

In Regards: North Country Environmental Services, Inc. (NCES) Application to Modify Permit #DES-SW-SP-03-002 for Construction of Stage IV Phase II of the NCES landfill, Trudeau Road, Bethlehem, New Hampshire

NOTICE OF APPEAL

The Appellants submit this notice of appeal pursuant to Env-WMC 204

I. Appellants

The appellant's full legal name and contact information are as follows:

1. Representative Jane Beaulieu 609 South Main St.
Manchester, NH 03102-5134 603-203-8440
jane.beaulieu@leg.state.nh.us

4. Joyce Menard 53 Peppersass Lane Bethlehem, NH 03574 603-869-2012

Debra Payne
 48 Katja Lane
 Bethlehem, NH 03574
 603-869-2446

5. Peter Menard 53 Peppersass Lane Bethlehem, NH 03574 603-869-2012

3. Seth Goldstein 441 Swazey Lane Bethlehem, NH 03574 603-616-1600

II. Appellant's Representative

Seth Goldstein 441 Swazey Lane Bethlehem, NH 03574 603-616-1600 sethhg@rcn.com

III. Concise Statement of Relief and Statutory Provision Under Which the Relief is Sought
The appellants requests the Council consider for reconsideration and reverse the
Departments decision, thereby denying NCES's expansion application (to modify permit # DES-SW-SP-03-002, Stage IV phase II, NCES Landfill). The relief sought is pursuant to RSA 149-M:8, RSA 21-O:9, V, and RSA 21-O:14. In addition, Env-Sw 1002.2(d), Env-Sw 305.03(b)(2),

Condition #9 of NCES's Groundwater Management and Release Detection No. GWP-198704033-B-005

IV. Copy of the Decision being appealed

The department approved NCES's application for a construction permit by letter dated February 17, 2011, (the "Decision") a copy of which is attached as Exhibit 1, even as the original permit application granted August 28,2010 is under challenge in two ongoing appeals.

V. Concise Statement as to Why the Appellant has Standing

The appellants (#2-5) "will suffer a direct and adverse affect as a result of the [Decision] in a way that is more than any impact of the [Decision] on the general public," due to the fact that property owned and occupied by the appellants are in close proximity, .2 to 1.2 miles, from NCES's polluted landfill and therefore the appellant's health and property are at risk. The appellant's properties are served by artesian deep-water wells, which are below the grade of the landfill and are threatened by NCES pollution (see exhibit 2 for map of appellant locations relative to landfill, including well depths). In addition to eventual contamination of their drinking water supply, appellants will also be harmed economically because their property values will be severely decreased by their proximity geographically and visually to an expanding landfill that is leaking contamination into the groundwater.

Appellant #3 "will suffer a direct and adverse affect as a result of the [Decision] in a way that is more than any impact of the [Decision] on the general public," Because NCES mailed to every household in Bethlehem via the U.S. Postal Service documents and a DVD that personally attacked and disparaged appellant #3. Appellant #3 is a private citizen, not a public official, elected official or paid lobbyist (exhibit 3). By attacking Appellant #3 in such a manner NCES has singled out this individual.

Appellant #1, Jane Beaulieu, is an Elected Representative of NH and former Vice Chair of the House Environmental and Agriculture Committee. While serving on the Committee, Representative Beaulieu attended numerous meetings over a period of months about the NCES landfill and its impact on Bethlehem. She has participated in discussions that centered on DES's responsibilities to protect the environment and health of NH citizens. Representative Beaulieu in her capacity as an elected official required to make law and protecting citizens through the lawmaking process, "will suffer a direct and adverse affect as a result of the [Decision] in a way that is more than any impact of the [Decision] on the general public," because in her unique role as Vice Chair of the Environment and Agricultural Committee, she is thoroughly conversant on the plain meaning and the intent of environmental laws and holds that they are being violated by the DES's approval of NCES's permit.

VI. Concise Statement of Facts Upon Which the Council is Expected to Rely in Granting Relief

A. Background:

North Country Environmental Services (NCES), a private landfill in Bethlehem New Hampshire, is a wholly-owned subsidiary of Casella Waste Systems, Inc., a company with headquarters in Rutland, Vermont that is publicly traded on the NASDAQ stock exchange under the stock symbol <CWST>, has since 2007 been allowed by DES to submit three similar applications in the last four years for a permit to expand.

The first application to expand was denied December 12, 2008 because the Department said there was ongoing groundwater contamination and because NCES's berm design was conceptually and structurally flawed.

The second application to expand was denied on March 25, 2009, again for ongoing groundwater pollution issues. The berm had been redesigned and DES accepted the conceptual change but stated its denial for a second time was again directed at the ongoing groundwater contamination and evidence that NCES had not addressed in a meaningful way that a leak in the landfill liner was the cause.

In his denial of NCES's first application for expansion, DES Waste Management Division Director, Michael Wimsatt, wrote (emphasis added), "Until NCES completes the on-going corrective action plan (CAP) and produces data to demonstrate that the work has resulted in achieving DES-approved performance standards for groundwater remediation, DES concludes that the landfill liner system is or may be a contributing factor to the contamination in the monitoring wells," (exhibit 4, page 8, 1rst paragraph).

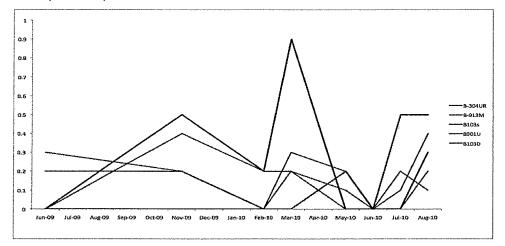
In clarifying the purpose of a CAP, DES wrote, "The approved CAP also establishes groundwater performance standards to be achieved as an <u>objective</u> means of substantiating whether implementation of the CAP has properly identified and corrected the problems that resulted in releases, and that groundwater quality is being restored," (DES Response to Public Comment 8/27/10)

On September 5, 2010 the appellant requested any and all analyses by the DES in order to verify that contamination of the groundwater no longer continued, in light of the fact that the Corrective Action Plan (CAP) was still incomplete and DES groundwater guidelines had not been met. This request was denied by Waste Management Director Mike Wimsastt (exhibit 10).

The appellants assert that the DES approved NCES's expansion permit not by thorough analysis of science and data, as required by law, but rather due to legal intimidation by NCES through frivolous lawsuits, and to political pressure from elected officials with the authority to approve or deny approval of the re-appointment of top DES officials.

On February 17, 2011 DES approved NCES's expansion permit despite:

- 1. Not having completed a DES prescribed Corrective Action Plan (CAP).
- 2. Not achieving "objective" DES-approved performance standards for groundwater remediation.
- 3. New detections of a bromide at wells along the east and south perimeter of the landfill. Bromide is a compound that is used to trace contamination, and its discovery at new wells indicates contamination of ground water is not only ongoing but also spreading. In 2010, bromide tracer was found in wells along the landfill's eastern and southern border including wells B103S, B901U, B103D.

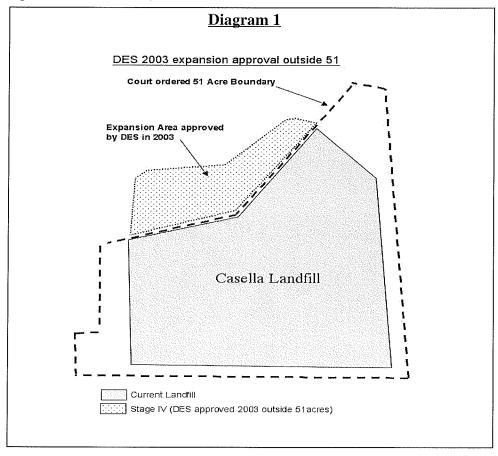


- 4. Alarmingly high levels of methane in several monitoring wells from 2006 through 2011 (exhibit 11), which the department admits are the result of "imperfections" in the liner system but contends are not groundwater related, and as such argues "are not a compliance issue" (exhibit 12).
- 5. NCES after years of denials finally admitted that there were tears and broken welds in the landfill liner system, after previously and repeatedly claiming that there were no tears and that the groundwater pollution was due to a minor incidents such as leachate spills. (exhibits 7 and 8).
- 6. NCES and its primary consultant, Sanborn Head and Associates, failure to meet required testing regulations (exhibit 20) and purging certain wells prior to testing in an effort to manipulate groundwater test data results in violation of the law (Exhibit 21).
- 7. DES publicly acknowledged in a recent press release, "It can take many years for pollution to be found in groundwater. And, it can take many more years for the pollution to be cleaned up, if it gets cleaned at all" (exhibit 22).

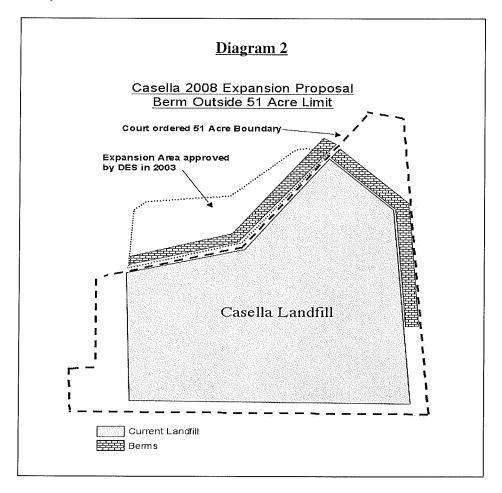
8. NCES operating outside its legal footprint. The New Hampshire Supreme Court ruled in 2003 that the legal footprint for NCES was 51 acres. That was the area for which NCES had received local approval from the Town. The Court found that state law did not preempt the Town's right to local approval under the circumstances at issue.

Not withstanding that ruling, in the approved permit for expansion, NCES has placed major infrastructure components outside the 51-acre legal limit including underground leachate lines. This is despite the fact that NCES and DES knew the Court had ruled against allowing landfilling or landfill-related operation outside the 51-acre legal limit.

In 2003, the previous DES administration approved expansion of the NCES landfill outside the 51 acre court-ordered legal limit. This was despite ongoing litigation on the matter. The approved DES permit was granted only weeks before the NH Supreme Court ruled in the Town's favor and that the area DES granted NCES for expansion was not zoned for landfill use (see diagram 1 or exhibit 14).

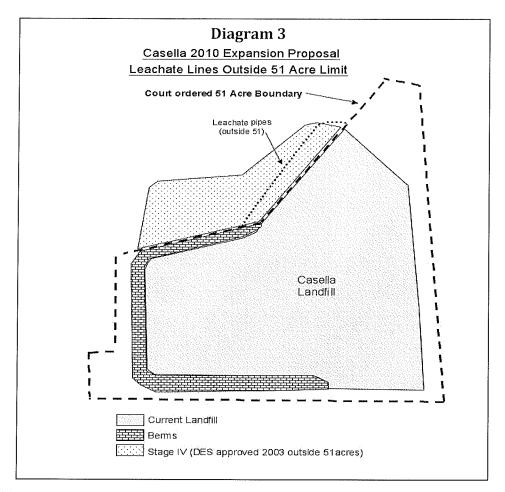


In 2007, under the present DES administration, NCES applied for an expansion permit with a large portion of the proposed berm located outside the 51 acre boundary (see diagram 2, or exhibit 15).



When Town counsel objected, Director Michael Wimsatt informed NCES in a letter dated September 7, 2007, "In light of the Supreme Court decisions on local authority over landfill expansion, DES requires additional information of proposed landfill facilities in relation to the 10 acre and 41 acre lots..." (exhibit 17). Thus prompted, NCES withdrew the berm design that was in violation of the Court's order, and proposed a redesign for a berm that resided within the 51 acre boundary (see diagram 3 or exhibit 16).

But once again, in the permit modification approved by DES, now under appeal, NCES violated the Court's order by placing major underground leachate supply lines outside the 51-acre boundary line (see diagram 3, below).



This despite, Bethlehem Selectman and Town Council notifying DES and NCES on several occasions, that the leachate line does not have local approval permits and is therefore in violation of the Court order (exhibit 18 and 19).

With full knowledge of the pressing legal issues prohibiting landfill construction outside the 51 acres, contrary to Mike Wimsatts September 7, 2007 letter, this time, DES chose to ignore Bethlehem's (N.H. Supreme Court supported) zoning, and on February 17, 2011, approved expansion. The question of undue political influence is raised as a possible motivating factor, and evidence to that effect will be produced at the hearing in this appeal.

