

# North Country Environmental Services

Secure, state-of-the-art solid waste disposal solutions

DATE:

9/24/98

TOWN:

Bethlehem

PROJECT:

NCES Landfill

LETTER/DATA/PERMIT/FA/OTHER:

TIME:

TO:

Mike Gurysoy

FROM:

Don Manhattan

SUBJECT:

PIA 3 DATA

NUMBER OF PAGES:

7

(INCLUDING THIS COVER PAGE)

MESSAGE:

OUR FAX LINE IS: ( 603 ) 869-2152

If you did not receive all of these pages please call back as soon as possible to:

( 603 ) 869-3366

Trudeau Road, P.O. Box 9, Bethlehem, New Hampshire 03574



North Country Environmental  
Services, Inc.

16 State Street  
Montpelier, Vermont 05602

September 21, 1998

Mr. Jon A. Bushold, Laboratory Supervisor  
City of Concord WWTF  
General Service Department  
125 Hall Street  
Concord, NH 03301-3228

(802) 223-7220  
(802) 223-7128 Fax

**RE: North Country Environmental Services, Inc.  
Leachate Sampling Results Stage I Phase III  
September 10, 1998**

Dear Mr. Bushold:

Enclosed please find the leachate analysis for North Country Environmental Services, Inc. landfill, as a re-test of the July 15, 1998 sampling. The sample was again collected by Dennis Porter of Sanborn, Head and Associates and tested by Scitest Laboratory Services. As indicated by the latest results the summed concentration of acetone, methylene chloride, methyl ethyl ketone, and toluene were 43.6 parts per million. These results are more in line with what we have seen from this Phase historically. For these reason we are asking you to accept this leachate for disposal.

We are taking steps to assure that we do not send you leachate that is not acceptable to your facility in the future. We are planning to meet with New Hampshire Department of Environmental Services personnel this week on leachate issues.

Please do not hesitate to contact me or Larry Lackey at (802) 223-7220 if you have any questions or comments.

Sincerely,

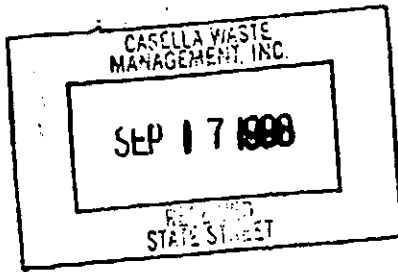
NORTH COUNTRY ENVIRONMENTAL SERVICES, INC.

Robert A. Watts  
Permits, Compliance and Engineering

Encl.

c: Michael Hanscom, City of Concord (w/o encl.)  
James W. Bohlig, New England Waste Services, Inc. (w/o encl.)  
Larry B. Laokey, New England Waste Services, Inc. (w/o encl.)  
William T. Clifton, New England Waste Services, Inc. (w/o encl.)  
Donald Monahan, North Country Environmental Services, Inc. ✓

(RAW) C:\Compliance\Concord\10921981



ANALYTICAL REPORT

P.O. Box 339  
 Randolph, Vermont 05060-0339  
 (802) 728-6313  
 (802) 728-6044 (fax)  
<http://www.scitestlabs.com>

