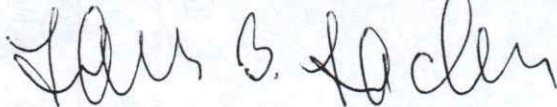
As you are aware, in the fall of 1995, we graded, placed intermediate cover and seeded and mulched the side slopes of the Stage I landfill. In late October, the Facility received very heavy rainfalls (9 inches in the span of 8 days), followed by above normal precipitation in the form of both rain and snow throughout the winter. As a result of the higher than normal precipitation, there was some erosion, as well as breakouts of leachate on the slope above the detention basin. It was our intention to repair the slopes as soon as the soils were dry enough to support construction equipment. This spring, we also experienced above-normal rainfall at the Facility, making it very difficult to repair slopes.

The first period of dry weather following melting frost was experienced at the site beginning about May 1st. Since that time, we have excavated the leachate breakouts, backfilled the areas with sand to induce filtration, and spread intermediate cover over the slopes. As you are aware, we received heavy rains a couple of weeks ago, eroding side slopes once again. We are currently regrading the side slopes and anticipate starting to seed and mulch the side slopes this week. We believe that the contributing factors to the ponded water have been rectified and as shown will continue to see improvements.

Should you have any questions, please do not hesitate to give me a call at (802)223-7220.

Sincerely,

NORTH COUNTRY ENVIRONMENTAL SERVICES, INC.



Larry B. Lackey, Vice President
Permits, Compliance and Engineering

Attachments

cc: John W. Casella, New England Waste Services, Inc.
James W. Bohlig, North Country Environmental Services, Inc.
Robert A. Watts, North Country Environmental Services, Inc.
Dr. Philip J. O'Brien, PhD., Director, State of New Hampshire
Pamela Sprague, State of New Hampshire
John Reagan, State of New Hampshire
Town of Bethlehem, Board of Selectmen
Marghie Seymour, North Country Council

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LANDFILL\NCES\CORRES\BERG528.DOC





LABORATORY REPORT

Eastern Analytical, Inc. ID#: 5429 NCE

Client: North Country Env. Svcs., Inc.

Client Designation: Pond

Volatile Organic Compounds

Sample ID: Pond 2A
Matrix: Aqueous
Date Received: 5/13/96
Units: µg/L
Date of Analysis: 5/17/96
Analyst: JDS
EPA Method: 8240

Chloromethane	< 10
Bromomethane	< 10
Vinyl Chloride	< 10
Chloroethane	< 10
Methylene Chloride	< 2
Carbon Disulfide	< 2
1,1-Dichloroethene	< 2
1,1-Dichloroethane	< 2
Trans-1,2-Dichloroethene	< 2
Cis-1,2-Dichloroethene	< 2
Chloroform	< 2
1,2-Dichloroethane	< 2
1,1,1-Trichloroethane	< 2
Carbon Tetrachloride	< 2
Bromodichloromethane	< 2
1,2-Dichloropropane	< 2
Trans-1,3-Dichloropropene	< 2
Trichloroethene	< 2
Dibromochloromethane	< 2
1,1,2-Trichloroethane	< 2
Cis-1,3-Dichloropropene	< 2
2-Chloroethylvinylether	< 2
Bromoform	< 2
Tetrachloroethene	< 2
1,1,2,2-Tetrachloroethane	< 2
Acetone	160
2-Butanone (MEK)	180
Vinyl Acetate	< 10
4-Methyl-2-Pentanone (MIBK)	< 10
2-Hexanone	20
Methyl t-Butyl Ether (MTBE)	< 20
Benzene	< 1
Toluene	< 1
Ethylbenzene	< 1
Total Xylenes	< 1
Chlorobenzene	< 1
Styrene	< 1

Approved By: Clifford Chase, Volatile Organics Supervisor



Larry Lackey
North Country Env. Svcs., Inc.
P.O. Box 9, 581 Trudeau Road
Bethlehem, NH 03574

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 5343ANCE
Client Identification: None
Sample Quantity/Type: 2 aqueous
Date Received: 5/3/96

Dear Mr. Lackey:

Enclosed please find the laboratory report for the above identified project. All analyses were subjected to rigorous quality control measures to assure data accuracy.

The following standard abbreviations and conventions apply throughout all Eastern Analytical, Inc. reports:

- < = "less than" followed by the detection limit
- TNR = Testing Not Requested
- ND = None Detected, no established detection limit
- BRL = Below Reporting Limits

If you have any questions regarding the results contained within, please feel free to directly contact me, the department supervisor, or the analytical chemist who performed the testing in question.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Will Brunkhorst, President

5/10/96

Date



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 5343A NCE

Client: North Country Env. Svcs., Inc. Client Designation: **None**

Sample ID:	Pond 2A-1	Pond 2A-2	Date of	EPA
Matrix:	Aqueous	Aqueous	Analysis	Analyst Method
Date Rec'd:	5/3/96	5/3/96		
Microbiology (MPN/100ml)				
Total Coliform	46,000	24,000	05/03/96	KL SM9221B

Approved by: Lorraine Olashaw, Inorganics Supervisor Lorraine Olashaw



Rev'd
5/20/96
PH

Larry Lackey
North Country Env. Svcs., Inc.
P.O. Box 9, 581 Trudeau Road
Bethlehem, NH 03574

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 5343 NCE
Client Identification: None
Sample Quantity/Type: 2 aqueous
Date Received: 5/2/96

Dear Mr. Lackey:

Enclosed please find the laboratory report for the above identified project. All analyses were subjected to rigorous quality control measures to assure data accuracy.