A. Relevant NH law and permit conditions regarding groundwater pollution:

Env-Sw 1002.2(d): Facilities and practices shall not contaminate surface water or groundwater in violation of federal or state law, any rules implemented by the department or any administratively-attached board, or the conditions of any permit issued by the department or any administratively-attached board.

Env-Sw 305.03(b)(2): Denial of a Requested Approval. A requested approval shall be denied if one or more of the following conditions applies... The application provides insufficient or ambiguous information that precludes a determination that the proposed approval will comply

with RSA 149-M and the applicable requirements of the solid waste rules, and the deficiencies are so substantial as to not be remedied by subjecting the approval to compensating terms and conditions:

Condition #9 of NCES's Groundwater Management and Release Detection NO. GWP-198704033-B-005; The permittee shall not cause a regulated contaminant as defined in RSA 485-C to be introduced to the ground or groundwater.

RSA 485-C: XIII. "Regulated contaminant" means any physical, chemical, biological, radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment.

B. Bromide and VOC pollution (Sections in Italics quoted from DES, Waste Management Director, Mike Wimsatt, December 12, 2008 denial letter, (Full doc. attached as exhibit 4):

Beginning in 1996, DES required that NCES apply a tracer compound, sodium bromide, to the NCES landfill, Stage II and Stage III. Detection of bromide concentrations above background values in any monitoring wells...indicate that there were liner leak issues.

The detection of VOC contaminants and elevated concentrations of bromide indicate the operation of the existing landfill has resulted in releases of regulated contaminants in violation of condition #9 of the Groundwater Management and Release Detection Permit #GWP-198704033-B-005 (Groundwater Permit).

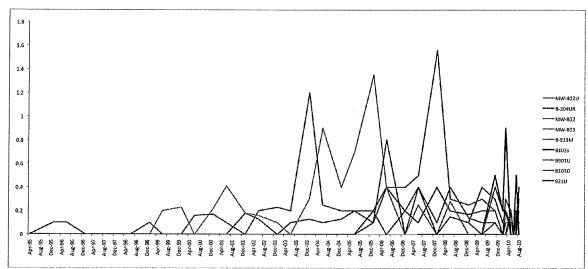
NCES concludes that the releases are not due to a leaking liner system and are most likely due to known leachate spills and accidental discharge of leachate to stormwater systems during 2006 construction events... DES does not agree that the analysis demonstrates that the liner system is not leaking.

Until NCES completes the on-going corrective action plan and produces data to demonstrate that the work has resulted in achieving DES-approved performance standards for groundwater remediation, DES concludes that the landfill liner system is or may be a contributing factor to the contamination in the monitoring wells.

The Bromide tracer's function is to detect the presence if leaks in the liner system. To the extent NCES is now unable to satisfy DES that the landfill liner is not the source of the

groundwater contamination, it is due in large measure to NCES's own operational failure at the facility.

NCES Bromide Pollution 1995 to Present



Several wells indicate bromide pollution is spreading and worsening at the NCES landfill in recent months, in particular B-103S and B-901U (data source NCES)

C. Corrective Action plan (CAP) (section in italics quoted from DES Response to Public Comment, August 27, 2010 (full document attached as Exhibit A5)

At the NCES landfill, both the release detection and assessment monitoring detected contaminants at concentrations above background concentrations in several groundwater monitoring wells, which is an indication that a release had occurred from the landfill. Consequently, DES required NCES to develop a CAP. DES approved the CAP on May 19, 2010 subject to a condition regarding the proposed groundwater performance standards and other comments.

The approved CAP also establishes groundwater performance standards to be achieved as an <u>objective</u> means of substantiating whether implementation of the CAP has properly identified and corrected the problems that resulted in releases, and that groundwater quality is being restored.

D. <u>DES findings upon first NCES application: Denied December 14, 2008</u> "Because the contamination detected at the site is consistent with what would be expected with a release from the liner system and because NCES has not demonstrated to the satisfaction of DES that there is no ongoing release from the facility, DES can not conclude at this time that the proposed facility

can comply with Env-Sw 1002.02(d). Therefore, in accordance with Env-Sw 305.03(b)(2), DES can not approve the application." – Michael Wimsatt, DES (see exhibit 4 for full text)

E. <u>DES findings upon second NCES application: Denied March 25, 2009</u>

"The application provides no information to determine the source of the continuing groundwater contamination at the site, and does not provide additional information responsive to the reasons for denial stated in Section II-B of DES's denial letter dated December 12, 2008."

– Michael Wimsatt, DES (see exhibit 6 for full text)

F. DES findings upon third NCES application: Approved August 27, 2010

"While groundwater quality at the site has not yet fully met the groundwater performance standards, as is required by the facility's Groundwater Release Detection Permit # GWP-198704033-B-005 (GRDP), NCES is in compliance with the terms and conditions of the GRDP by implementing an approved Corrective Action Plan." (DES Response to public comment, 8/27/10).

G. Attorney Generals statement on groundwater pollution

On February 23, 2009, Attorney General Kelly Ayotte and Associate Attorney General Richard Head filed with the WMC the following document: "Department of Environmental Services Objection to Motion to Stay". A key section of the motion stated, "The fundamental nature of this case is one of science and sound engineering practice as applied to the solid waste rules."

Over the past three years, through "sound science" DES has determined objective criteria from which to determine groundwater is not being polluted. Further, DES though sound science has determined NCES has not achieved these objective criteria.

H. Appeals and lawsuits:

From the time of the first expansion denial (December, 2008) up until today, NCES has filled multiple appeals with the Waste Management Council and has brought legal action against the Department of Environmental Service (DES) claiming that political interference and DES's incorrect interpretation of the law were the reasons for NCES's two rejected applications. A key argument by NCES against DES's past permit denials was outlined by NCES's Permitting and Compliance Engineer John Gay, in which he stated "NCES maintains that NHDES has no lawful

authority to deny modifications to its Stage IV standard permit based on the contaminants in the release detection wells."

In response, NH Associate Attorney General, Richard Head made the following statements,

- 1. "The presence of the tracer compound beyond the landfill bounds shows a failure to operate the facility in a way that allows the [leak] detection system to function."
- 2. "The decision of DES was based on the science that is presented to them with regard to this type of application as well as the law."
- 3. "The decision of the department was valid, and it was also protective of human health and the environment."

I. Other supporting documents attached

- 1. Timeline of documents with NCES claims that landfill is not leaking, which have now been proven false, Exhibit 7.
- 2. DES memo, identifying torn liners and broken welds, Exhibit A8.
- 3. Video of John Casella stating, "the permit process has to born in technical facts ...integrity of the permit process needs to be maintained...", (exhibit 9).

VII. Reservation of Rights

Pursuant to Env-WMC 205.02, the appellants reserve the right to supplement this notice of appeal with briefs, other written materials and memoranda before the hearing and with testimony, other evidence and exhibits at the hearing. The Appellants also reserves all of his rights in law and at equity.



Seth Goldstein

Certificate of Service

I Hereby certify that this written document was this day hand delivered, to Thomas Burack, Commissioner, Department of Environmental Services, 29 Hazen Drive; PO Box 95, Concord, NH 03302-0095 and to Michael Wimsatt, Director, NHDES Waste Management Division, 29 Hazen Drive; PO Box 95, Concord, NH 03302-0095, and mailed to the applicant: North Country Environmental Services, Inc., Trudeau Road, Bethlehem, N.H. 03574



Request for Expedited Review

The appellants request expedited review by the Waste Council because of concerns for imminent and substantial threat to public health or the environment that will remain unaddressed until the appeal is resolved. Further, the appellants stand to suffer significant economic hardship if the appeal is not promptly resolved.



Seth Goldstein

Exhibit 1

DES February 17, 2011 Approval (Decision)



The State of New Hampshire

DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

February 17, 2011

John Gay North Country Environmental Services, Inc. 408 East Montpelier Road Montpelier, VT 05602

SUBJECT:

BETHLEHEM- North Country Environmental Services, Inc., 581 Trudeau Rd. Permit #DES-SW-SP-03-002

Type II Permit Modification Application, Stage IV Phase II-A Landfill Expansion, prepared by North Country Environmental Services, Inc., application received October 8, 2010, WMD Doc Log #s 2010642, 2010643, 2010655, and 2010659

Dear Mr. Gay:

The New Hampshire Department of Environmental Services, Waste Management Division (Department) has completed its review of the above-cited application to modify permit #DES-SW-SP-03-002. The requested modification is herewith granted, per the enclosed, pursuant to RSA Chapter 149-M:9 and Section Env-Sw 315 of the New Hampshire Solid Waste Rules (Rules).

The modification approves construction plans and specifications for Stage IV-Phase IIA of the above-cited landfill, involving extension of the liner system to the north, west, and south of Stage I-Phase IV, and to the south of Stage I-Phases I, II, and III. The plans include demolition of the existing Stage I-Phase IV primary and secondary manholes, completion of the northern perimeter berm up to the eastern limits of Stage I-Phase IV, reconstruction of the Stage I-Phase IV sump, construction of Pump Station I and the force main to the leachate management area, construction of the western and southern perimeter berms, construction of an overlay liner on the south-facing waste slope over Stage I-Phases I, II, and III, and completion of modifications to a landfill gas system beneath the southern overlay liner. This construction is planned to occur in four segments.

Please attach a copy of the enclosed Record of Permit Modification to the subject permit to establish a clear and permanent record of this action.

Please also note that prior to actually starting construction, NCES must file a Notice of Intent to Construct and receive written confirmation of receipt of the notice from the Department. For your convenience, the form is available at the link provided below.

Questions concerning this permit modification may be referred to me at (603) 271-2935.

Sincerely,



Paul M. Gildersleeve, P.E.

Solid Waste Management Bureau

Tel: (603) 271-2935 Fax: (603) 271-2456

E-mail: paul.gildersleeve@des.nh.gov

Encl.: Record of Permit Modification

http://des.nh.gov/organization/divisions/waste/swmb/documents/notice_of_intent.doc

ec: Town of Bethlehem

Kevin Roy, NCES Kim Crosby, NCES Larry Lackey, NCES

Wayne Wheeler, PE, NHDES Karlee Kenison, PG, NHDES

Jeff Murray, PE, CMA

Michael Guilfoy, PE, NHDES John Regan, PG, NHDES



RECORD OF MODIFICATION TO SOLID WASTE MANAGEMENT FACILITY PERMIT

as authorized by the

NH Department of Environmental Services, Waste Management Division (Department) pursuant to RSA 149-M and Part Env-Sw 315 of the New Hampshire Solid Waste Rules (Rules)

I. PERMIT/FACILITY IDENTIFICATION:

Permit No.: DES-SW-SP-03-002

Permittee: North Country Environmental Services, Inc. Facility Name: North Country Environmental Services, Inc. Facility Location: 581 Trudeau Road, Bethlehem, NH

Facility Type: Lined Landfill

Permit Modification Type: Type II

II. FILE REFERENCE/RECORD OF APPLICATION:

Date(s) Received: October 8, 2010; October 12, 2010; December 3, 2010; and December 17, 2010

WMD Document Log #(s): 2010642; 2010643; 2010655; and 2010659, respectively

- III. MODIFICATION: The above-cited permit is hereby modified to approve and incorporate by reference the above-cited construction plans and specifications for Stage IV-Phase IIA, involving extension of the liner system to the north, west, and south of Stage I-Phase IV, and to the south of Stage I-Phases I, II, and III. The plans include demolition of the existing Stage I-Phase IV primary and secondary manholes, completion of the northern perimeter berm up to the eastern limits of Stage I-Phase IV, reconstruction of the Stage I-Phase IV sump, construction of Pump Station I and the force main to the leachate management area, construction of the western and southern perimeter berms, construction of an overlay liner on the southfacing waste slope over Stage I-Phases I, II, and III, and completion of modifications to a landfill gas system beneath the southern overlay liner. This construction is planned to occur in four segments.
- IV. TERMS AND CONDITIONS: Three conditions are attached.
- V. <u>EFFECTIVE DATE</u>: Date of signature below.
- VI. <u>AUTHORIZING SIGNATURE</u>: The permit identified in Section I above is hereby modified as specified in Section III above. This authorization is based on information and representations provided to the Department by the permittee, in documents referenced in Section II above. If the information is false, misleading or incomplete, the modification may be revoked or suspended in accordance with Section Env-Sw 306 of the <u>New Hampshire Solid Waste Rules</u>.