Casella Waste Management Inc.  
 16 State Street  
 Montpelier, VT 05601

Mr. Bob Watts

Work Order No.: 9809-03295

Project Name: VOC Analysis  
 Customer Nos.: 070338

Date Received: 9/11/98  
 Date Reported: 9/16/98

Sample Desc.: Stage 1 Phase 3 - Primary

Sample Date: 9/10/98

Sample Nos: 001

Collection Time: 16:00

Test Performed	Method	Results	Units	Analyst	Analysis Date
Volatiles	EPA 8260B	< 200	ug/L	RJS	9/15/98
Dichlorodifluoromethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Chloromethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Vinyl chloride	EPA 8260B	< 200	ug/L	RJS	9/15/98
Bromomethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Chloroethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Trichlorofluoromethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,1-Dichloroethene	EPA 8260B	< 1000	ug/L	RJS	9/15/98
Diethyl ether	EPA 8260B	< 2000	ug/L	RJS	9/15/98
Iodomethane	EPA 8260B	17,800	ug/L	RJS	9/15/98
Acetone	EPA 8260B	< 2000	ug/L	RJS	9/15/98
Carbon disulfide	EPA 8260B	310	ug/L	RJS	9/15/98
Methylene chloride	EPA 8260B	< 200	ug/L	RJS	9/15/98
Methyl tertiary Butyl Ether	EPA 8260B	< 200	ug/L	RJS	9/15/98
trans-1,2-Dichloroethene	EPA 8260B	< 4000	ug/L	RJS	9/15/98
Acrylonitrile	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,1-Dichloroethane	EPA 8260B	< 4000	ug/L	RJS	9/15/98
Vinyl acetate	EPA 8260B	< 200	ug/L	RJS	9/15/98
cis-1,2-Dichloroethene	EPA 8260B	< 200	ug/L	RJS	9/15/98
2,2-Dichloropropane	EPA 8260B	< 200	ug/L	RJS	9/15/98
2-Butanone (MEK)	EPA 8260B	25,300	ug/L	RJS	9/15/98
Bromochloromethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Chloroform	EPA 8260B	< 200	ug/L	RJS	9/15/98
Tetrahydrofuran	EPA 8260B	< 2000	ug/L	RJS	9/15/98
1,1,1-Trichloroethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Carbon tetrachloride	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,1-Dichloropropene	EPA 8260B	< 200	ug/L	RJS	9/15/98
Benzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,2-Dichloroethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Trichloroethene (TCE)	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,2-Dichloropropane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Dibromomethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Bromodichloromethane	EPA 8260B	< 200	ug/L	RJS	9/15/98

## ANALYTICAL REPORT

Project Name: VOC Analysis  
Project No.: 070338

Work Order No.: 9809-03295

Sample Desc.: Stage 1 Phase 3 - Primary

Sample Date: 9/10/98

Sample Nos: 001

Collection Time: 16:00

Test Performed	Method	Results	Units	Analyst	Analysis Date
2-Chloroethyl vinyl ether	EPA 8260B	< 4000	ug/L	RJS	9/15/98
cis-1,3-Dichloropropene	EPA 8260B	< 200	ug/L	RJS	9/15/98
4-Methyl-2-pentanone (MIBK)	EPA 8260B	< 2000	ug/L	RJS	9/15/98
Toluene	EPA 8260B	190	ug/L	RJS	9/15/98
trans-1,3-Dichloropropene	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,1,2-Trichloroethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Tetrachloroethene (PCE)	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,3-Dichloropropane	EPA 8260B	< 200	ug/L	RJS	9/15/98
2-Hexanone	EPA 8260B	< 2000	ug/L	RJS	9/15/98
Dibromochloromethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,2-Dibromoethane (EDB)	EPA 8260B	< 200	ug/L	RJS	9/15/98
Chlorobenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,1,1,2-Tetrachloroethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
Ethylbenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
Xylenes-m,p	EPA 8260B	< 400	ug/L	RJS	9/15/98
o-Xylene	EPA 8260B	< 400	ug/L	RJS	9/15/98
Styrene	EPA 8260B	< 400	ug/L	RJS	9/15/98
Bromoform	EPA 8260B	< 200	ug/L	RJS	9/15/98
Isopropylbenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
Bromobenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,2,3-Trichloropropane	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,1,2,2-Tetrachloroethane	EPA 8260B	< 200	ug/L	RJS	9/15/98
trans-1,4-Dichloro-2-butene	EPA 8260B	< 4000	ug/L	RJS	9/15/98
n-Propylbenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
2-Chlorotoluene (ortho)	EPA 8260B	< 200	ug/L	RJS	9/15/98
4-Chlorotoluene (para)	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,3,5-Trimethylbenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
tert-Butylbenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,2,4-Trimethylbenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
sec-Butylbenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,3-Dichlorobenzene (meta)	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,4-Dichlorobenzene (para)	EPA 8260B	< 200	ug/L	RJS	9/15/98
p-Isopropyltoluene	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,2-Dichlorobenzene (ortho)	EPA 8260B	< 200	ug/L	RJS	9/15/98
n-Butylbenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
1,2-Dibromo-3-chloropropane	EPA 8260B	< 400	ug/L	RJS	9/15/98
1,2,4-Trichlorobenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98
Hexachlorobutadiene	EPA 8260B	< 200	ug/L	RJS	9/15/98
Naphthalene	EPA 8260B	< 400	ug/L	RJS	9/15/98
1,2,3-Trichlorobenzene	EPA 8260B	< 200	ug/L	RJS	9/15/98

## ANALYTICAL REPORT

Project Name: NCES Triannual Leachate Analysis (July) NSW RULE  
 Project No.: 070338