The following standard abbreviations and conventions apply throughout all Eastern Analytical, Inc. reports:

- < = "less than" followed by the detection limit
- TNR = Testing Not Requested
- ND = None Detected, no established detection limit
- BRL = Below Reporting Limits

If you have any questions regarding the results contained within, please feel free to directly contact me, the department supervisor, or the analytical chemist who performed the testing in question.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Will Brunkhorst, President

5/13/96

Date



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 5343 NCE

Client: North Country Env. Svcs., Inc.

Client Designation: None

Volatile Organic Compounds

Sample ID:	Pond 2A1	Pond 2A2
Matrix:	Aqueous	Aqueous
Date Received:	5/2/96	5/2/96
Units:	µg/L	µg/L
Date of Analysis:	5/4/96	5/4/96
Analyst:	JDS	JDS
EPA Method:	8240	8240
Chloromethane	< 10	< 10
Bromomethane	< 10	< 10
Vinyl Chloride	< 10	< 10
Chloroethane	< 10	< 10
Methylene Chloride	< 2	< 2
Carbon Disulfide	< 2	< 2
1,1-Dichloroethene	< 2	< 2
1,1-Dichloroethane	< 2	< 2
Trans-1,2-Dichloroethene	< 2	< 2
Cis-1,2-Dichloroethene	< 2	< 2
Chloroform	< 2	< 2
1,2-Dichloroethane	< 2	< 2
1,1,1-Trichloroethane	< 2	< 2
Carbon Tetrachloride	< 2	< 2
Bromodichloromethane	< 2	< 2
1,2-Dichloropropane	< 2	< 2
Trans-1,3-Dichloropropene	< 2	< 2
Trichloroethene	< 2	< 2
Dibromochloromethane	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2
Cis-1,3-Dichloropropene	< 2	< 2
2-Chloroethylvinylether	< 2	< 2
Bromoform	< 2	< 2
Tetrachloroethene	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2
Acetone	220	210
2-Butanone (MEK)	280	270
Vinyl Acetate	< 10	< 10
4-Methyl-2-Pentanone (MIBK)	< 10	< 10
2-Hexanone	10	10
Methyl t-Butyl Ether (MTBE)	< 20	< 20
Benzene	< 1	< 1
Toluene	< 1	< 1
Ethylbenzene	< 1	< 1
Total Xylenes	< 1	< 1
Chlorobenzene	< 1	< 1
Styrene	< 1	< 1

Approved By: Clifford Chase, Volatile Organics Supervisor



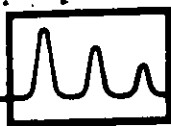
LABORATORY REPORT

Eastern Analytical, Inc. ID#: 5343 NCE

Client: North Country Env. Svcs., Inc. Client Designation: None

Sample ID:	Pond 2A1	Pond 2A2	Date of	EPA
Matrix:	Aqueous	Aqueous	Analysis	Analyst Method
Date Rec'd:	5/2/96	5/2/96		
Inorg. Non-Metals (mg/L)				
pH (SU)	6.2	6.3	05/02/96	TD 150.1
Chloride	41	41	05/06/96	LO 300.0
Nitrite	< 0.5	< 0.5	05/06/96	LO 300.0
Bromide	< 1	< 1	05/06/96	LO 300.0
Nitrate	< 0.5	< 0.5	05/06/96	LO 300.0
Ammonia	6.7	6.8	05/03/96	KL 350.3
TKN	10	10	05/03/96	KL 351.4
Phosphorus	0.23	0.22	05/03/96	KL 365.3
Organics (mg/L)				
BOD	300	310	05/03/96	JD 405.1
COD	410	410	05/07/96	EB 410.4

Approved by: Lorraine Olashaw, Inorganics Supervisor Lorraine Olashaw



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 5343 NCE

Client: North Country Env. Svcs., Inc. Client Designation: None

Sample ID:	Pond 2A1	Pond 2A2	Date of	EPA
Matrix:	Aqueous	Aqueous	Analysis	Analyst Method
Date Rec'd:	5/2/96	5/2/96		
Units:	mg/L	mg/L		
Total Metals				
Arsenic	< 0.01	< 0.01	05/02/96	RW 200.7
Barium	0.12	0.11	05/02/96	RW 200.7
Cadmium	0.003	0.002	05/02/96	RW 200.7
Chromium	0.010	0.007	05/02/96	RW 200.7
Iron	6.7	6.5	05/02/96	RW 200.7
Lead	< 0.01	< 0.01	05/02/96	RW 200.7
Manganese	2.6	2.5	05/02/96	RW 200.7
Mercury	< 0.0002	< 0.0002	05/10/96	JG 245.1
Selenium	< 0.05	< 0.05	05/02/96	RW 200.7
Silver	< 0.005	< 0.005	05/02/96	RW 200.7

Approved by: Tim Wilson, Metals Supervisor