BY EXERCISING ANY RIGHTS UNDER THIS AUTHORIZATION, THE PERMITTEE HAS AGREED TO ALL TERMS AND CONDITIONS OF THE PERMIT, AS MODIFIED. Fallure to comply with the terms and conditions of the permit could result in civil or criminal penalties, suspension or revocation of the permit, or administrative fine. No liability is incurred by the State of New Hampshire by reason of any approval of this solid waste facility. No warranty/guarantee is intended or implied by reason of any advice given by the Department or its staff.

This permit shall not eliminate the permittee's obligation to obtain all requisite federal, state or local permits, licenses or approvals, or to comply with all other applicable federal, state, district and local permits, ordinances, laws, approvals or conditions relating to the facility.

Michael J. Cansatt, P.G., Director

Waste Management Division

2/14/11 Date

Contact the Waste Management Division, 29 Hazen Drive, Concord, New Hampshire [telephone (603) 271-2900] if there are questions.

Permit No.: DES-SW-SP-03-002

Permittee: North Country Environmental Services, Inc.

Facility Name: North Country Environmental Services, Inc., Stage IV Phase II-A Landfill

Facility Location: 581 Trudeau Road, Bethlehem, NH

February 14, 2011 Page 2 of 2



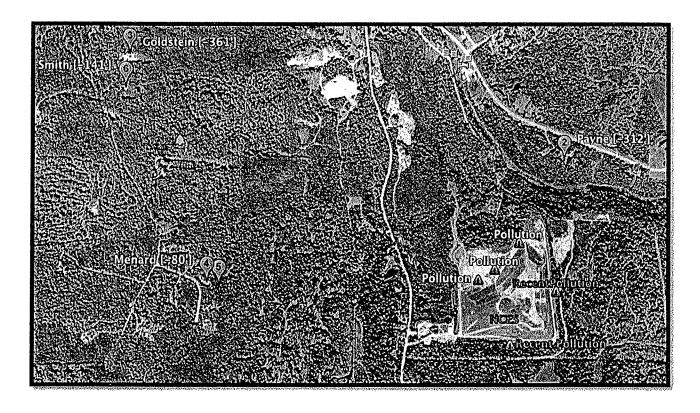
TERMS AND CONDITIONS

- Prior to commencing construction, the Permittee shall submit a Notice of Intent to construct pursuant to Env-Sw 1104.02 of the <u>New</u> <u>Hampshire Solid Waste Rules</u> (<u>Rules</u>) and shall obtain written confirmation of its receipt by the Department.
- 2. The Permittee shall provide Record Drawings to the Department pursuant to Env-Sw 1104.07(f) of the Rules. Such record drawings shall be prepared in accordance with the standards specified in Env-Sw 1103.05 of the Rules.
- 3. The permittee shall provide Record Drawings, Notices of Intent to Construct, and Notices of Intent to Operate for each of the four planned construction segments.

Appellant Locations Relative to NCES Landfill

This map shows the locations of appellants property (2-6) relative to the NCES landfill. Numbers in [brackets] represent the number of feet the appellant's artesian wells are below the grade of the NCES landfill. These numbers are conservative estimates and believed to be accurate within 20' feet.

This map also shows approximate locations of long-term and recent pollution surrounding the NCES landfill.



| | Property | Property | Property | Artisian | Elevation | Feet Below |
|---|---------------|--------------|------------|---------------|-------------|----------------|
| | Name | Elev, Meters | Elev. Feet | Well Depth Ft | Bottom Well | NCES Elevation |
| 2 | Debra Payne | 402 | 1,318 | 300 | 1,018 | -312 |
| 3 | Seth Golstein | 451 | 1479 | 510 | 969 | -361 |
| 4 | Joyce Menard | 442 | 1450 | 200 | 1,250 | -80 |
| 5 | Pete Menard | 442 | 1450 | 200 | 1,250 | -80 |
| - | | 451 * | 1489 | -300 | -12150 | |

Exhibit 3 NCES/Casella Mailer targeting Seth Goldstein

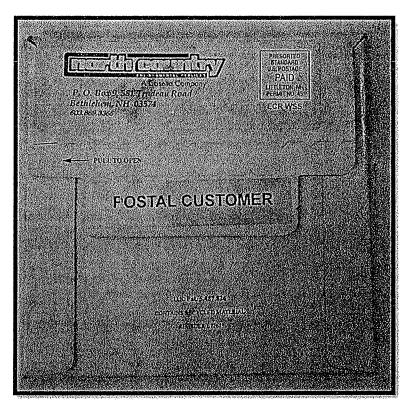
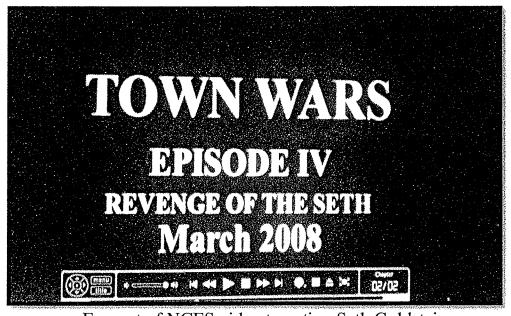


Photo of NCES/Casella DVD Sent to all Bethlehem Voters



Excerpt of NCES video targeting Seth Goldstein

Exhibit 4 December 12, 2008 DES Expansion Denial Letter

NHDES

The State of New Hampshire

DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner



December 12, 2008

SENT VIA E-MAIL AS A .PDF AND VIA FIRST CLASS MAIL

John Gay, E.I. North Country Environmental Services, Inc. 3 Pitkin Court Montpelier, Vermont 05602

Subject: North Country Environmental Services (NCES) Applications to Modify Permit # DES-SW-SP-03-002 for Stage IV Phase II of the NCES Landfill, Trudeau Road, Bethlehem, New Hampshire

Dear Mr. Gay:

In accordance with the provisions of Env-Sw 304.07 of the NH Administrative Rules for Solid Waste Management (Rules), the New Hampshire Department of Environmental Services (DES) has completed its review of the above referenced applications to modify permit #DES-SW-SP-03-002. The review included information submitted in the permit application documents cited as items 1. - 10. below, as well as information provided by abutters, town officials, and persons participating in the public hearing process that commenced on September 16, 2008 and closed on October 16, 2008. Both applications are hereby denied for reasons explained in this letter. In addition, DES's response to public comment and hearing testimony is attached to this letter as Appendix A.

I. Background

On November 30, 2007 NCES submitted the following applications for permit modification:

- 1. Type 1B permit modification application seeking approval to redesign portions of the Stage IV Phase II solid waste landfill located on Trudeau Road in Bethlehem¹; and
- 2. Type II permit modification application seeking approval to construct the modified facility. 2

WMD document log #200700211.

² WMD document log #200700211.

Those modifications propose to develop 1,300,000 cubic yards of permitted Stage IV capacity within the boundaries of a 51 acre area comprised of a 10 acre lot and a 41 acre lot. A permit for Stage IV of the landfill was previously granted by DES in 2003. Under the provisions of that permit, construction of Stage IV was to have occurred, in part, on land outside of the 51 acre area. The combined effect of the Town of Bethlehem's 1992 ordinances prohibiting construction or expansion of a private landfill, a 2001 New Hampshire Supreme Court decision that those ordinances do not apply to the 51 acre area, and a 2004 New Hampshire Supreme Court ruling on the extent to which local approvals are necessary for landfill expansion effectively limited expansion activities to within the 51 acre area.

The pending applications propose to modify the plan that was approved by DES in 2003 by shifting the Stage IV development to the 51 acre area. Under the revised plan, NCES would construct the Stage IV expansion on top of the existing landfill. The additional waste would be contained utilizing near-vertical mechanically stabilized earth (MSE) berms.

Subsequent to submitting the applications described in paragraphs 1-2 above, NCES submitted the following additional permit application information:

- 3. On February 25, 2008, additional information in response to a DES letter dated February 8, 2008 requesting certain information to complete the application.³
- 4. On March 11, 2008, additional information in response to a DES letter dated March 3, 2008 requesting certain information to complete the application.⁴
- 5. On April 7, 2008, additional information in response to a DES letter dated March 12, 2008 requesting certain information to complete the application.⁵
- 6. On May 16, 2008, the "NCES Stage IV/Phase II Fill Area Characterization." 6

By letter dated May 30, 2008, DES notified NCES that the application was complete and that DES was commencing a technical review of the proposal. The documents constituting the complete application were those enumerated above as items 1.- 6.

³ WMD document log #200800038.

WMD document log #200800041.

⁵ WMD document log #200800061.

⁶ WMD document log #200800083.

On July 15, 2008, DES held a public information meeting in Bethlehem, providing an opportunity for interested persons to obtain information from both the applicant and DES concerning the applications, the application process, and the facility.

By letter dated September 10, 2008, DES notified NCES that it had completed its technical review and determined there were certain issues of concern that warranted additional attention, including design drawing and specification inconsistencies, MSE berm design concerns, and groundwater contamination conditions indicating NCES's mismanagement of the leachate collection system and/or a release through the existing landfill liner system.

On September 16, 2008, DES held a public hearing in Bethlehem to receive public testimony on the application, and left the public hearing record open through October 16, 2008 for receipt of written testimony.

In response to DES's September 10, 2008 letter, NCES submitted the following additional information to supplement the application information previously submitted:

- 7. A letter report dated September 29, 2008⁷, providing information in response to items of concern listed as A, B and C in DES's September 10, 2008 letter.
- 8. A letter dated October 13, 2008 addressing groundwater contamination concerns listed under item D of DES's September 10, 2008 letter, including as attachments a Liner Leakage Analysis dated October 14, 2008, prepared by CMA Engineers, Inc. and a Hydrogeologic Analysis dated October 17, 2008, prepared by Sanborn, Head & Associates, Inc. 8
- 9. Additional information to address item D of the September 10, 2008 letter, identified as "Analysis of Site Hydrogeologic Conditions Relative to Potential Leachate Leakage Monitoring Well MW-402U/L Area" dated October 24, 2008, prepared by Sanborn, Head & Associates, Inc. 9
- 10. A letter dated November 7, 2008 with attached plans, providing a revised MSE berm and liner design between stations 0+00 to 12+25 and between 28+00 and 36+14. 10

WMD document log #200800153.

⁸ DES electronic document ID #4143113.

⁹ DES electronic document ID #4144804.

¹⁰ WMD document log #200800178.

II. Reasons for Denial

DES denies the requested permit modifications on the basis of two issues. First, for the reasons stated below, DES concludes that the MSE berm and liner design does not comply with the requirements of Env-Sw 1103.01(a), Env-Sw 1103.01(b) and Env-Sw 1004.01. Second, for the reasons stated below, DES can not conclude at this time that the proposed facility can comply with Env-Sw 1002.02(d). Both of these issues are discussed in detail below.

A. MSE Berm/Liner Design

The 2039 lineal feet of mechanically stabilized earthen ("MSE") berm between stations 0+00 and 12+25 and between stations 28+00 and 36+14, as depicted on sheets C-29 to C-31 of the design plans, form part of the containment system for the landfilled waste and must conform to all applicable requirements of the Rules. Based on a thorough review of the original MSE berm design submitted with the application on November 30, 2007, 11 DES notified NCES by letter dated September 10, 2008 that the berm design was deficient. In response, the applicant submitted a revised MSE berm design on November 7, 2008 12 to replace the original design. For reasons stated below, DES has determined that the revised design of the MSE berm and its associated liner do not meet the requirements of Env-Sw 1103.01(a), Env-Sw 1004.01 and Env-Sw 1103.01(b) of the Rules.

The design of the above noted portions of the MSE berm shows a double liner system consisting of two HDPE geomembrane liners, separated by drainage geocomposite, placed on the near-vertical (1 foot of run to 5 feet of rise or 1:5) inside face of the MSE berm. The design also includes a "shingled" or hanging installation of geosynthetic clay liner over every three lifts of the MSE berm. The use of the two HDPE geomembrane liners on such a steep slope departs significantly from the conventional and generally accepted design standards for solid waste landfill liner systems. Conventional landfill liner system design specifications involve liner installation on slopes of approximately 3:1 (3 feet of run to 1 foot of rise, or 3:1) or less.