Work Order No.: 9807-02472

Sample Desc.: Leachate: Stage I Phase II				Sample Date: 7/15/98		
Sample Nos: 002				Collection Time: 13:45		
Test Performed	Method	Results	Units	Analyst	Analysis Date	
1,4-Dichlorobenzene (para)	EPA 8260B	< 200	ug/L	RJS	7/25/98	
p-Isopropyltoluene	EPA 8260B	< 200	ug/L	RJS	7/25/98	
1,2-Dichlorobenzene (ortho)	EPA 8260B	< 200	ug/L	RJS	7/25/98	
n-Butylbenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98	
1,2-Dibromo-3-chloropropane	EPA 8260B	< 400	ug/L	RJS	7/25/98	
Hexachlorobutadiene	EPA 8260B	< 200	ug/L	RJS	7/25/98	
Naphthalene	EPA 8260B	< 400	ug/L	RJS	7/25/98	
1,2,3-Trichlorobenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98	
Surrogate:						
***Dibromofluoromethane		102	% Recovery	RJS	7/25/98	
***Toluene-d8		85	% Recovery	RJS	7/25/98	
***Bromofluorobenzene		97	% Recovery	RJS	7/25/98	

Sample Desc.: Leachate: Stage I Phase III				Sample Date: 7/15/98		
Sample Nos: 003				Collection Time: 14:00		
Test Performed	Method	Results	Units	Analyst	Analysis Date	
COD	SM18 5220	45000	mg/L	PGH	7/28/98	
Chloride	EPA 325.2	2600	mg/L	RJM	7/22/98	
Sulfate	EPA 375.4	2000	mg/L	PEZ	8/07/98	
Cadmium	EPA 6010B	< 0.2	mg/L	PEZ	7/28/98	
Chromium	EPA 6010B	0.9	mg/L	PEZ	7/28/98	
Copper	EPA 6010B	0.3	mg/L	PEZ	7/28/98	
Iron	EPA 6010B	2300	mg/L	PEZ	7/28/98	
Lead	EPA 6010B	1	mg/L	PEZ	7/28/98	
Manganese	EPA 6010B	79	mg/L	PEZ	7/28/98	
Volatiles	EPA 8260B			RJS	7/25/98	
Dichlorodifluoromethane	EPA 8260B	< 200	ug/L	RJS	7/25/98	
Chloromethane	EPA 8260B	550	ug/L	RJS	7/25/98	
Vinyl chloride	EPA 8260B	< 200	ug/L	RJS	7/25/98	
Bromomethane	EPA 8260B	< 200	ug/L	RJS	7/25/98	
Chloroethane	EPA 8260B	2200	ug/L	RJS	7/25/98	
Trichlorofluoromethane	EPA 8260B	< 200	ug/L	RJS	7/25/98	
1,1-Dichloroethene	EPA 8260B	< 200	ug/L	RJS	7/25/98	
Iodomethane	EPA 8260B	< 2000	ug/L	RJS	7/25/98	
Acetone	EPA 8260B	50.200	ug/L	RJS	7/25/98	
Carbon disulfide	EPA 8260B	< 2000	ug/L	RJS	7/25/98	
Methylene chloride	EPA 8260B	660	ug/L	RJS	7/25/98	
Methyl tertiary Butyl Ether	EPA 8260B	< 200	ug/L	RJS	7/25/98	
trans-1,2-Dichloroethene	EPA 8260B	< 200	ug/L	RJS	7/25/98	

## ANALYTICAL REPORT

Project Name: NCES Triannual Leachate Analysis (July) NSW RULE  
 Project No.: 070338