Double liner systems deployed on slopes of 3:1 or less have a known track record of constructability, durability, and performance that demonstrates their ability to protect human health and the environment.

Constructability describes the technical and engineering barriers to construction of the landfill. A typical landfill design with 3:1 slopes has well understood

¹¹ WMD document log #200700211.

¹² WMD document log #200800178.

Letter to John Gay December 12, 2008 Page 5 of 9

constructability issues, and the technical and engineering issues have largely been addressed. NCES's near-vertical slope for its double liner system presents new and significantly more difficult constructability issues.

Durability describes the likelihood of failure with time. Double liner systems deployed on a 3:1 slope are well understood, and have existed under New Hampshire landfills for years. As the slope increases to the near-vertical slope as designed by NCES, the durability of the system diminishes. For example, vertical slopes place a greater stress on liner sections where they are welded together, at the base where the vertical wall angles sharply to the base of the landfill, and on the anchor point where the liner system anchors into the top of the wall. Any defects in construction are also reflected in durability.

Performance of landfills with double liner systems on a 3:1 slope is similarly well documented and understood in New Hampshire and throughout the country. Double liner systems are designed to collect leachate flowing through the landfill, and to prevent contamination of soil and groundwater under and adjacent to the landfill. As the risks associated with constructability and durability of the near-vertical liner slope increase, so does the risk of performance failure increase.

DES has been unable to find an example of a similar landfill liner application, in which HDPE geomembrane liner material has been successfully deployed and anchored along such extreme slopes over a distance comparable to the revised MSE berm design. Given the lack of similar projects to review, DES is unwilling to rely solely upon the applicant's analyses for expected performance. The proposed design poses a greater risk of failure, compared to conventional designs. NCES proposes to install, seam, test and anchor the geomembrane liners on a near-vertical MSE berm. Each of these elements of NCES's liner design pose additional failure risks, which increases the overall risk of failure of the liner system. Issues of concern to DES include: the constructability of the liner on the near-vertical berm wall; the efficacy of the anchor trench design for such a high, steep installation; and the tensile and shear stresses that will exist. DES finds that the cumulative increases in risk are unacceptable and unwarranted, and pose unnecessary risks to human health and the environment.

Moreover, DES has determined that approval of such a design would set a precedent that would significantly decrease the minimum standards for landfill design in the State, potentially resulting in higher risk designs and construction at other landfill facilities in New Hampshire. Acceptance of such increased risks would be inconsistent with DES's role to protect human health and the environment, and are inconsistent with the existing criteria for approval of landfill design.

DES views the above outlined concerns as technical deficiencies in the proposed design. As a result of these deficiencies, DES has identified several provisions of the

applicable Rules that are either not met, or for which there is substantially insufficient or ambiguous information that precludes a determination that the proposed facility modifications will comply with the applicable requirements of the Rules. The proposed design does not comply with the applicable requirements of the Rules as outlined below:

- Env-Sw 1103.01 General Design Requirements provides under Env-Sw 1103.01(a) that "[a] facility shall employ best practicable technology(s) and sound engineering practices in meeting the applicable design requirements in the solid waste rules." For the reasons outlined above, the subject design fails to comply with this rule.
- Env-Sw 1004.01 <u>Basic Design Requirements</u> provides under Env-Sw 1004.01(a) that "[t]he design of a facility shall be compatible with achieving the universal environmental performance requirements in Env-Sw 1002." Env-Sw 1002 <u>Universal Environmental Performance Requirements</u> provides under Env-Sw 1002.01 that "[f]acilities shall be located, designed, constructed, operated and closed in a manner that conserves natural resources and is protective of the natural environment, human health and safety." Because the subject design has a greater risk of liner failure when compared to more conventional designs and therefore has a greater risk of releasing leachate and/or landfill gas to the environment, the proposed design does not meet the cited requirement. DES's analysis of the issues of constructability, durability and performance, as outlined above, also supports a finding that the design fails to comply with Env-Sw 1004.01 and Env-Sw 1002.
- Env-Sw 1103.01 <u>General Design Requirements</u> provides under Env-Sw 1103.01(b) that "[w]here options exist relative to design concepts, preference shall be given to the option which provides:
 - (1) The least complex alternative(s) for facility construction, operation and maintenance; and
 - (2) Exhibits the required performance standard(s)."

The subject design fails to comply with this rule. The proposed MSE berm/liner design requires deployment of a liner system on 2039 lineal feet of 39 foot high wall at a near-vertical 1:5 slope. This liner system is untried, essentially experimental in nature, and is significantly more complex with respect to its construction, operation, and maintenance when compared to deployment of a liner system on a conventional 3:1 slope.

Therefore, in accordance with Env-Sw 305.03(b)(1) and (2), DES denies the applications.

B. Groundwater Contamination

Beginning in 1996, DES required that NCES apply a tracer compound, sodium bromide, to the NCES Landfill, Stage II and Stage III. The NCES Landfill has been constructed, in part, on top of the footprint of the former unlined landfill (waste removal and relocation into Stage I of the lined landfill began in December 1991 and was completed in October 1993). The bromide tracer was required to be added to the landfill operations for the Stage II and Stage III lined portion of the landfill to aid in differentiation of groundwater quality impacts associated with the previous releases from the former unlined landfill from a failure of the existing double HDPE geomembrane leachate liner collection system. Because sodium bromide was not added to the unlined landfill, detection of bromide concentrations above background values in any monitoring wells downgradient of the landfill would indicate that there were liner leak issues.

Volatile organic compounds or elevated concentrations of bromide have been detected in groundwater monitoring wells located downgradient from the landfill, including wells MW-402U, MW-403L, B-913M, B-919U, B-921M, B-921U and B-304UR. The detection of the VOC contaminants and elevated concentrations of bromide indicate that the operation of the existing landfill has resulted in releases of regulated contaminants in violation of condition #9 of Groundwater Management and Release Detection Permit #GWP-198704033-B-005 (Groundwater Permit), which was issued to the applicant in November 2007.

The key issues of concern relative to these detections of VOCs and elevated concentrations of bromide were outlined in Section D of DES's September 10, 2008 technical review letter. In that letter, DES requested that additional information be provided to further evaluate the source of the VOCs and the elevated concentrations of bromide detected in downgradient monitoring wells. In response to this request for additional information, the applicant provided the documents listed as application information items 8, and 9, above.

These documents provide a detailed hydrogeological and engineering analysis of the situation to support NCES's contention that the landfill liner system is not leaking and is not the source of the elevated concentrations of bromide and VOCs detected in several monitoring wells. In these documents, NCES concludes that the releases are not due to a leaking liner system and are most likely due to known leachate spills and an accidental discharge of leachate to stormwater systems during 2006 construction events.

Letter to John Gay December 12, 2008 Page 8 of 9

Because NCES's hydrogeological and engineering analysis relies on a number of assumptions regarding aquifer properties, construction history, and the current condition of the existing landfill liner system that are not verified by independent field or environmental data, the analysis is not conclusive. DES does not agree that the analysis demonstrates that the liner system is not leaking. Until NCES completes the on-going corrective action plan and produces data to demonstrate that the work has resulted in achieving DES-approved performance standards for groundwater remediation, DES concludes that the landfill liner system is or may be a contributing factor to the contamination in the monitoring wells.

There is uncertainty as to whether the VOCs and elevated concentrations of bromide detected in the downgradient wells are the result of NCES's own mismanagement of the leachate collection system. By virtue of the past spills and releases from the leachate collection system (the occurrence of which NCES has acknowledged), NCES has raised doubt as to the source of the VOCs and elevated concentrations of bromide. The bromide tracer's function is to detect the presence of leaks in the liner system. To the extent NCES is now unable to satisfy DES that the landfill liner is not the source of the groundwater contamination, it is due in large measure to NCES's own operational failure at the facility.

Env-Sw 1002.02(d) provides in pertinent part that "[f]acilities and practices shall not contaminate surface or groundwater in violation of...the conditions of any permit issued by DES..." Based upon the groundwater quality conditions, the analysis and data presented, and the status of the corrective action plan implementation, DES concludes that there have been releases that have in fact contaminated groundwater in violation of the conditions of the facility's Groundwater Management and Release Detection Permit. Because the contamination detected at the site is consistent with what would be expected with a release from the liner system and because NCES has not demonstrated to the satisfaction of DES that there is no ongoing release from the facility, DES can not conclude at this time that the proposed facility can comply with Env-Sw 1002.02(d). Therefore, in accordance with Env-Sw 305.03(b)(2), DES can not approve the application.

Until the remedial actions are fully implemented and soil and groundwater performance data are collected, DES will not have sufficient information to determine the source of the contaminated groundwater and to conclude that it has been remediated.

In summary, and for the reasons outlined in this letter, DES hereby denies the requested applications for permit modification.

Letter to John Gay December 12, 2008 Page 9 of 9

III. Continuing Groundwater Management Obligations

Irrespective of this permit decision, DES notes that the applicant remains responsible to continue and complete the ongoing remedial work as required by Groundwater Management and Release Detection Permit #GWP-198704033-B-005. Correspondence regarding the proposed groundwater performance standards, as contained in NCES's October 13, 2008 response to the September 10, 2008 DES Comment Letter, will be issued by DES under separate cover.

IV. Appeal

In accordance with RSA 149-M:8 and Env-Sw 305.03(a)(3), this decision issued by DES may be appealed to the Waste Management Council as provided under RSA 21-O:9, V and Env-WMC 200.

If you have any questions regarding this decision, please contact me at the letterhead address, via telephone at (603) 271-1997, or via e-mail at michael.wimsatt@des.nh.gov.

Sincerely yours,



Michael J. Wimsatt, P.G., Director Waste Management Division

Appendix A: Response to Public Comments

CC: Bryan Gould, Esq., Brown, Olson & Gould Town of Bethlehem Brenda Keith, Esq., Boutin & Altieri Robert Grillo, P.E., CMA Engineers Paul Rydel, P.G., SHA Associates Thomas Burack, Commissioner, DES Richard Head, Esq., NHDOJ Harry Stewart, P.E., DES Robert Scott, DES Department of Environmental Services

Digitally signed by Department of Environmental Services DN: cn=Department of Environmental Services, c=US, o=Directors office, ou=Waste Managment Division, emall=pamela.wemer@des.nh.gov Date: 2008.12.12 14:50:00 -05'00'

Exhibit 6 March 25, 2009 DES Denial Expansion Denial Letter

The State of New Hampshire



DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

March 25, 2009

John Gay, E.I. North Country, Environmental Services, Inc. 3 Pitkin Court Montpelier, Vermont 05602

Subject: North Country Environmental Services (NCES) application to modify Permit # DES-SW-SP-03-002 for Stage IV Phase II of the NCES Landfill, Trudeau Road, Bethlehem, New Hampshire / Document Log # 200900018

Dear Mr. Gay:

In accordance with the provisions of Env-Sw 304.03, the New Hampshire Department of Environmental Services (DES) has reviewed the above-referenced application and determined it is administratively complete.

In addition, DES completed a limited technical review of the application, resulting in the following determinations:

- 1. The application provides no information to determine the source of the continuing groundwater contamination at the site, and does not provide additional information responsive to the reasons for denial stated in Section II-B of DES's denial letter dated December 12, 2008. Therefore, DES has determined that the reasons for denial of NCES's previous application, as stated in Section II-B of DES's December 12, 2008 denial letter, still exist. See enclosed letter, which is incorporated herewith as part of this record of decision. In accordance with the provisions of Env-Sw 305.03, the current application is hereby denied for those same stated reasons.
- 2. The revised berm and liner design is conceptually approvable, to the extent that it eliminates those design features that provided a basis for having denied NCES's previous application, as stated in Section II-A of the December 12, 2008 letter referenced above. Because DES performed a limited technical review of the application, and because the application was denied for the reasons stated in Paragraph 1 of this letter, DES reserves the right to perform a detailed technical review of the design, in accordance with Env-Sw 304.07, as part of any new permit application review, should NCES be able to demonstrate to DES's satisfaction that the issues for denial have been addressed.

DES Web Site: www.des.nh.gov

John Gay DES # 200900018 March 25, 2009 Page 2 of 2



In accordance with RSA 149-M:8 and Env-Sw 305.03(a)(3), this decision issued by DES may be appealed to the Waste Management Council as provided under RSA 21-O:9 and Env-WMC 200.

If you have questions regarding this decision, please contact me at the letterhead address, by telephone at (603) 271-1997, or via e-mail at michael.wimsatt@des.nh.gov.

Sincerely yours,



Michael J. Wimsatt, P.G., Director Waste Management Division

Enc: DES denial letter dated December 12, 2008

CC: Bryan Gould, Esq, Brown, Olson & Gould

Town of Bethlehem

Brenda Keith, Esq., Boutin & Altieri Robert Grillo, P.E., CMA Engineers Paul Rydel, P.G., SHA Associates Thomas Burack, Commissioner, DES

Richard Head, Esq. NHDOJ

Exhibit #7

Summary of NCES/Casella Documents Claiming that NCES Landfill is not Polluting the Groundwater

<u>Documented erroneous Casella claims that the landfill liner does not leak and DES memo identifying liner tears and broken liner welds</u>

Attached below are excerpts from seven documents regarding denial of leaks at the Casella/NCES Bethlehem landfill. Please note that there are repeated occurrences of Casella employees telling Bethlehem residents that the Casella landfill is a "state-of-the-art landfill", "the double liner system does not leak".

Despite Bethlehem concerns of documented evidence of ongoing liner leaks since 1995 (see document # 4), Casella has claimed there are no liner leaks and that the bromide and Voc pollution is from "poor leachate handling practices" and "construction related" events.

Please read these brief excerpts to understand the evolution of Casella's claims and to read that even after finding conclusive proof of liner leaks (see document #6) Casella still claims that the "landfill liner systems continue to function as designed".

1. Document #1

Date: 10/14/08

Document Name: Liner Leakage Analysis

Page Number: Page 5

Individual Quoted: Robert Grillo P.E., Project Manager CMA Engineers

"The Calculated leakage rates are quite low... leakage has not impacted water quality at the site monitoring wells"

"...we do not believe that any reasonable assumptions could result in substantial leakage from the landfill due to the documented secondary flows and the known properties of the double liner design."

2. Document #2

Date: 1/12/09

Document Name: Notice of Appeal regarding permit denial

Page Number: Pages 5 and 6

Individual Quoted: Bryan Gould, Attorney for Casella

"NCES responded by submitting an engineering analysis to rule out an ongoing liner leak based on known quantities of leachate production, groundwater volumes,

known concentrations of contaminants in detection wells, and conservative assumptions regarding other factors contributing to the analysis." – Page 6

"During NCES's operation of the landfill, there have been a small number of leachae spills between the landfill and leak detection wells, and there was also an accidental release of leachate from the landfill during construction activities." – Page 5

3. Document #3

Date: 2/10/09

Document Name: NCES v. NHDES

Page Number: Page 10

Individual Quoted: Bryan Gould, Attorney for Casella

"79. On October 14 and October 24, 2008, NCES presented NHDES with an engineering analysis concluding that the exceedances in the release detection wells could not be the result of a liner leak."

4. Document #4

Date: 4/24/09

Document Name: February 2009 Groundwater Performance Standards Review

Individual Quoted: George Holt, PG and Thomas Roy, PE, PG - Aries Engineering

Page Number: Page 8

"4. Observed groundwater bromide concentration trends are consitent with an ongoing source or sources of bromide released to groundwater. Potential bromide release sources include leachate leaks from the landfill liner system, discharges from the site leachate management system due to leachate mismanagement, or a combination of both."

5. Document #5

Date: 5/15/09

Document Name: NCES Groundwater Performance Standards Work Plan

Page Number: Page 1

Individual Quoted: John Gay, E.I. Casella Engineering, Permitting, Compliance and Construction

"we believe scientific evidence demonstrates beyond serious question that conditions observed in the down gradient monitoring wells are not related to a release from the containment system of the landfill."

6. Document #6

Date: 9/16/09 (referring to meeting 9/9/09)

Document Name: Memo - stage 1 Anchor trench repairs/NCES/Bethlehem

Page number: Page 1

Individual Quoted: Wayne Wheeler, NHDES - Permitting & design Review Section

"Upon removing soil from approximately 200 feet of anchor trench and exposing the geomembrane cap, Kevin noted that the cap was badly deteriorated. It had holes in it and the cap was not welded the liner in this area."

7. Document #7

Date: 9/30/09

Document Name: 2009 Summary of Water Quality Minitoring

Page Number: Page 11

Individual Quoted: Pail Rydel. P.G. Sandborn Head & Associates for Casella

"Limited residual impacts to groundwater quality are likely associated with past leachate handling practices, and are expected to decrease with time..."

"Construction-related impacts (e.g., elevated bromide concentrations ...) are also diminishing. As previously reported, these ipacts were expected to be transient in nature given the limited nature of the release."

"Taken in its entirety, the record of water quality monitoring data developed over time at the site indicates that the landfill liner systems continue to function as designed".

Exhibit #8

DES Memo Identifying Torn Liners and Broken Liner Welds at the NCES Landfill

STATE OF NEW HAMPSHIRE

INTER-DEPARTMENT COMMUNICATION

DATE: September 16, 2009 AT(OFFICE): **P&DRS**



FROM:

Wayne Wheeler, P.E.

Permitting & Design Review Section

SUBJECT:

Stage 1 Phase 1 Anchor Trench Repairs/NCES/Bethlehem/

DES-SW-SP-03-002

TO:

Michael E. Guilfoy, P.E., Administrator, SWMB

On Tuesday, September 9, 2009, Paul Gildersleeve and I visited the NCES landfill in Bethlehem to attend a Leachate Management Improvements construction meeting. Prior to the meeting, we were given a tour of the facility by Kevin Roy. Picture 1 shows the amount of soil that has been removed from the area between the old leachate loadout area and MW 402U & L.



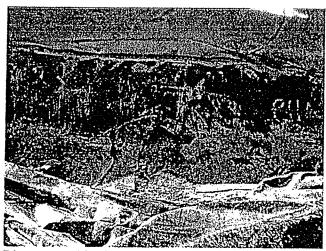
Picture 1. This picture shows the area to the north of Stage 1 where the leachate loading tanks and area were formerly located.

Kevin then proceeded to show us the area near the Stage 1 Phase 1 downchute. While removing the 36-inch culvert, Kevin saw landfill gas coming from the direction of the Stage 1 Phase 1 anchor trench. Upon removing soil from approximately 200 feet of anchor trench and exposing the geomembrane cap, Kevin noted that the cap was badly deteriorated. It had holes in it and the cap was not welded to the liner in this area.

He explained that his intent was to have CMA prepare a plan to replace the existing cap and to weld it to the liner.



Picture 2. This picture is looking up (south) the Stage 1 Phase 1 downchute. The excavated anchor trench is to the right.



Picture 3. This picture is looking north at the Stage 1 Phase 1 anchor trench. Note arrow pointing out hole in geomembrane cap.



Picture 4. This picture is looking north towards MW 913M. The open trench is where the 36" culvert connecting the Stage 1 Phase 1 down chute to detention pond 3 was located.

Prior to going to the landfill, I had plotted secondary leachate flows versus rainfall for Stage 1 Phases 1 through 4, State 3, and Stage 4 Phase 1 (which includes flows from Stage 2) for 2007 through the present.

On April 25, 2007 Casella Construction along with a crew from Terafix lined a small area between the cap down chute and the culvert to Pond #3. The 60-mil liner was welded to the cap at the Stage 1 Phase 1 anchor trench and was booted to the culvert such that all water flowing through the cap down chute would be drained through the culvert. In addition, the low level orifice for the outlet structure to Pond #3 was blinded by silt, resulting in a backup of water through the culvert and further saturation of soil adjacent to the anchor trench. Both of these conditions were thought to have raised local groundwater levels to an elevation above the anchor trench, resulting in a flow of clean water into the Phase 1 secondary collection system.

As shown the Stage 1 Leachate Flow charts (esp. Phases 1 and 4), secondary leachate flows appear to have substantially decreased following the repairs.

As shown on the attached charts, Stage 1 secondary flows appear to be influenced by either rainfall events or runoff. In addition and as shown on the attached charts, there appears to be a relationship between total VOCs measured at MW B-913M and secondary leachate flows. I have also plotted Total VOCs for each of the Stage 1 phases.

Exhibit 9 John Casella Video with Quote



John Casella stating, "the permit process has to born in technical facts... the integrity of the permit process needs to be maintained..."

Full video available at http://www.youtube.com/user/casellawastedsystems

Exhibit 10

Email From DES Waste Management Director Michael Wimsatt Denying Request For DES Analysis Determining Groundwater Was No Longer Being Polluted at NCES Landfill From: "Wimsatt, Mike" < Michael. Wimsatt@des.nh.gov>

Subject: RE: Regarding DES approval of Casella landfill expansion despite ongoing and recent pollution

Date: September 10, 2010 1:05:02 PM EDT

To: "Seth" <sethhg@rcn.com>

Cc: <governorlynch@nh.gov>, "Burack, Thomas S" <Thomas.Burack@des.nh.gov>, <Katherine.peters@nh.gov>, "Kenison, Karlee" <Karlee.Kenison@des.nh.gov>, "Regan, John" <John.Regan@des.nh.gov>, "Kathleen Taylor"

<kntaylor2@gmail.com>, "Richard Head" <richard.head@doj.nh.gov>, "Wheeler, Wayne"

<Wayne.Wheeler@des.nh.gov>, "Guilfoy, Mike" <Michael.Guilfoy@des.nh.gov>, "Gildersleeve, Paul M."
<Paul.Gildersleeve@des.nh.gov>, "Art McGrath" <amcgrath@salmonpress.com>, "Robert Blech!"

<calrecord@gmail.com>, <editor@nhbr.com>, "Harold Janeway" <harold.janeway@leg.state.nh.us>,

<deb.reynolds@leg.state.nh.us>, <kathleen.sgambati@leg.state.nh.us>, <martha.fullerclark@leg.state.nh.us>,

<jacalyn.cilley@leg.state.nh.us>, <~HouseEnvironmentandAgricultureCommittee@leg.state.nh.us>,

<mbevis@nhpr.org>, <aquinton@nhpr.org>, "Hans Schulz" <hschulz@cmonitor.com>

Dear Mr. Goldstein,

Thank you for your e-mail. You express a number of concerns and pose several questions about the recent approval of the application for permit modification at the NCES Landfill in Bethlehem. I will respond to them in order.

First, you express your concern about approval of the application for permit modification despite "documented, ongoing pollution which is spreading," and that the terms of the Corrective Action Plan have not been met. As you know, in issuing its decision on the application, the Department of Environmental Services also issued a "Response to Public Comment" (RPC) document, which provided the Department's response to the many comments received on this application. A number of commenters did express concerns that there were on-going releases from the facility. The RPC document addresses these comments. The RPC document also provided a discussion of the current status of the Corrective Action Plan (CAP) being implemented pursuant to the Groundwater Release Detection Permit.

Second, you expressed your concern that "new sources of pollution have recently been identified which are not addressed by the CAP." As we discussed on the telephone on August 27, the Department reviewed all of the data available to it at the time it rendered its permit decision. This data included the July 2010 data to which you refer. As you correctly state, the recent (July 2010) detection of bromide above background concentrations in well B901-U is not addressed in the CAP. Per the provisions of the Groundwater Release Detection Permit, NCES will be required to monitor further to confirm the presence of bromide above background and to provide an explanation for its presence. If the condition persists, NCES will be required to identify and remediate the source of the bromide. When I spoke with you on the telephone, it was my understanding that the Department would be issuing a letter to NCES addressing the matter within a week or so. Our staff has instead spoken with a representative of NCES' groundwater consultant, who indicated that the issue will be addressed in its annual groundwater report to the Department, which is due at the end of this month. That report will be available to the public shortly after receipt on DES's OneStop Website.

Regarding the four questions at the conclusion of your letter, the engineering and hydrogeological staff within our solid waste and groundwater programs worked as a team to review the pertinent design modifications and groundwater data. Based upon their input, and in accordance with current law and administrative rules, the Department issued its decision. Pursuant to the rules, that decision was signed by me, as Director of the Waste Management Division. As discussed above, the RPC document discusses in some detail the Department's analysis of the corrective action plan's effectiveness and the basis for the Department's decision. This document speaks for itself, and I will not attempt to elaborate here.

Thank you again for your e-mail and interest in this facility.