Work Order No.: 9807-02472

Sample Desc.: Leachate: Stage I Phase III	Method	Results	Units	Analyst	Analysis Date
Sample Nos: 003					
Test Performed					
Acrylonitrile	EPA 8260B	< 4000	ug/L	RJS	7/25/98
1,1-Dichloroethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Vinyl acetate	EPA 8260B	< 4000	ug/L	RJS	7/25/98
cis-1,2-Dichloroethene	EPA 8260B	< 200	ug/L	RJS	7/25/98
2,2-Dichloropropane	EPA 8260B	< 200	ug/L	RJS	7/25/98
2-Butanone (MEK)	EPA 8260B	62,700	ug/L	RJS	7/25/98
Bromochloromethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Chloroform	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,1,1-Trichloroethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Carbon tetrachloride	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,1-Dichloropropene	EPA 8260B	< 200	ug/L	RJS	7/25/98
Benzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,2-Dichloroethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Trichloroethene (TCE)	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,2-Dichloropropane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Dibromomethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Bromodichloromethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
cis-1,3-Dichloropropene	EPA 8260B	< 200	ug/L	RJS	7/25/98
4-Methyl-2-pentanone (MIBK)	EPA 8260B	< 2000	ug/L	RJS	7/25/98
Toluene	EPA 8260B	270	ug/L	RJS	7/25/98
trans-1,3-Dichloropropene	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,1,2-Trichloroethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Tetrachloroethene (PCE)	EPA 8260B	< 200	ug/L	RJS	7/25/98
2-Hexanone	EPA 8260B	< 2000	ug/L	RJS	7/25/98
Dibromochloromethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,2-Dibromoethane (EDB)	EPA 8260B	< 200	ug/L	RJS	7/25/98
Chlorobenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,1,1,2-Tetrachloroethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Ethylbenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
Xylenes-m,p	EPA 8260B	< 400	ug/L	RJS	7/25/98
o-Xylene	EPA 8260B	< 400	ug/L	RJS	7/25/98
Styrene	EPA 8260B	< 400	ug/L	RJS	7/25/98
Bromoform	EPA 8260B	< 200	ug/L	RJS	7/25/98
Isopropylbenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
Bromobenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,2,3-Trichloropropane	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,1,2,2-Tetrachloroethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
trans-1,4-Dichloro-2-butene	EPA 8260B	< 4000	ug/L	RJS	7/25/98
n-Propylbenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
2-Chlorotoluene (ortho)	EPA 8260B	< 200	ug/L	RJS	7/25/98

## ANALYTICAL REPORT

Project Name: NCES Triannual Leachate Analysis (July) NSW RULE  
 Project No.: 070338

Work Order No.: 9807-02472

Sample Desc.: Leachate: Stage I Phase III				Sample Date: 7/15/98	
Sample Nos: 003				Collection Time: 14:00	
Test Performed	Method	Results	Units	Analyst	Analysis Date
4-Chlorotoluene (para)	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,3,5-Trimethylbenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
tert-Butylbenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,2,4-Trimethylbenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
sec-Butylbenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,4-Dichlorobenzene (para)	EPA 8260B	< 200	ug/L	RJS	7/25/98
p-Isopropyltoluene	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,2-Dichlorobenzene (ortho)	EPA 8260B	< 200	ug/L	RJS	7/25/98
n-Butylbenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,2-Dibromo-3-chloropropane	EPA 8260B	< 400	ug/L	RJS	7/25/98
Hexachlorobutadiene	EPA 8260B	< 200	ug/L	RJS	7/25/98
Naphthalene	EPA 8260B	< 400	ug/L	RJS	7/25/98
1,2,3-Trichlorobenzene	EPA 8260B	< 200	ug/L	RJS	7/25/98
Surrogate:					
***Dibromofluoromethane		102	% Recovery	RJS	7/25/98
***Toluene-d8		80	% Recovery	RJS	7/25/98
***Bromofluorobenzene		98	% Recovery	RJS	7/25/98

Sample Desc.: Leachate: Stage I Phase IV				Sample Date: 7/15/98	
Sample Nos: 004				Collection Time: 14:10	
Test Performed	Method	Results	Units	Analyst	Analysis Date
COD	SM18 5220	16800	mg/L	PGH	7/22/98
Chloride	EPA 325.2	3520	mg/L	RJM	7/22/98
Sulfate	EPA 375.4	< 125	mg/L	PEZ	8/07/98
Cadmium	EPA 6010B	0.02	mg/L	PEZ	7/28/98
Chromium	EPA 6010B	0.48	mg/L	PEZ	7/28/98
Copper	EPA 6010B	0.04	mg/L	PEZ	7/28/98
Iron	EPA 6010B	160	mg/L	PEZ	7/28/98
Lead	EPA 6010B	0.2	mg/L	PEZ	7/28/98
Manganese	EPA 6010B	19	mg/L	PEZ	7/28/98
Volatiles	EPA 8260B			RJS	7/25/98
Dichlorodifluoromethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Chloromethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Vinyl chloride	EPA 8260B	< 200	ug/L	RJS	7/25/98
Bromomethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Chloroethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
Trichlorofluoromethane	EPA 8260B	< 200	ug/L	RJS	7/25/98
1,1-Dichloroethene	EPA 8260B	< 200	ug/L	RJS	7/25/98
Iodomethane	EPA 8260B	< 2000	ug/L	RJS	7/25/98