Sincerely yours,

Mike Wimsatt

Michael J. Wimsatt, P.G., Director Waste Management Division NH Department of Environmental Services 29 Hazen Drive, P.O. Box 95 Concord, New Hampshire 03302-0095 Tel No. (603) 271-1997 Fax No. (603) 271-2456

e-mail: michael.wimsatt@des.nh.gov

This e-mail and any files transmitted with it are intended solely and exclusively for the use of the persons to whom they are addressed. The information contained in this electronic message and any attached files may be privileged, confidential or otherwise protected by law or regulation. Please notify me at

(603) 271-1997 or reply to michael.wimsatt@des.nh.gov if you believe you have received this e-mail accidentally or in error, and delete or destroy all copies of this electronic message and any attachment or printed copies.

----Original Message----

From: Seth [mailto:sethhg@rcn.com]

Sent: Sunday, September 05, 2010 9:37 AM

To: Seth

Cc: Wimsatt, Mike; governorlynch@nh.gov; Burack, Thomas S; Kathleen.gov; Kenison, Karlee; Regan, John; Kathleen Taylor; Richard Head; Wheeler, Wayne; Guilfoy, Mike; Gildersleeve, Paul M.; Art McGrath; Robert Blechl; editor@nhbr.com; Harold Janeway; deb.reynolds@leg.state.nh.us; kathleen.sgambati@leg.state.nh.us; martha.fullerclark@leg.state.nh.us; <a href="mailto:martha.fullerclark@leg.s

Subject: Regarding DES approval of Casella landfill expansion despite ongoing and recent pollution

Dear Mr. Wimsatt,

As I conveyed to you on August 27th, I am deeply concerned with the State's Environmental Department approving landfill expansion despite documented, ongoing pollution which is spreading (see graph attached below).

The Corrective Action Plan (CAP), set in place to identify and remedy pollution at the landfill is still ongoing, its terms have clearly not been met as of this date. Pollution is still ongoing, and new sources of pollution have recently been identified which are not addressed by the CAP.

I believe the department can not in full confidence state "that the corrections actions that the facility has taken have addressed releases from the facility", as I have read you stating in the press. This statement is clearly premature given the terms of the CAP have not been met. I will again ask you, as I did on Friday August 27, what is the rush?

On August 27 you further explained to me that your department would be publishing a document regarding the recently detected pollution on the south side of the landfill (as indicated by well B901-U, July 14, .5 mg/l bromide). You told me that this information would be available last week. I am eager to see this information so I can better understand why the recently discovered pollution did not play a factor in denying the permit.

In addition, I would greatly appreciate it if you could answer the following questions. I would greatly appreciate a full and detailed response to these questions.

- 1. What group or individual made the determination that the "corrective actions" taken by the facility have "addressed" the releases from the facility?
- 2. Could you please provide to me the technical analysis or report, or notes generated by the department in which the department concluded that the "corrective actions" by Casella have addressed the releases at the facility?
- 3. If the leak detection system has become ineffective due to Casella negligence, does this not violate the terms of Casella's permits?
- 4. If the DES can no longer rely on the leak detection system, and pollution outbreaks are to be allowed by DES, by what system is the DES able to assure protection of the environment and health of the community?

Thank you for your time and consideration.

Sincerely, Seth Goldstein

Exhibit 11 Methane Gas Testing

| Weekly g | as pi | obes |
|----------|-------|------|
|----------|-------|------|

| Date 10/15/10 Time 10:26 11:10 Temperature (°F) 45.2 45.2 Barometric Pressure 27.74 27.7 Device ID Date/Time CH4 CO2 O2 Balance NCMW102D 10/15/2010 10:26 0 5.2 15.5 79.3 NCESGP04 10/15/2010 10:28 0 0.4 19.3 80.3 NCESGW1 10/15/2010 10:29 0.2 1.1 20.3 78.4 NCESSGW2 10/15/2010 10:30 9.4 15.8 11.3 63.5 NCESSGW3 10/15/2010 10:30 46.2 40 0.3 13.5 | |
|---|---|
| Temperature (°F) | |
| Barometric Pressure 27.74 27.7 Device ID Date/Time CH4 CO2 O2 Balance NCMW102D 10/15/2010 10:26 0 5.2 15.5 79.3 NCESGP04 10/15/2010 10:28 0 0.4 19.3 80.3 NCESSGW1 10/15/2010 10:29 0.2 1.1 20.3 78.4 NCESSGW2 10/15/2010 10:30 9.4 15.8 11.3 63.5 NCESSGW3 10/15/2010 10:30 46.2 40 0.3 13.5 | |
| Device ID Date/Time CH4 CO2 O2 Balance NCMW102D 10/15/2010 10:26 0 5.2 15.5 79.3 NCESGP04 10/15/2010 10:28 0 0.4 19.3 80.3 NCESSGW1 10/15/2010 10:29 0.2 1.1 20.3 78.4 NCESSGW2 10/15/2010 10:30 9.4 15.8 11.3 63.5 NCESSGW3 10/15/2010 10:30 46.2 40 0.3 13.5 | |
| NCMW102D 10/15/2010 10:26 0 5.2 15.5 79.3 NCESGP04 10/15/2010 10:28 0 0.4 19.3 80.3 NCESSGW1 10/15/2010 10:29 0.2 1.1 20.3 78.4 NCESSGW2 10/15/2010 10:30 9.4 15.8 11.3 63.5 NCESSGW3 10/15/2010 10:30 46.2 40 0.3 13.5 | |
| NCMW102D 10/15/2010 10:26 0 5.2 15.5 79.3 NCESGP04 10/15/2010 10:28 0 0.4 19.3 80.3 NCESSGW1 10/15/2010 10:29 0.2 1.1 20.3 78.4 NCESSGW2 10/15/2010 10:30 9.4 15.8 11.3 63.5 NCESSGW3 10/15/2010 10:30 46.2 40 0.3 13.5 | |
| NCESGP04 10/15/2010 10:28 0 0.4 19.3 80.3 NCESSGW1 10/15/2010 10:29 0.2 1.1 20.3 78.4 NCESSGW2 10/15/2010 10:30 9.4 15.8 11.3 63.5 NCESSGW3 10/15/2010 10:30 46.2 40 0.3 13.5 | |
| NCESSGW1 10/15/2010 10:29 0.2 1.1 20.3 78.4 NCESSGW2 10/15/2010 10:30 9.4 15.8 11.3 63.5 NCESSGW3 10/15/2010 10:30 46.2 40 0.3 13.5 | |
| NCESSGW2 10/15/2010 10:30 / 9.4 \ 15.8 11.3 63.5 NCESSGW3 10/15/2010 10:30 / 46.2 40 0.3 13.5 | |
| NCESSGW3 10/15/2010 10:30 / 46.2 40 0.3 13.5 | |
| | |
| | |
| NCESSGW4 10/15/2010 10:31 46.2 40.6 0 13.2 | |
| NCESSGW5 10/15/2010 10:32 11.6 / 15.2 14.1 59.1 | |
| NCESSGW6 10/15/2010 10:32 \(18,\) 33.1 0.2 47.9 | |
| NCEMW603 10/15/2010 10:35 0 2.4 17.4 80.2 | |
| NCESGP11 10/15/2010 10:35 0 1.7 18 80.3 | |
| NCESGP12 10/15/2010 10:37 0 4.1 14.2 81.7 | |
| NCESGP13 10/15/2010 10:38 0 3.1 17.3 79.6 | |
| NCESGP14 10/15/2010 10:39 0 8.5 12.4 79.1 | |
| NCESGP15 10/15/2010 10:41 0 4.6 15.2 80.2 | |
| NCESGP8A 10/15/2010 10:42 0 6.3 10.2 83:5 | |
| NCESGP02 10/15/2010 10:44 0 4.1 14 81.9 | |
| NCEMW401 10/15/2010 10:45 0 4.8 12 83.2 | |
| NCESGP07 10/15/2010 10:46 0 0.5 19.6 79.9 | |
| NCMW102D 10/15/2010 10:50 0 2,6 18.7 78.7 | |
| NCESGP04 10/15/2010 10:52 0.1 20.2 79.7 | |
| NCESSGW1 10/15/2010 10:54 / 31.8 21.6 0.5 46.1 | • |
| NCESSGW2 10/15/2010 10:55 47 33.1 0 19.9 | |
| NCESSGW3 10/15/2010 10:55 46.9 39 0 14.1 | • |
| NCESSGW4 10/15/2010 10:56 46.8 39.5 0 13.7 | |
| NCESSGW5 10/15/2010 10:57 \ 36.5 \ 46.5 \ 0 \ 17 | |
| NCESSGW6 10/15/2010 10:57 \15.7 30.2 0 54.1 | |
| NCEMW603 10/15/2010 10:59 0 2.5 17.4 80.1 | |
| NCESGP11 10/15/2010 11:00 0 1.8 18 80.2 | |
| NCESGP12 10/15/2010 11:01 0 4.1 14.5 81.4 | |
| NCESGP13 10/15/2010 11:02 0 1.4 19.2 79.4 | • |
| NCESGP14 10/15/2010 11:04 0 2.4 19.1 78.5 | |
| NCESGP15 10/15/2010 11:06 0 4.9 15.3 79.8 | |
| NCESGP8A 10/15/2010 11:07 0 6.7 9.7 83.6 | |
| NCESGP02 10/15/2010 11:08 0 4.2 13.9 81.9 | |
| NCEMW401 10/15/2010 11:09 0 5 11.9 83.1 | |
| NCESGP07 10/15/2010 11:10 0 0.5 19.7 79.8 | |

Notes

1. Each monitoring well and gas probe was monitored for CO2, O2, and CH4 using a Landtec Gem-2000 Gas Extraction Monitor. Calibration was checked daily. Monitoring procedures consisted of recording any gas levels during the first 1 to 2 minutes that the well/probe was opened and a second reading after a minimum of 20 minutes open venting.

Exhibit 12 DES Response to Questions by Appellants

STATE OF NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES WASTE MANAGEMENT COUNCIL

DOCKET NO/ 10-22-WMC

APPEAL OF SETH GOLDSTEIN, JANE BEAULIEU, DEBRA PAYNE, JOYCE MENARD, PETER MENARD AND BETTY SMITH

RESPONSES OF THE DEPARTMENT OF ENVIRONMENTAL SERVICES TO THE APPELLANT'S INFORMATION REQUESTS

In an email to Michael Wimsatt, Division Director, dated November 8, 2010, Appellant Seth Goldstein made the following requests for information pursuant to Env-Wmc 205.03(b). The Department, by and through its attorneys, the Office of the Attorney General, responds to the information requests in *Italic* type face below.

- 1. NCES Facility Monthly Reports 2006 through 2010 indicate that six wells are producing methane levels approaching 50%. Enough methane to run a power generator. In order for methane to reach the underground methane detection system, it must pas through (sic);
- a) a primary liner system,
- b) a gas collection system designed to collect all methane,
- c) a leachate collection system,
- d) a secondary liner system.

What is DES's explanation for this data/activity/leakage? Please cite specifically any tests, data and analyses done by DES to determine the reason for the presence of elevated levels of landfill gas/methane in the gas probe readings, and the environmental impact of high levels of methane.

The Department objects to this request because the question is not a request for information and is instead a request for the Department to conduct an investigation and provide an analysis, which is not the intended scope of information requests and is excessively burdensome to produce. The Department also objects because the request is not directly related to the matter at hand.

Without waiving the objections, the methane gas levels detected in the gas monitoring wells located beneath the primary and secondary liners are attributed to gas porosity and minor imperfections in the liner systems that are typical for such systems. The sampling of the wells is not an element of the Corrective Action Plan. The levels detected do not indicate any known violation of law or permit conditions. See Env-Sw 806.08(e) and 806.07(b).

2. Please provide a detailed explanation and scientific analysis used by DES to determine methane leaks below Stage III do not violate environmental regulations including the federal Clean Air Act and NH state regulations of methane.

The Department objects to this request because it is not directly related to the matter at hand. See response to Question 1 above.

3. Has DES imposed a Corective Action Plan on NCES and ordered compliance with it to remedy this situation? if not, why not? (sic)

See responses to questions 1 and 2. The Corrective Action Plan in place now only deals with groundwater contamination issues.

4. In a phone conversation with Mr. Seth Goldstein, DES engineer, Mr. Michael Guilfoy claimed that it is not problematic for methane gas to permeate past the landfills liner system, leachate system and gas collection system "because methane molecules are so small." What evidence has DES obtained to support this assertion, (e.g. liner performance specifications indicating methane gas permeability at levels reported in NCES' monthly facility monthly reports)?

See responses to questions 1 and 2 above. Without waiving the objections, the Department submits certain materials in response attached hereto as Exhibit Q4 and refers the Appellant to: Robert M. Koerner, Designing with Geosynthetics (Prentice Hall 4th ed.).

- 5. Is there a Corrective Action Plan in place that will identify the source of the pollution at B901U? if not, why not?
- No. Assessment monitoring is being conducted at this well to determine the presence of bromide. Bromide, however, is not a pollutant.
- 6. Has DES required that NCES provide VOC test results for B901U and B902U? if not, why not?

Yes.

7. What VOC tests for B901U and B902U is NCES required to provide as a condition of NCES' groundwater permit?

The Permit requires the operator to conduct a battery of VOC tests at the wells April and November of every year.

8. In October, 2010, all wells were tested for VOC's except wells B901U and B902U. What are the reasons for this and is there any governing regulation that allows this omission?

Under the permit conditions, the operator is not required to sample every well at the same sampling intervals. Not all wells were sampled in the October round for VOCs pursuant to the permit conditions.

9. How does the department determine the presence or absence of VOC pollution in the B901U and B902U wells without obtaining VOC testing data?

See answer to Question 6.

10. NHDES has claimed it has the authority to issue a permit before the Waste Management Council hearing November 18, and/or before the WMC makes a decision on the appeal. Please provide the legal and regulatory basis for DES's position, by reference number and text.

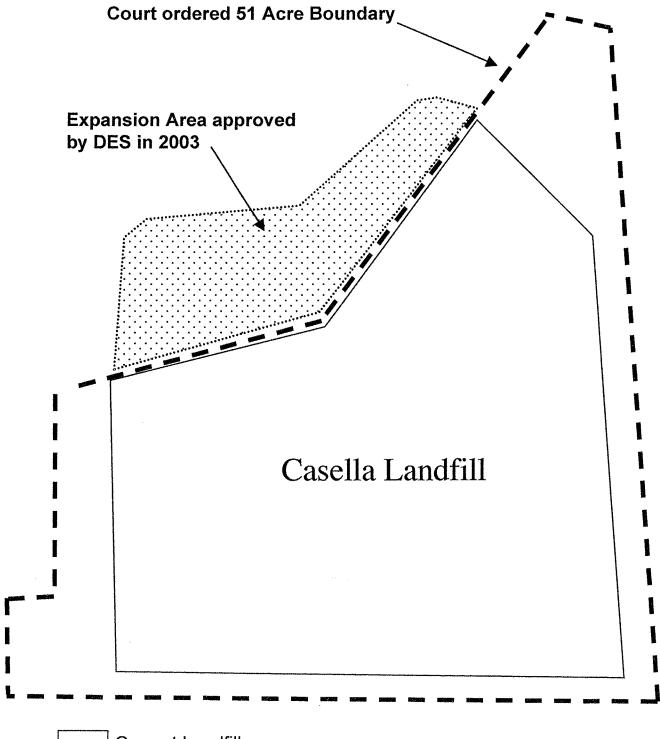
The permit was issued May 13, 2003. A modification was allowed on August 27, 2010. The August 27, 2010 modification is presumably the subject of this appeal. No stay has been issued and the Department can proceed to approve a type II modification for the final construction plans and specifications as requested by the operator should it find the plans and specifications satisfactory and complete.

11. Please provide the scientific basis, and any related technical analysis, notes, supporting material for NHDES' conclusion that support the Department's assertion that the "corrective actions" by Casella have addressed releases at the facility?

The Department objects to this question as excessively burdensome to produce. The consideration of the Corrective Action Plan goes back several years and includes many and voluminous documents. These documents are all publically available through the Department's OneStop web based document access system. Without waiving the objection, the Department provides herewith Exhibit Q11 which is a spreadsheet showing many of the documents located on the site and available to the Appellants through the internet.

Exhibit 14
Map of area DES approved outside 51 acres in 2003

DES 2003 expansion approval outside 51

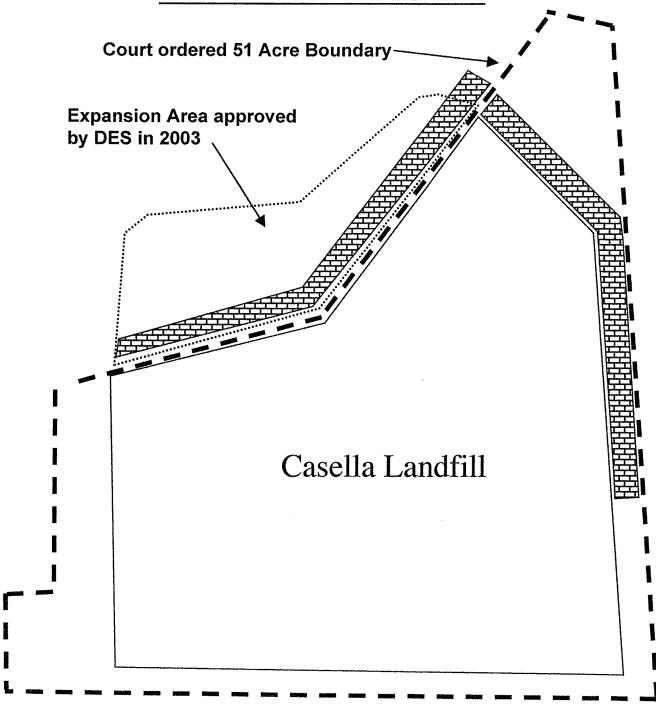


Current Landfill

Stage IV (DES approved 2003 outside 51acres)

Exhibit 15 Map of 2008 Berm proposal outside 51 acres

Casella 2008 Expansion Proposal Berm Outside 51 Acre Limit



Current Landfill

Berms

Exhibit 16 Map of approved design with leachate line outside 51 acres

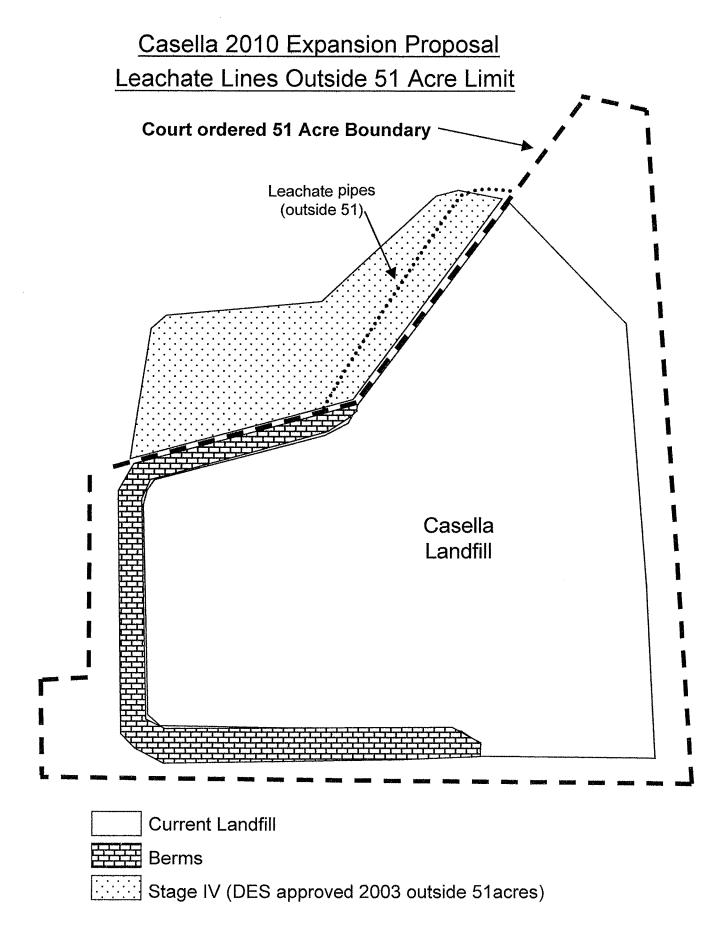


Exhibit 17 DES letter regarding 51 acre boundary

NHDES

The State of New Hampshire

DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner



September 7, 2007

Eugene J. Martin, Senior Project Manager Permits, Compliance & Engineering North Country Environmental Services, Inc. 3 Pitkin Court Montpelier, Vermont 05602

Re: Solid Waste Management Facility Standard Permit No. DES-SW-SP-03-02
Application for Type I-B Permit Modification

Dear Mr. Martin:

The purpose of this letter is to request additional information about the abovereferenced application for a Type I-B modification to Standard Permit issued for Stage IV of the North Country Environmental Services, Inc. solid waste facility in Bethlehem, New Hampshire.

Section VII of the application form requires a statement of all other permits or approvals necessary to complete a proposed modification to a permitted solid waste facility. The NCES application lists four permits issued by the Department of Environmental Services (DES). It lists no approvals or permits from the Town of Bethlehem. Attachment A of the application refers to the New Hampshire Supreme Court's 2004 decision on the extent to which local approvals are necessary for landfill expansion. The attachment also references the pending litigation on the validity of the Town of Bethlehem's ordinance prohibiting the construction or expansion of a privately owned landfill. DES is also aware of the 2001 Supreme Court decision that the local ordinances prohibiting the expansion of privately owned landfills do not apply to NCES's operations within the boundaries of a 10 acre and a 41 acre assemblage within its ownership.

In light of the Supreme Court decisions on local authority over landfill expansion, DES requires additional information on the location of proposed landfill facilities in relation to the 10 acre and the 41 acre lots. DES also requires additional information on the applicability of the Town's 1992 ordinance prohibiting private landfills and whether issuance of a state permit would be inconsistent with existing local authorities, as interpreted by the Supreme Court. Accordingly, DES requests that NCES submit the following additional information:

 A plan depicting the locations of all landfill facilities proposed in Stage IV, Phase II in relation to the boundaries of the 10 acre and 41 acre parcels within the Trudeau Road property. Eugene J. Martin, Senior Proj Manager North Country Environmental Curvices, Inc. September 7, 2007 Page 2 of 2

 If any of the proposed facilities are located outside of the boundary of the combined parcels totaling 51 acres, an explanation of the applicant's basis for constructing landfill facilities or conducting landfill operations beyond the 51 acre perimeter, including reference to controlling Supreme Court precedent.

DES will defer further permit proceedings on the Type I-B application pending submission and assessment of this additional information. The agency will assess the NCES response to determine whether the application demonstrates that the company has the legal right to use all of the property where the landfill facilities are proposed to be located. As it is unlikely that submission and DES assessment of the requested information can occur before the public hearing that is currently scheduled for September 18, 2007, DES has decided to postpone the public hearing.

DES will notify interested parties that the September 18, 2007 public hearing has been cancelled. DES will also keep the applicant and interested parties apprised of the status of its review of the application.

Thank you for your prompt attention to this matter.

Sincerely,

Michael J. Wimsatt, P.G.

Director

Waste Management Division

cc: Town of Bethlehem, Board of Selectmen

Brenda E. Keith, Esquire

Bryan K. Gould, Esquire

| Exhibit 18 | | | | | | | |
|-------------------------|----------------------|---------------------|-----------------------|--|--|--|--|
| Letter from Town | Council notifying DI | ES of 51 acre zonin | g and Courts findings | | | | |



Brenda E. Keith

*Admitted only in CT, DC and NY

NH DEPT OF ENVIRONMENTAL SERVICES

August 8, 2007

AUG -9 2007

RECEIVED

Wayne A. Wheeler, P.E.
Department of Environmental Services
Solid Waste Management Bureau
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Via USPS & E-mail

Re:

North Country Environmental Services, Inc.'s Stage IV, Phase II Modification Permit Application

Dear Wayne:

Enclosed and attached is the Town of Bethlehem's Engineer's report on his review of the applicant's modification permit. Please note that the Engineer, Tom Roy, must still review the 66-page revisions made last week as a result of the DES' notification on July 13, 2007 that the application was deemed incomplete.

I draw to the DES' attention the fact that some of the improvements, as designed, are outside of the 51 acres in Bethlehem currently zoned and approved for a privately owned landfill. Given that the 2003 Supreme Court case, North Country Environmental Services v. Town of Bethlehem, 150 N.H. 606 (2004), rejected the applicant's contention that the State preempts local regulation of landfills, and given that the Court has held that the applicant only has local approval for improvements within the 51 acres, I expect that the DES will take note that NCES needs Town (or court) approval to construct anything outside the 51 acres.

The Town and NCES are headed back to Grafton County Superior Court in October for trial on several remaining land use issues. Currently, given that NCES cannot construct any improvements outside of the 51 acres without further local approval—and given that this current design places part of the REB outside of the 51 acres, I request on behalf of the Town, that the DES delay issuing any construction permits or approvals until after the Grafton County Superior Court decides the case.

BOUTIN ALTIERI, PL.L.C.

Wayne A. Wheeler, P.E. August 8, 2007 Page 2

Please do not hesitate to contact me if you have any questions.

Sincerely,

c. Clients
Tom Roy
Thomas Burack, Commissioner
Bryan Gould
File

Exhibit 19 Letter from Selectman to DES regarding 51 acre zoning

Town of Bethlehem

2155 MAIN \$TREET • POST OFFICE BOX 189 • BETHLEHEM, NEW HAMPSHIRE 03574 603-869-3351/ 869-2042 fax 603/869-2260 email tobalth@adelphia.net

Mr. Michael J. Wimsatt, P.G. Director, Waste Management Division NHDES PO Box 95 29 Hazen Drive Concord, NH 03302-0095

October 2, 2007

Dear Director Wimsatt,

The Bethlehem Board of Selectmen would like to take this opportunity to acknowledge your consideration of legal issues that are relevant to NCES' current Type I B Modification to Standard Permit for Stage IV of the Trudeau Road solid waste facility.

In prior permitting, DES was reluctant to consider the legal issues between the Town and NCES, and we thank you for acknowledging the fact that NCES does not have local approval to expand beyond the 10 acre and 41 acre parcels of their Trudeau Road facility. We also thank you for pausing to consider whether or not issuance of this permit would be inconsistent with existing local authorities, as interpreted by the Supreme Court.

On behalf of the people of the Town of Bethlehem, the Select Board would like to thank the current leadership at DES that has initiated this change. The Town remains hopeful that DES will continue to scrutinize the permitting process and reflect on issues regarding the NCES facility, both legal and environmental, that impact our community and our future. Specifically, we ask the DES to review the town's engineering firm's evaluation of the permit, and draw to your attention to Mr. Roy's comments on Page 11, ¶ 8, wherein he recommends that a DES New Hampshire-licensed geotechnical engineer should evaluate the application. If the DES does not have such a staff engineer, then Mr. Roy has suggested that DES should retain an independent geotechnical engineer to evaluate the permit application.

Thank you again.



Co:

Governor John Lynch
DES Commissioner Thomas Burack
Representative Martha McLeod
Wayne Wheeler, DES



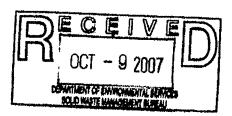


Exhibit 20 Email exchange regarding NCES incorrect testing procedures

Kenison, Karlee

From: John Schwalbe [John.Schwalbe@CASELLA.COM]

Sent: Friday, September 24, 2010 9:51 AM

Cc: Regan, John; Kenison, Karlee

Subject: Re: Bethlehem - NCES Landfill DES #198704033 - Elevated Bromide Concentrations

Karlee,

This E-Mail confirms our discussion that NCES will perform the additional assessment monitoring requested by the Department as outlined below during the October sampling period.

John

John Schwalbe---09/22/2010 01:52:19 PM---Karlee, Thanks for the E-Mail. I have been travelling this week and have not received your phone me

From: John Schwalbe/CASELLA WASTE SYSTEMS INC/US

To: "Kenison, Karlee" < Karlee. Kenison@des.nh.gov>

Cc: "Regan, John" < John.Regan@des.nh.gov>

Date: 09/22/2010 01:52 PM

Subject: Re: Bethlehem - NCES Landfill DES #198704033 - Elevated Bromide Concentrations

Karlee.

Thanks for the E-Mail. I have been travelling this week and have not received your phone message. I will be in my office tomorrow and will call then

Thanks

John

From: "Kenison, Karlee" [Karlee.Kenison@des.nh.gov]

Sent: 09/22/2010 01:48 PM AST

To: John Schwalbe

Cc: "Regan, John" < John.Regan@des.nh.gov>

Subject: Bethlehem - NCES Landfill DES #198704033 - Elevated Bromide Concentrations

John.

This is a follow-up to my phone message of yesterday morning regarding the detection of bromide at a concentration of 0.5 mg/L in the groundwater sample from well B-901U collected during the July 14, 2010 sampling event. As indicated in the phone message, the concentration of 0.5 mg/L represents an increase from the established background concentration at this well, therefore NCES is subject to the requirements of Env-Or 703.13 (d) and Env-Or 703.14 (see requirement under Condition #10 of Groundwater Management and

Release Detection Permit No. GWP-198704033-B-005). The Department expects that assessment monitoring at B-901U will commence with the next planned monthly sampling event (October 2010) to verify the July 2010 results. If the presence of bromide above background is confirmed, assessment monitoring shall continue. After collection of the regular November 2010 Groundwater Management and Release Detection Permit sampling round (which will include analysis for Volatile Organic Compounds (VOCs), chloride, nitrate, COD, TKN and dissolved iron/manganese), the Department expects an assessment of the detects above background will be made and reported to the Department along with recommendations based on that assessment (due with the November 2010 sampling data submission). Going forward, the Department expects that any future detects above background concentrations in any site release detection well will be reported and assessment monitoring initiated in accordance with Condition #10 of Groundwater Management and Release Detection Permit GWP-198704033-B-005 and Env-Or 703.13 (d) (1) and (2).

Also, as indicated in my phone message, in the August 2010 analytical data set, as provided to the Department on September 13, 2010 (dated September 8, 2010) by Sanborn, Head & Associates on behalf of NCES, an increase of bromide concentrations at B-103S and B-103D is indicated (concentrations of 0.3 mg/L and 0.4 mg/L, respectively). This increase above the previously reported concentration of < 0.1 mg/L for both wells warrants additional tracking under the previously established monthly assessment monitoring mode.

This email will become a part of the record to document the Department's request for additional assessment monitoring.

Karlee Kenison, P.G. Site Remediation Programs Waste Management Division/NHDES P.O. Box 95, 29 Hazen Drive Concord, NH 03302-0095 Phone: (603) 271-6542

Fax: (603) 271-2181

E-mail: karlee.kenison@des.nh.gov

This e-mail has been scanned by MCI Managed Email Content Service, using Skeptic(tm) technology powered by MessageLabs. For more information on MCI's Managed Email Content Service, visit http://www.mci.com.

Exhibit 21 Water Purging Data

Groundwater Quality Field Sampling Summary



Project Number: 2637.03 Date: March 17-18, 2009

Project Name: North Country Environmental Services, Inc.

Project Location: Bethlehem, New Hampshire

pH Meter: Hanna (SH-2) Project Manager: P. Rydel

Conductivity Meter: Hanna (SH-2) Collector(s): D. Porter

Water Level Meter: Slope (#8) Weather: P. Cloudy, 30s-40s °F

Other:

Field Measurements

| | | rieid Meas | игешентѕ | | | | |
|----------------------------------|---------------------|---------------------|------------------------------|------------------------------|---------------------------------|---------------------|---------------------------------|
| Sampling Location | B-304UR | MW-402U | MW-403L | B-913M | B-919U | B-921U | B-921M |
| Reference Point | PVC | PVC | TOC | PVC | PVC | PVC | PVC |
| Reference Point Elevation (feet) | 1338.44 | 1329.34 | 1340.22 | 1341.77 | 1344.27 | 1341.72 | 1341.82 |
| Depth to Water (feet) | 47.91 | 15.84 | 36.49 | 39.04 | 38.51 | 35.11 | 40.27 |
| Water Table Elevation (feet) | 1290.53 | 1313.50 | 1303.73 | 1302.73 | 1305.76 | 1306.61 | 1301.55 |
| Depth to Bottom (feet) | 50 | 30 | 73 | 89.4 | 50 | 40 | 80.0 |
| pH (standard units) | 6.2 | 6.2 | 6.2 | 6.6 | 5.9 | 5.6 | 7.2 |
| Specific Conductance (μS/cm) | 240 | 550 | 180 | 500 | 170 | 250 | 160 |
| Temperature (°C) | 10.0 | 8.0 | 9.4 | 12.7 | 10.1 | 12.5 | 12.6 |
| Date of Sample | 18-Mar | 17-Mar | 17-Mar | 17-Mar | 18-Mar | 17-Mar | 17-Mar |
| Sample Time | 1000 | 0900 | 0940 | 1630 | 1050 | 1115 | 1410 |
| Gallons Purged | 3 | 5 | 15 | (89)* | (22) ¥ | 5 | (67)** |
| Purge/Sample Device | Dedicated Bailer | Dedicated Bailer | Dedicated Bladder Pump | Dedicated Bladder Pump | Whale Pump and Dedicated Bailer | Dedicated Bailer | Whale Pump and Dedicated Bailer |
| Comment Reference Number | 1 | 1 | 2 | 3 | 5 | 1 | 4 |

Comments

- 1. A minimum of three well volumes of groundwater were purged using a dedicated bailer prior to obtaining a groundwater sample.
- 2. A minimum of three well volumes of groundwater were purged using a dedicated bladder pump prior to obtaining a groundwater sample.
- 3. A minimum of ten well volumes of groundwater were purged using a dedicated bladder pump prior to obtaining a groundwater sample. Pumping rate was approximately 5-6 minutes per gallon. All purge water was disposed of near the well because of access difficulties.
- 4. A minimum of ten well volumes of groundwater were purged using a new 12 Volt submersible Whale pump prior to obtaining a groundwater sample using a dedicated polyethylene bailer. Pumping rate was approximately 0.8-1.2 gallons per minute. All purge water was disposed of in the Stage IV Leachate tank.
- 5. A minimum of ten well volumes of groundwater were purged using a new 12 Volt submersible Whale pump prior to obtaining a groundwater sample using a dedicated polyethylene bailer. The well purged dry after purging approximately 7 gallons and pumped several times during approximately 2 hours of recharge. All purge water was disposed of in the Stage IV Leachate tank.

Exhibit 22 DES Press release regarding groundwater pollution

<u>DES Home</u> > <u>Media Center</u> > Media Center > Media Center FOR IMMEDIATE RELEASE: _DATE: March 9, 2011_CONTACT: Jim Martin, 603 271-3710 Paul Susca, (603) 271-7061

Homeowners: Protect Your Wells

Concord, NH – Homeowners in New Hampshire are being urged to take action to make sure the groundwater that serves their water needs is clean and safe to use. The New Hampshire Department of Environmental Services encourages residents to be proactive. Nearly 60 percent of New Hampshire residents rely on groundwater for their drinking water.

Groundwater is not often in the forefront of people's minds. It is easy to forget about groundwater. After all, by its nature, it is underground and out of sight. However, groundwater is susceptible to pollution from a variety of sources. It can take many years for pollution to be found in groundwater. And, it can take many more years for the pollution to be cleaned up, if it gets cleaned at all.

How do you know if your well is polluted? Don't rely on your neighbors! Even if your neighbors' wells are clean, that does not mean that yours will be, too. Have your well water tested every three to five years for most tests, but test every year for bacteria and nitrates.

You can also do your part to make sure groundwater remains clean and safe to drink. Do you have an old well on your property? If you do, have the well decommissioned. This means that the well is sealed by being filled with grout, cement, or other clean fill, depending on the type of well that is being decommissioned. Contact a water well contractor for details or read the DES fact sheet WD-DWGB-1-7, "Maintenance of Inactive Wells and Decommissioning of Abandoned Wells." Go to www.des.nh.gov to find the fact sheet, or use a search engine to search for "decommissioning wells nh."

Another way to protect groundwater is to properly maintain your existing well. Make sure the top of the well is at least eight inches above the ground surface. Check your well cover to make sure no holes or cracks are visible and the cover is secured to the casing. Make sure the electrical conduit exiting the well cover is secured to the cover. If your home has a dug well, inspect the concrete cover and tiles for holes or cracks. Dug wells should have a concrete cover that is difficult to remove by virtue of its weight to prevent children or unauthorized persons from gaining access to the well. Read more at http://des.nh.gov/media/pr/2010/20100308.htm.

For additional information about wells, read DES fact sheets at www.des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm.