



TRANSMITTAL

DATE: January 6, 2015
RE: 2010-015
TO: Brett Rand
NH Department of Environmental Services
FROM: George C. Holt, P.G.
Aries Engineering, Inc.

VIA: Mail Express Pickup Electronic Submittal

QUANTITY	ITEM	DESCRIPTION
1	Document	Type1-B Modification Supporting Documents Closed Bethlehem Municipal Landfill NHDES Site No. 198400057 Project No. 6

This document is being submitted electronically to the Department of Environmental Services. Three original copies are being submitted to the NHDES Permitting & Design Review Section along with a check in the amount of \$100.00 made payable to Treasurer, State of New Hampshire.

cc: April Hibberd, Town of Bethlehem
NHDES Permitting & Design Review Section (3 original copies)

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

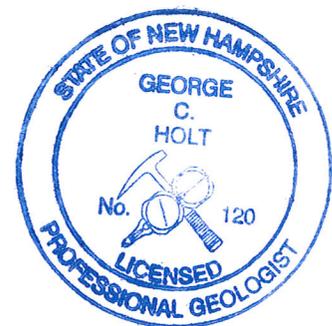
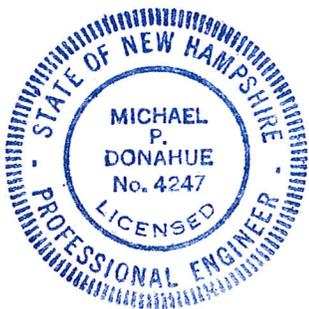
TYPE 1-B MODIFICATION SUPPORTING DOCUMENTS
Closed Bethlehem Municipal Landfill
Prospect Street
Bethlehem, New Hampshire

NHDES Site No. 198400057
Project Type: Landfill
Project Number: 6

Prepared for:
Town of Bethlehem
Board of Selectman
2155 Main Street, PO Box 189
Bethlehem, NH 03574-0189
Phone Number: (603) 869-3351
Contact Name: April Hibberd
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Prepared by:
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Date of Report: December 2014
File No. 2010-015




Michael P. Donahue, P.E.
Principal Engineer


George C. Holt, P.G.
Senior Hydrogeologist

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INSTRUCTIONS
for obtaining a

Type I Modification To Solid Waste Management Facility Permit

pursuant to
RSA 149-M and New Hampshire Administrative Solid Waste Rule Env-Sw 315

Read these instructions before completing the attached form. For additional assistance contact the NH Department of Environmental Services (DES), Permitting & Design Review Section (P&DRS) at (603) 271-2925 or the below noted mailing address or TDD Access: Relay NH 1-800-735-2964.

Note: All references on this form beginning with “Env-Sw” are citations from the New Hampshire Solid Waste Rules. To obtain a copy of the Rules, contact the DES Public Information & Permitting Office at (603) 271-2975 or above noted TDD Access. The Rules are also available on the Internet at <http://www.des.nh.gov/rules>.

Complete the attached form to obtain either a “type I-A” or “type I-B” permit modification pursuant to Env-Sw 315.02(b) or (c), respectively. **Before completing the form, be certain the proposed facility modification falls within the definition of either a type I-A or type I-B modification.** [If unfamiliar with how to make this determination, refer to the worksheet on the reverse side of this instruction sheet and/or contact the P&DRS for assistance.]

All requested information must be provided as specified. Do **NOT** skip any question, unless instructed to do so. Do **NOT** mark any question “not applicable.” If you need more room than provided on the form to answer a particular question and are using a paper copy of the form, attach additional pages as necessary; mark each page clearly to show both the applicant name and the question being answered; and indicate on the form that the additional pages are attached.

Submit **THREE** copies of the completed form, **EACH bearing ORIGINAL signatures**. Applications may be submitted to the department electronically. If an applicant chooses to submit an application electronically, a single paper copy of the application shall also be submitted to the department to the following address:

NH Department of Environmental Services (DES)
Waste Management Division (WMD)
Permitting & Design Review Section (P&DRS)
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095

Include the required fee, as determined from the following table. Make checks or money orders payable to “TREASURER, State of New Hampshire”:

Type I-A Modification, without a capacity increase	\$1500
Type I-A Modification, with a capacity increase	See Env-Sw 310.07(a)(2) for formula to calculate or contact the P&DRS for assistance, at (603) 271-2925
Type I-B Modification	\$100

Your application will be processed by DES in accordance with Env-Sw 304 and Env-Sw 305. If your application is correctly filed (i.e., you submit the right number of copies, each with original signatures, and the required fee), your application will be accepted for processing. Within 60 days of receipt, and earlier whenever possible, you will be notified whether the application is complete (i.e., whether the application provides all information required to support a full technical review and determine whether the proposed modification meets all requirements of the Rules). If incomplete, you will be given instructions for correcting the deficiencies. If complete, you will be notified in writing and the agency will undertake a technical review of the application to determine whether the proposal meets all requirements of the Rules. In addition, for certain type I-A modifications, the agency must also hold a public hearing within the host municipality during the technical review process. Following the close of the technical review process and the hearing, if held, DES will make a final decision to issue or deny the requested modification. You will be notified in writing, as will the host municipality and host solid waste management district.

WORKSHEET FOR DETERMINING MODIFICATION TYPE

STEP 1: In order to correctly use and complete the attached application form, you must first confirm that your proposed facility modification is a "type I" modification (as opposed to being either a "type II" through "type V" modification). If your response to each of the following questions is "FALSE," your proposed facility modification most likely falls within the scope of a "type I" modification:

True False The proposed change is required by a condition of my permit which requires me to submit final plans for DES approval based on preliminary plans provided to DES on an earlier date. (Note: If this statement is "TRUE," your proposed modification is most likely a "type II" modification and you need to file your application by completing a "Type II Permit Modification Application Form.")

True False The proposed change is one of the following **AND** I am able to certify compliance with each of the statements provided in Section X of this application form:

— A change in facility operating hours between the hours of 6 AM and 6 PM or within alternative limits specified in my permit, or for a private facility managing only on-site generated waste, within limits allowed by local ordinance.

— A change in a key above-ground site feature, for instance a facility structure or appurtenance, which will not alter the permitted function(s) of the facility, change the basis of the approved facility design or violate any applicable siting criteria specified in the Rules, and which is merely a change to improve facility operations within the limits specified in my permit.

— For a facility permitted to collect recyclable materials, a change in the type of select recyclable materials (paper, cardboard, glass, plastic, metal or textiles) to be collected which does not increase the facility's approved storage capacity or require a change in the approved financial assurance plan of record for the facility.

— For landfills, a change in the type of cover material to be used at the facility, pursuant to Env-Sw 806.03.

— A name change for the permittee or facility that does not constitute a change in ownership or operational control of the facility.

— A change in organizational structure, including a change in the individuals/entities holding 10% or more of the permittee's equity or debt and/or a change in officers, directors, partners or key employees, that does not constitute a change in ownership or operational control of the facility.

(Note: If you respond "TRUE" to the above statement, your proposed modification is most likely a "type III" modification and you need to file your application by completing a "Type III Permit Modification Application Form.")

True False The proposed change is to transfer my permit or otherwise authorize a change in the ownership or operational control of the facility. (Note: If you respond "TRUE" to this statement, your proposed modification is most likely a "type IV" modification and you need to file your application by completing a "Type IV Permit Modification Application Form.")

True False The proposed change is to authorize the destruction or relocation of facility records. (Note: If you respond "TRUE" to this statement, your proposed modification is most likely a "type V" modification and you need to file your application by completing a "Type V Permit Modification Application Form.")

STEP 2: If your response to each of the above is "FALSE," you may assume that the proposed modification is a type I modification. You must now determine whether the proposed change is a "type I-A" or "type I-B" modification, as defined by Env-Sw 315.02(b) or (c).

A "type I-A" modification is one that will change facility operations in a manner having the potential to adversely affect the state's ability to establish and maintain an integrated system of facilities which: (1) will assist in achieving the waste reduction/recycling goals in RSA 149-M:2; (2) is consistent with the hierarchy in RSA 149-M:3; and (3) will provide a substantial public benefit pursuant to RSA 149-M:11. Therefore, if any of the following statements are TRUE relative to the change you are proposing at your facility, the change falls within the definition of a "type I-A" modification.

True False The proposed modification will increase the approved design capacity of the facility.

True False The proposed modification will extend the expiration date of the permit.

True False The proposed modification will reduce the operating life expectancy of a NH landfill without a comparable reduction in the permitted capacity of the landfill, as by directly or indirectly increasing the quantity of waste which will be received daily at a New Hampshire landfill.

True False The proposed modification will expand the permitted service area of the subject facility.

True False The proposed modification will change the subject facility service type from a "limited service" area facility (one which can accept waste from only certain sources specified in the permit) to an "unlimited service" area facility (one which can accept waste from any source).

True False The proposed modification will change facility operations to include a waste management method less preferred in the RSA 149-M:3 hierarchy. The methods, in order of descending preference as specified in RSA 149-M:3 are: source reduction; recycling and reuse; composting; waste-to-energy technologies (including incineration); incineration without resource recovery; and landfilling.

If you answer "FALSE" to each of the above statements, your proposed modification is most likely a "type I-B" modification, i.e., a modification which is unlikely to have an adverse effect on the state's ability to establish and maintain an integrated system of facilities which (1) will assist in achieving the waste reduction/recycling goals in RSA 149-M:2; (2) is consistent with the hierarchy in RSA 149-M:3; and (3) provides a substantial public benefit pursuant to RSA 149-M:11.



Waste Management Division

For Office Use Only:	
WMD Log #:	_____
Date Rec'd.:	_____
No. of Copies:	_____
Fee: \$ _____	/Check # _____

APPLICATION FORM FOR TYPE I MODIFICATION TO SOLID WASTE MANAGEMENT FACILITY PERMIT

pursuant to
RSA 149-M and New Hampshire Administrative Solid Waste Rule Env-Sw 315

SECTION I. FACILITY IDENTIFICATION

(1)	Facility name: Bethlehem Municipal Landfill
(2)	Functional classification: <input type="checkbox"/> collection/storage/transfer <input type="checkbox"/> processing/treatment <input checked="" type="checkbox"/> landfill
(3)	Mailing address: 2155 Main Street, PO Box 189, Bethlehem, NH 03574-0189
(4)	Permit number: DES-SW-TP-95-001
(5)	Location, by street address and municipality: Prospect Street, Bethlehem NH

SECTION II. PERMITTEE IDENTIFICATION

(1)	Permittee/applicant name: Town of Bethlehem		
(2)	Mailing address: 2155 Main Street, PO Box 189, Bethlehem, NH 03574-0189		
(3)	Telephone number: (603) 869-3351		
(4)	If different than above, identify the individual associated with and designated by the permittee/applicant to be the contact individual for matters concerning this application:		
	(a) Name: April Hibberd	(b) Title:	
	(c) Mailing address: 2155 Main Street, PO Box 189, Bethlehem, NH 03574-0189		
	(d) Telephone number: (603) 869-3351	(e) E-Mail: admin@bethlehemnh.org	

SECTION III. DESCRIPTION OF PROPOSED MODIFICATION

Describe the proposed modification by answering each of the following questions. Use additional paper as necessary.

(1)	Provide a BRIEF description of the proposed modification. [Check box if response is provided on separate paper <input type="checkbox"/> See attached Section III.(3) - Proposed Post-Closure Landfill Monitoring Plan		
(2)	Identify whether the proposed modification is a "type I-A" or "type I-B" modification. (If uncertain, use the worksheet provided with the instructions for this form): <input type="checkbox"/> Type I-A <input checked="" type="checkbox"/> Type I-B		
(3)	Identify, either below or on separate paper, each written permit condition that will require amendment to effect the proposed modification and provide draft language for the same. [Check box if response is provided on separate paper <input checked="" type="checkbox"/> See attached Section III.(3) - Proposed Post-Closure Landfill Monitoring Plan		
(4)	Identify, below, each "last approved plan of record" identified in the permit which will be affected by the proposed modification and will therefore require amendment/revision:		
	Check here if affected	TYPE OF PLAN	DES APPROVAL DATE
	<input type="checkbox"/>	Facility design plans/specifications	WMD LOG # (Find this number on your copy of the approval)
	<input type="checkbox"/>	Facility operating plan	
	<input type="checkbox"/>	Facility closure plan	
	<input type="checkbox"/>	Facility financial assurance plan	
	<input type="checkbox"/>	Other plan (specify):	

(5)	Submit, on separate paper, the proposed amendments/revisions for each document identified pursuant to (4) above, based on the below listed instructions. (Note: The revisions may be presented in the form of replacement pages ready for substitution into the last approved plan of record, each page being clearly marked to show the date of revision. In the event there is no last approved plan of record for any of the following, you must prepare and submit a full plan, including the proposed modification(s), in accordance with the applicable cited Rules.)
	<input type="checkbox"/> Facility design plans must be prepared in accordance with Env-Sw 1103.05.
	<input type="checkbox"/> Facility operating plans must be prepared in accordance with Env-Sw 1105.11.
	<input type="checkbox"/> Facility closure plans must be prepared in accordance with Env-Sw 1106.04.
<input type="checkbox"/> Financial assurance plans must be prepared as specified in Env-Sw 1400 and must include all related draft financial assurance documents required to effect the proposed modification.	
(6)	In order for DES to approve the proposed modification, the agency must be able to conclude from the information provided in this application that the proposed modification meets all applicable requirements of the Rules. Therefore, for any aspect of the proposed modification where it may not be self-evident that the proposed change meets all applicable requirements of the Rules, you should explicitly provide such information. Provide your response below and/or use separate paper as necessary. (Check box if response is attached on separate paper <input checked="" type="checkbox"/>)
	Section III.(6) Addendum - Compliance with NHDES Solid Waste Rules.

<p>SECTION IV. SCHEDULE Provide a proposed schedule for implementing the modification. Use separate paper if necessary. (Check box if response is attached on separate paper <input type="checkbox"/>)</p>
<p>Conduct landfill gas (LFG) monitoring once every five years, with the LFG monitoring events to coincide with site groundwater management permit (GMP) sampling events for volatile organic compounds (VOC) beginning in November 2018.</p>

<p>SECTION V. STATEMENT OF NEED Provide a statement of need describing why the proposed change is necessary or desirable. Use separate paper if necessary. (Check box if response is attached on separate paper <input type="checkbox"/>)</p>
<p>Protective of human health and the environment, does not change overall closure strategy, reduces expense to town, and reduces carbon footprint through less sampling events and trips to the site.</p>

<p>SECTION VI. IMPACT EVALUATION On separate paper, identify all impacts, both positive and adverse, which the proposed modification will have, including each of the below listed considerations.</p>
<p>(1) The effect the modification will have on facility function, capacity, life expectancy, service type and service area.</p> <p>(2) The effect the modification will have on the environment, public health and safety.</p> <p>(3) The effect the modification will have on the state's ability to achieve the goals and objectives specified in RSA 149-M:2, namely achieving a 40% minimum weight reduction in the solid waste stream on a per capita basis by the year 2000 and avoiding the disposal of recyclable materials in a lined landfill with a leachate collection system.</p> <p>(4) The effect the modification will have on establishing and maintaining integrated waste management systems consistent with the hierarchy of waste management methods in RSA 149-M:3 [the methods, in descending order of preference as specified in RSA 149-M:3, are: source reduction; recycling and reusing; composting; waste-to-energy technologies (including incineration), incineration without resource recovery; and landfilling].</p> <p>(5) Consistency with the state solid waste management plan and the applicable district plan, pursuant to RSA 149-M:12,I(b). If necessary, contact the P&DRS at (603) 271-2925 for plan information.</p>

<p>SECTION VII. PUBLIC BENEFIT DEMONSTRATION Provide a "demonstration of public benefit" based on the below listed instructions. Check which one of the listed instructions applies to your particular application.</p>
<p><input type="checkbox"/> For a type I-A modification of a standard permit, provide a "demonstration of public benefit" in accordance with RSA 149-M:11 and in conformance with the provisions of Env-Sw 1005.05. Prepare and submit the demonstration on separate paper.</p>
<p><input type="checkbox"/> For a type I-A modification of an emergency permit or a research and development permit, or a permit-by-notification, there is a presumption of public benefit, provided that the proposed modification meets all requirements of the Rules. Therefore, you may skip this section and go to Section VIII.</p>
<p><input checked="" type="checkbox"/> For a type I-B modification, there is a presumption of public benefit, provided that the proposed modification meets all requirements of the Rules. Therefore, you may skip this section and go to Section VIII.</p>

SECTION VIII. OTHER PERMITS

Complete the following table to identify and provide the status of all other permits or approvals necessary to effect the proposed modification.

Type of Permit/Approval Required	Date the Application was/will be Submitted	Status/Comments
Groundwater Management Permit GWP#-198400057-B-004	July 1, 2011	Effective from January 11, 2012 to January 10, 2017 Sampling events conducted during November of each year

SECTION IX. LEGAL NOTICES

Submit proof of having provided certain legal notifications and filings, as follows:

- (1) You must send by certified mail, or deliver in hand, a complete copy of this application to the host municipality, host solid waste management district and other affected entities, with a "notice of filing," as specified by Env-Sw 303.
- (2) For a type I-A modification, you must send by certified mail, or deliver in hand, a "notice of filing" to each owner of property abutting the facility site, as specified by Env-Sw 303. If the applicant/permittee or the owner of the facility site owns any abutting parcel of land, the "notice of filing" must be sent to the owner(s) of the next parcel(s) not owned by the permittee/applicant or facility site owner.
- (3) You must also provide a "notice of filing" to the New Hampshire Department of Justice/Office of the Attorney General (NH DoJ/AGO) if, pursuant to Section X(2) of this form, you are required to submit business and personal disclosure information.
- (4) You must attach to this application "proof" that notification has been provided as required by (1) through (3) above. Therefore, attach a copy of the notice(s) of filing and the signature(s) of all required recipients, acknowledging receipt.

SECTION X. CERTIFICATION OF COMPLIANCE/COMPLIANCE REPORT

All applications for permit modification must be submitted with either certification of compliance or a compliance report, as follows:

- (1) If you are ABLE to certify that each of the statements numbered (1) - (8) below are true, do so by your signature.
- (2) If you are UNABLE to certify that each of the statements numbered (1) - (8) below are true, you must:
 - Prepare and submit a separate Compliance Report as specified by Env-Sw 303.15; and
 - If the proposed modification involves a change in organizational structure, or a change in individuals/entities holding 10% or more of the permittee's debt or equity, or a change in officers, directors, partners or key employees, none of which constitutes a change in operational control of the facility or a change in ownership per Env-Sw 315.02(f), also submit completed "business and personal disclosure forms" for each non-compliant individual and entity involved in the change. Obtain the required forms from the P&DRS at (603) 271-2925. Submit the completed forms, with the notice of filing referenced by Section IX(3) of this form and a copy of the Compliance Report, direct to the New Hampshire Department of Justice/Office of Attorney General, Environmental Protection Bureau, 33 Capitol Street, Concord, NH 03301-6397. [Note: Copies of the completed disclosure forms should NOT be attached to this application when it is submitted to DES or to the host municipality, host solid waste management district and other effected entities, pursuant to Section IX(1) above. Only the NH DoJ/AGO should receive copies of the disclosure forms].

COMPLIANCE STATEMENT

The applicant shall certify that each of the statements listed in (1)-(8) below are true for each of the following individuals and entities:

- The applicant, and
- The facility owner, and
- The facility operator, and
- All individuals and entities holding 10% or more of the applicant's debt or equity, and
- All of the applicant's officers, directors, and partners, and
- All individuals and entities having managerial, supervisory or substantial decision making authority and responsibility for the management of the facility operations or the activity(s) for which approval is being sought.

(1)	No individual or entity listed above has been convicted of or plead guilty or no contest to a felony in any state or federal court during the 5 years before the date of the application.
(2)	No individual or entity listed above has been convicted of or plead guilty or no contest to a misdemeanor for a violation of environmental statutes or rules in any state or federal court during the 5 years before the date of the application.
(3)	No individual or entity listed above has owned or operated any hazardous or solid waste facility which has been the subject of an administrative or judicial enforcement action for a violation of environmental statutes or rules during the 5 years before the date of the application.

- (4) No individual or entity listed above has been the subject of any administrative or judicial enforcement action for a violation of environmental statutes and rules during the 5 years before the date of the application;
- (5) All hazardous and solid waste facilities owned or operated in New Hampshire by any individual or entity listed above are in compliance with either.
 - (a) All applicable environmental statutes, rules, and DES permit requirements; or
 - (b) A DES approved schedule for achieving compliance therewith.
- (6) All individuals and entities listed above are in compliance with all civil and criminal penalty provisions of any outstanding consent agreement, settlement, or court order to which DES is a party.
- (7) All individuals and entities listed above have paid, or are in compliance with the payment schedule for any administrative fine assessed by DES.
- (8) All individuals and entities listed above are in compliance with all terms and conditions under every administrative order, court order or settlement agreement relating to programs implemented by DES.

Signature of the permittee/applicant certifying the above statements are true:

Permittee/Applicant Name (Print Clearly or Type) Cassandra Lateme

Permittee/Applicant Signature Cassandra Lateme

Date 12/29/14

SECTION XI. PERMITTEE/APPLICANT SIGNATURE REQUIREMENTS

The permittee/applicant must sign the following statement prior to submitting this application. All copies of the application filed with DES must bear the permittee's/applicant's ORIGINAL signature. If the permittee/applicant is not an individual, an individual duly authorized by the permittee/applicant shall sign the application.

To the best of my knowledge and belief, the information and material submitted herewith is correct and complete. I understand that any approval granted by DES based on false and/or incomplete information shall be subject to revocation or suspension, and that administrative, civil or criminal penalties may also apply. I certify that this application is submitted on a complete and accurate form, as provided by DES, without alteration of the text.

Permittee/Applicant Name (Print Clearly or Type) Cassandra Lateme

Permittee/Applicant Signature Cassandra Lateme

Date 12/29/14

SECTION XII. PROPERTY OWNER SIGNATURE

If the permittee and property owner are not the same, the property owner must also sign this form as follows. All copies of the application filed with DES must bear the property owner's ORIGINAL signature. If the property owner is not an individual, an individual duly authorized by the property owner shall sign the application.

- (1) I hereby affirm that the permittee/applicant has the legal right to occupy and use the property on which the subject facility is or will be located for the purposes specified in this application.
- (2) I hereby affirm that I shall grant access to the property for closure and post-closure monitoring of the subject facility and site as required by RSA 149-M and the New Hampshire Solid Waste Rules (Env-Sw 100 - 300 and Env-Sw 400 - 2000), as amended.

Property Owner Name (Print Clearly or Type) Cassandra Lateme

Property Owner Signature Cassandra Lateme

Date 12/29/14

**TYPE 1-B MODIFICATION SUPPORTING DOCUMENTS
CLOSED BETHLEHEM MUNICIPAL LANDFILL
PROSPECT STREET
BETHLEHEM, NEW HAMPSHIRE
NHDES SITE NO. 198400057**

1.0 - INTRODUCTION

Aries Engineering, Inc. (Aries) prepared the attached Type I Modification to Solid Waste Management Facility Permit (Type 1-B permit modification) and the following supporting documents for the Town of Bethlehem (Town) for the closed Bethlehem Municipal Landfill (site) located on Prospect Street in Bethlehem, New Hampshire. Figure 1 depicts a site locus, while Figure 2 depicts the site landfill features.

The objective of the Type I-B Permit Modification and supporting documents is to provide evidence for the Type 1-B modification application to adjust the post-closure landfill monitoring plan for the solid waste management facility permit # DES-SW-TP-95-001.

The findings and conclusions presented herein are not scientific certainties, but rather our professional opinions concerning the data gathered during our work. In addition, this report is subject to the limitations provided in Appendix A.

2.0 - BACKGROUND

The site is located on the southeast side of Prospect Street in Bethlehem, NH approximately 1-mile north of Bethlehem Center. Available information discussed in the following indicates that landfill closure activities, including capping and regrading, were completed in the summer of 1995.

Closure construction was completed on July 14, 1995. The construction involved grading the landfill material to slopes not flatter than five percent, nor steeper than 25 percent. The closed landfill cover consists of 18 inches of cover soil composed of fine to coarse sand and silt with trace to little gravel. The soil was placed in two lifts and compacted to provide permeability less than 10^{-5} centimeters per second (cm/sec). A minimum of 4 inches of topsoil was placed above the cover soil and seeded.

Site topography generally slopes to the northwest with surface water drainage to the Barrett Brook. The site is designated as Lot 5 on Town of Bethlehem Tax Assessor's Map 414.

Current site landfill monitoring program includes the following:

1. Annual inspection of the landfill cap and its features for degradation and obstructions during the month of November.
2. Annual groundwater management permit (GMP) sampling and analysis for standard landfill monitoring parameters,

3. and GMP sampling for volatile organic compounds (VOCs) every five years of the GMP, starting in 2013.

Landfill gas monitoring on site has been done sporadically in the past with the most recent sampling round conducted by Aries in November 2013. As indicated in a November 18, 2013, NHDES correspondence Aries' November 2013 landfill gas monitoring results would be used to assess the need for further landfill gas monitoring. Aries recommended landfill gas monitoring plan follows in Section 3.0.

The current GMP (#GWP-198400057-B-004) and Solid Waste Facility Management Temporary Permit (# DES-SW-TP-95-001) for site landfill are provided in Appendix B.

3.0 - TYPE 1-B MODIFICATION SUPPLIMENTS

The following sections are supplements to the attached Type I-B permit modification form are referenced by application section number.

Section III.(3) Addendum - Post-Closure Monitoring Plan

Air and Landfill Gas Monitoring

Site landfill ambient air, four landfill gas vents and four landfill gas probes shall be monitored for methane release once every five years during the month of November beginning in 2018.

Settlement Monitoring

The surface of the landfill will be monitored for settlement and applicable off-cap features on an annual basis in the month of November starting in 2015. Such features include adequate access control, perimeter warning signs, maintained roads, and drainage systems. The condition of on site landfill equipment, such as culverts, soil gas probes, and groundwater monitoring wells, where present will be monitored and replaced as necessary. Landfill settlement identified during the post-closure inspections which results in ponding or impedes drainage will be repaired.

Operations and Maintenance

November site inspections on an annual basis beginning in November 2015 will be conducted of each of the landfill cap systems and features. Onsite landfill surface will be monitored for maintenance, erosion, damage from outside sources, and cap settlement and depression. Where present drainage swales, culverts, and landfill gas vents will be monitored for obstructions and integrity to ensure good working condition.

Groundwater

Groundwater shall be monitored in accordance with site landfill Groundwater Management Permit (GMP). The current GMP, (# GWP-198400057-B-004) issued on January 11, 2012, is Attached in appendix B.

Section III (6) Addendum - Compliance with NHDES Solid Waste Rules

Section 3 of the of permit # DES-SW-TP-95-001 dictated that the closed facility shall be maintained in conformance with Env-Wm 2507.04, (current rule Env-Sw 807.04), which requires monitoring of decomposition gases to prevent potential hazards to health, safety, and property. Post-closure landfill operations shall not cause the concentration of methane and other explosive gases to:

- (1) Exceed 25 percent of the lower explosive limit for gases in structures on or off-site, excluding leachate collection and gas control and recovery components; and
- (2) Exceed 50 percent of the lower explosive limit for the gases at and beyond the property boundary within the soil.

On November 19, 2013, Aries screened the ambient air, four landfill gas vents and four landfill gas probes for methane using a field-calibrated GEM-2000 multi-gas analyzer (instrument) with a methane and lower explosive limit (LEL) detection limits of approximately 0.1% on a volumetric basis. Aries' landfill gas screening locations are depicted on Figure 2.

Aries' landfill gas screening measurements did not detect methane at concentrations above the instrument's lower detection limit of 0.1% methane by volume or 0.1% LEL.

Based on the non-detection of methane gas in each site landfill gas vent and gas probe screening, Aries recommends modifying site landfill gas (LFG) monitoring to once every five years, with the LFG monitoring events to coincide with site groundwater management permit (GMP) sampling events for volatile organic compounds (VOC) beginning in November 2018.

Section VI Addendum - Impact Evaluation

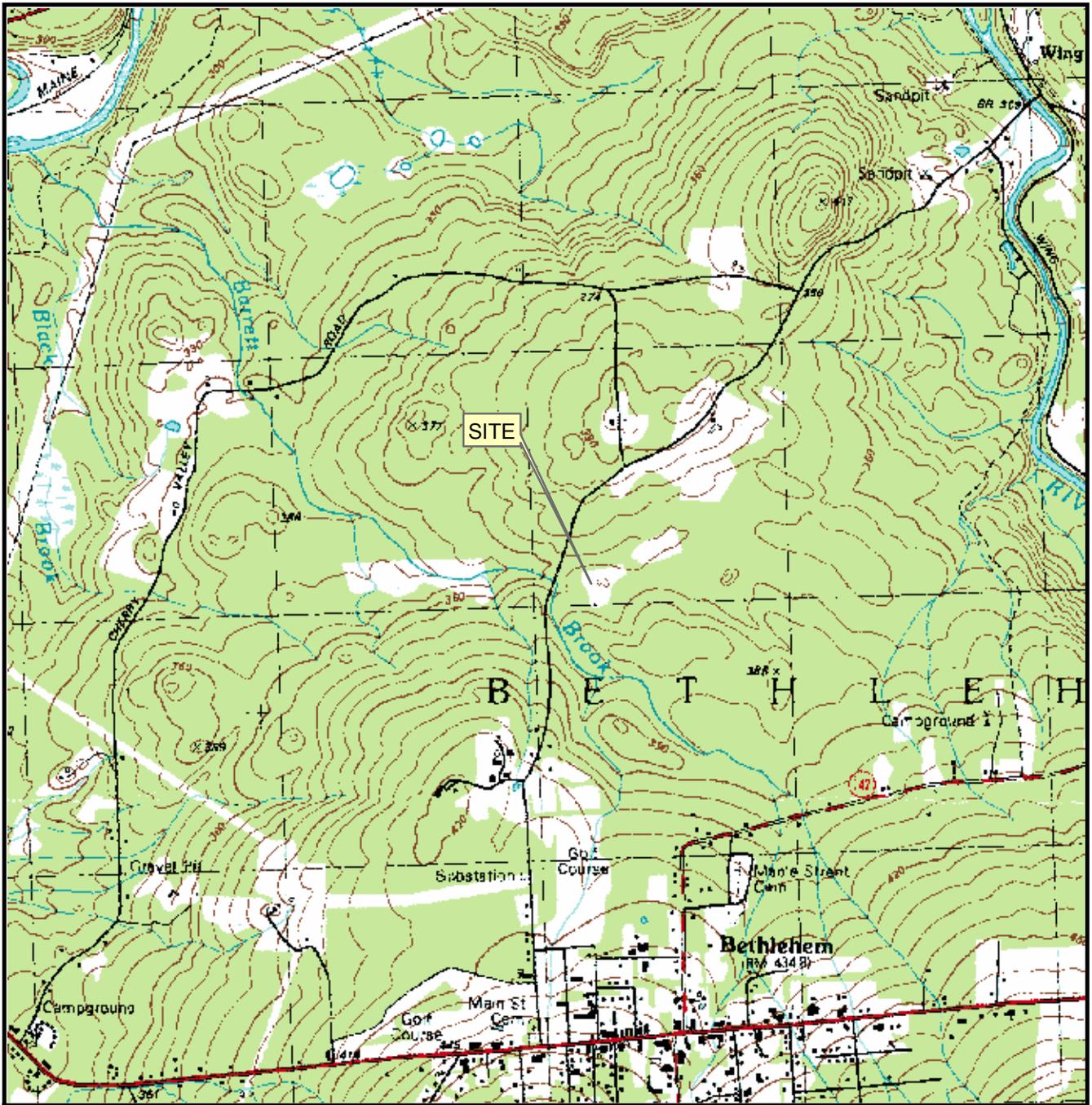
As required under section VI of the permit application, the following impacts have been considered:

1. The proposed permit modification is not anticipated to impact facility function, capacity, and life expectancy.
2. The proposed permit modification is not anticipated to adversely effect the environment, public health, or safety.
3. The proposed permit modification is not anticipated to impact the state's ability to achieve its goals and objectives specified in RSA 149-M:2

4. The proposed permit modification is not anticipated to impact the establishment or maintenance of the integrated waste management system consistent with the hierarchy of the waste management methods in RSA 149-M:3
5. The proposed permit modification is not anticipated to impact consistency with the state solid waste management plan and applicable district plan, pursuant to RSA 149-M:12,I(b).

Section IX Attachment - Legal Notices

See Appendix C for the attached notice-of-filing letter sent to the Town of Bethlehem in regards to this application.



PREPARED FROM: USGS BETHLEHEM W,
 NEW HAMPSHIRE QUADRANGLE, 1986



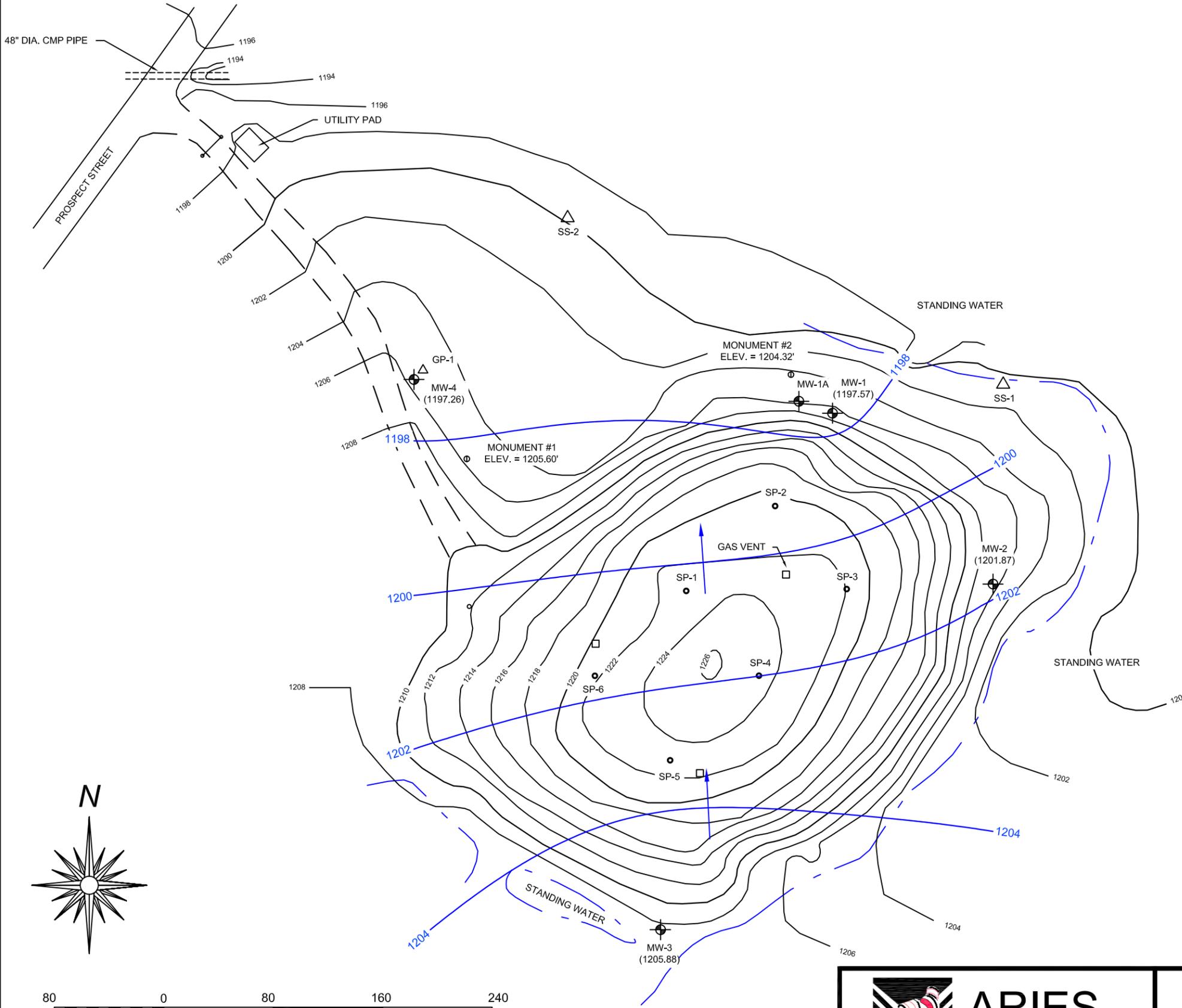
NOTES: Aries developed the Locus Map from the New Hampshire Geographically Referenced Analysis and Information Transfer System (NH GRANIT) maintained by University of New Hampshire and the NH Office of State Planning.

Aries Project # 2010-015A
 File # 2010-015A(1)12.14.mxd



TYPE I-B MODIFICATION DOCUMENTS
 CLOSED BETHLEHEM MUNICIPAL LANDFILL
 BETHLEHEM, NEW HAMPSHIRE

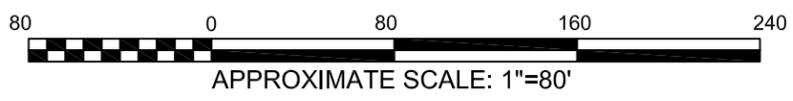
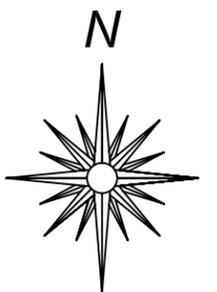
LOCUS PLAN
 DECEMBER 2014
 FIGURE 1



- NOTES:**
1. Aries developed this base map from a plan prepared by Sanborn, Head & Associates, Inc. titled "Bethlehem Municipal Landfill Site Plan and Groundwater Elevation Contour Plan" dated December 2007 and Aries' Site Observations.
 2. Site feature locations are approximate.
 3. Aries made groundwater level readings in the monitoring wells at times and under conditions stated in the text. Fluctuations in groundwater levels may occur due to variations in season, precipitation, temperature, and other factors.
 4. Contours represent inferred lines of equal groundwater elevation.
 5. Contour lines are approximate and are based on data obtained from widely spaced observation points. Actual contours may vary from those shown.

LEGEND:

MW-1		Monitoring Well
SW-1		Surface Water Sampling Location
1200		Ground Surface Elevation Contour
		Gas Vent
GP-1		Gas Probe
SP-1		Settlement Platform
		Monument
		Edge of Wetlands
1200		Inferred shallow overburden groundwater elevation contour in feet
(1201.87)		Monitoring well groundwater elevation in feet observed by Aries on November 21, 2014
		Estimated groundwater flow direction



JOB # 2010-015A

**TYPE 1-B MODIFICATION DOCUMENTS
FORMER BETHLEHEM TOWN LANDFILL
BETHLEHEM, NEW HAMPSHIRE**

**INFERRED OVERBURDEN
GROUNDWATER CONTOUR AND
SITE PLAN**
DECEMBER 2014 **FIGURE 2**

APPENDIX A

LIMITATIONS

LIMITATIONS

Aries prepared this Type 1-B Modification Supporting Documents (report) on behalf of and for the exclusive use of Town of Bethlehem (Client) solely for use at the Closed Bethlehem Municipal Landfill in Bethlehem, New Hampshire. This report shall not be transmitted to any other party, or relied upon by any other party, without Aries' written consent. However, Aries acknowledges the report may be conveyed to the New Hampshire Department of Environmental Services.

Aries made the reported observations under the conditions stated herein. Aries based the report conclusions solely on the services described herein, and not on scientific tasks or procedures beyond the scope of described services.

In preparing this report, Aries relied on certain information provided by state officials, federal officials and other parties referenced herein, and on information contained in the files of federal, state and local agencies available to Aries at the time of the report. Although there may have been some degree of overlap in the information provided by these various sources, Aries did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this report.

Aries made site observations as reported. Where access to portions of the sites were unavailable or limited, Aries renders no opinion as to the presence of hazardous material, petroleum product, or to the presence of indirect evidence relating to hazardous material or petroleum product, in those portions of the site. In addition, Aries renders no opinion as to the presence of hazardous material, petroleum product, or to the presence of indirect evidence relating to hazardous material or petroleum product, where direct observation was obstructed by objects or coverings, including snow cover, on or over the hazardous material or petroleum product.

Aries' conclusions are based solely on the site observations made during the site reconnaissances. If variations or other latent conditions later appear evident, Aries may need to reevaluate and may change the report conclusions and/or recommendations.

Aries did not attempt to check the compliance of present or past site owners or operators with federal, state or local laws and regulations, environmental or otherwise.

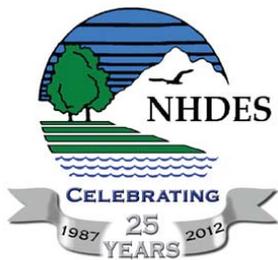
Aries anticipates variations in actual site conditions beyond those interpreted, and would have to reevaluate the report conclusions and recommendations if additional site data are made available.

Chemical analyses were performed for specific parameters during the course of this study, as described in the text. Additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the site.

Aries did not assess the presence of radon, pesticides, herbicides, fungicides, polychlorinated biphenyls (PCBs), radioactive materials, biological agents, or asbestos at the site or in the environment at the site. Aries did not perform testing or analyses to determine the presence or concentration of these, or any other, compounds, materials or substances. Aries would be pleased to arrange for testing for these constituents if Client so desires.

Aries conducted this report in general accordance with accepted consulting practices. Aries makes no warranty, either expressed or implied.

APPENDIX B
CURRENT NHDES PERMITS



The State of New Hampshire
Department of Environmental Services

Thomas S. Burack, Commissioner



*Celebrating 25 Years of Protecting
New Hampshire's Environment*

January 11, 2012

David Lovejoy, Chairman
Board of Selectmen
Town of Bethlehem
2155 Main Street
P.O. Box 189
Bethlehem, NH 03574-0189

Subject: **Bethlehem** – Closed Bethlehem Municipal Landfill, Prospect Street,
DES #198400057, Project #6.

Groundwater Management Permit Renewal Application, prepared by Aries
Engineering, Inc., and dated July 1, 2011.

2010 Annual Summary Report, prepared by Aries Engineering, Inc., and dated
January 1, 2011.

Dear Mr. Lovejoy:

Please find enclosed Groundwater Management Permit Number **GWP-198400057-B-004**, approved by the Department of Environmental Services (Department). This permit is issued for a period of 5 years to monitor groundwater quality at the Closed Bethlehem Municipal Landfill and is a renewal of the permit which expired on November 2, 2011.

All monitoring summaries and all required sampling results shall be submitted to the Groundwater Management Permits Coordinator at the address below. All correspondence must contain a cover letter that clearly shows the Department identification number for the site (DES #198400057).

Upon review of the 2010 Annual Report (Report) dated January 1, 2011, and received February 16, 2011, the Department has the following comments. The Report recommends that the PVC riser pipe and protective standpipe at MW-3 be repaired and that the site monitoring well elevations be resurveyed. The Department concurs with these recommendations and anticipates that they will be completed in advance of the next scheduled groundwater monitoring round (November 2012).

Please note, that Permit Condition # 7 has been modified from the previous permit. **The annual summary report has also been changed to a biennial summary report, with the first biennial summary report under this permit due in January 2014.** This assumes the last Annual Summary Report will be submitted in January 2012. Also, note that standard submission of permit monitoring data collected in November each year still need to be submitted within 45 days in accordance with standard permit conditions.

DES Web Site: www.des.nh.gov

PO Box 95 • 29 Hazen Drive • Concord, NH 03302-0095

Telephone: (603) 271-2908 • Fax: (603) 271-2181 • TDD Access: Relay NH 1-800-735-2964

Additionally, the Department has changed its requirement for volatile organics analyses. The Department no longer references an EPA analytical method to be used but instead specifies a standardized list of analytes along with reporting requirements and detection limits that must be achieved. A copy of the February 28, 2008, Department letter and attachments including the Waste Management Division Full List of Analytes may be found at the Department's web site at http://des.nh.gov/organization/divisions/waste/hwrp/documents/voc_changes.pdf

As a point of clarification regarding compounds to be included in the analyses of volatile organic compounds (VOCs); 1, 4-dioxane shall be included in future permit monitoring. Analysis for the other compounds on the Full List illustrated with an asterisk (*) bromodichloromethane, dibromochloropropane, 1,3-dichloropropene, hexachlorobutadiene, and ethylene dibromide (EDB), may be required in the future (achieving the performance standards noted on the Full List) if these analytes are identified as Tentatively Identified Compounds (TIC) in the standard volatile organic compound analysis.

Finally, please note that on October 19, 2011, the Waste Management Division issued a letter to all consultants (enclosed) explaining the need to lower the reporting limit of the volatile organic compound (VOC) 1,4-dioxane from 3 µg/L to 0.25 µg/L. Future testing for this compound shall be at this lower limit until further notice.

Should you have any questions regarding this letter or require additional information, please contact me directly by telephone or email.

Sincerely,



Peter L. Beblowski, C. P.G.
Hazardous Waste Remediation Bureau
Groundwater Remediation & Permitting
Tel: (603) 271-2999
Fax: (603) 271-2181
Email: peter.bebowski@des.nh.gov

Attachment: October 19, 2011 Waste Management Division letter RE: 1, 4-dioxane

cc: Michael Guilfooy, PE, SWMB Administrator
Karlee Kenison, PG, HWRB-GR&P, Supervisor
Thomas Roy, PG, PE, Aries Engineering, Inc.



The
NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES
hereby issues
GROUNDWATER MANAGEMENT PERMIT NO. GWP-198400057-B-004
to the permittee
TOWN OF BETHLEHEM
to monitor groundwater and surface water quality at the
CLOSED BETHLEHEM MUNICIPAL LANDFILL
(Prospect Street)
in BETHLEHEM, N.H.
via the groundwater and surface water monitoring system comprised of
4 monitoring wells and 2 surface water sampling sites
as depicted on the Site Plan entitled
Figure 2 - Site Plan for the former Bethlehem Town Landfill
dated July 2011, prepared by Aries Engineering, Inc.

TO: TOWN OF BETHLEHEM
2155 MAIN STREET
P.O. BOX 189
BETHLEHEM, NEW HAMPSHIRE 03574

Date of Issuance: January 11, 2012
Date of Expiration: January 10, 2017

Pursuant to authority in N.H. RSA 485-C:6-a, the New Hampshire Department of Environmental Services (Department), hereby grants this permit to monitor groundwater at the above described location for five years subject to the following conditions:

(continued)

STANDARD MANAGEMENT PERMIT CONDITIONS

1. The permittee shall not violate Ambient Groundwater Quality Standards adopted by the Department (N.H. Admin. Rules Env-Or 600) in groundwater outside the boundaries of the Groundwater Management Zone, as shown on the referenced site plan.
2. The permittee shall not cause groundwater degradation that results in a violation of surface water quality standards (N.H. Admin. Rules Env-Ws 1700) in any surface water body.
3. The permittee shall allow any authorized staff of the Department, or its agent, to enter the property covered by this permit for the purpose of collecting information, examining records, collecting samples, or undertaking other action associated with this permit.
4. The permittee shall apply for the renewal of this permit at least 90 days prior to its expiration date.
5. This permit is transferable only upon written request to, and approval of, the Department. Compliance with the existing Permit shall be established prior to permit transfer. Transfer requests shall include the name and address of the person to whom the permit transfer is requested, signature of the current and future permittee, and a summary of all monitoring results to date.
6. The Department reserves the right, under N.H. Admin. Rules Env-Or 600, to require additional hydrogeologic studies and/or remedial measures if the Department receives information indicating the need for such work.
7. The permittee shall maintain a water quality monitoring program and submit monitoring results to the Department's Waste Management Division no later than 45 days after sampling. Samples shall be taken from on-site monitoring wells and surface water sampling points as shown and labeled on the referenced site plan and other sampling points listed on the following table in accordance with the schedule outlined herein:

Monitoring Locations	Sampling Frequency	Parameters
MW-1, MW-2, MW-3, MW-4, SS-1 and SS-2	November each year	Specific Conductance @ 25°C, pH, Chloride, Nitrate, TKN, Iron, Manganese, Arsenic & Static Water Elevation (in monitoring wells)
MW-1, MW-2, MW-3 and MW-4	November 2013	NHDES Waste Management Division Full List of Analytes for Volatile Organics including 1,4-Dioxane (using a 0.25 ug/l reporting limit) and Drinking Water Metals.

Sampling shall be performed in accordance with the documents listed in Env-Or 610.02 (e). Samples shall be analyzed by a laboratory certified by the U.S. Environmental Protection Agency or the New Hampshire Department of Environmental Services.

All overburden groundwater samples collected for metal analyses (iron, manganese, and Drinking Water Metals) shall be analyzed for dissolved metals; and thus must be field filtered (with a 0.45-micron filter) and acidified after filtration in the field. Surface water samples and samples collected from bedrock or water supply wells shall be analyzed for total metals, and shall not be filtered. As referred to herein, the term "Drinking Water Metals" refers to arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.

Summaries of water quality shall be submitted **biennially in the month of January, starting in 2014**, to the Department's Waste Management Division, using a format acceptable to the Department. The Biennial Summary Report shall include the information listed in Env-Or 607.04 (a), as applicable.

The **Biennial Summary Report** shall be prepared and stamped by a professional engineer or professional geologist licensed in the State of New Hampshire.

8. Issuance of this permit is based on the Groundwater Management Permit Application dated July 1, 2011 and the historical documents found in the Department file DES #198400057. The Department may require additional hydrogeologic studies and/or remedial measures if invalid or inaccurate data are submitted.
9. Within 30 days of discovery of a violation of an ambient groundwater quality standard at or beyond the Groundwater Management Zone boundary, the permittee shall notify the Department in writing. Within 60 days of discovery, the permittee shall submit recommendations to correct the violation. The Department shall approve the recommendations if the Department determines that they will correct the violation.

ADDITIONAL CONDITION FOR LANDFILLS

10. The permittee shall maintain a capping system at the facility that meets the standards set forth in Env-Sw 805.10.

SPECIAL CONDITIONS FOR THIS PERMIT

11. Recorded property within the Groundwater Management Zone includes the lot as listed and described in the following table:

Tax Map/ Lot #	Property Address	Owner Name and Address	Grafton County Deed Reference (Book/Page)
Tax Map 414/ Lot 5	Old Town Landfill Prospect Street Bethlehem, N.H. 03574	Town of Bethlehem P.O. Box 189 Bethlehem, N.H. 03574	Book 0575/ Page 0193

12. All monitoring wells at the site shall be properly maintained and secured from unauthorized access or surface water infiltration.

13. The permittee shall update ownership information required by Env-Or 607.03(a)(20) for all properties within the Groundwater Management Zone prior to renewal of the permit or upon a recommendation for site closure.



Carl W. Baxter, P.E., Administrator
Hazardous Waste Remediation Bureau
Waste Management Division

Under RSA 21-0:14 and 21-0:9-V, any person aggrieved by any terms or conditions of this permit may appeal to the Waste Management Council in accordance with RSA 541-A and N.H. Admin. Rules, Env-WMC 200. Such appeal must be made to the Council within 30 days and must be addressed to the Chairman of the Waste Management Council, c/o Appeals Clerk, Department of Environmental Services Legal Unit, 29 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095.

GWP-198400057-B-004



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

October 19, 2011

Subject: Change in Reporting Limit for 1,4-Dioxane

Dear Colleague:

In January 2008, the Waste Management Division established sampling and analytical requirements for the contaminant 1,4-dioxane. At that time, the reporting limit for dioxane was set at 3.0 µg/L, which is the current Ambient Groundwater Quality Standard (AGQS) for this compound. Although the reporting limit was 3.0 µg/L, there were several laboratories, both in the state and out of state, that were able to achieve a reporting limit of 1.0 µg/L.

In August 2010, the US Environmental Protection Agency, under the Integrated Risk Information System (IRIS), published a drinking water cancer risk value for 1,4-dioxane for a 1 in one million risk of 0.35 µg/L. This new health guideline was established after a comprehensive review of toxicity data by EPA health scientists from several program offices, regional offices and the Office of Research and Development.

There is neither a federal nor New Hampshire drinking water maximum contaminant level (MCL) for 1,4-dioxane. However, under New Hampshire Statutes, RSA 485-C:6, the commissioner of DES is directed to establish and adopt an AGQS for contaminants which adversely affect human health or the environment. Under the statute, where health advisories have been established for a contaminant and where such standards are based on a cancer risk, the AGQS for a contaminant shall be equivalent to a lifetime exposure risk of one cancer in 1,000,000 exposed population.

A revised AGQS value for 1,4-dioxane at 0.35 µg/L could have a significant impact on several programs within the Department, specifically Site Remediation, Drinking Water, and Groundwater Discharge permits. Research at the University of New Hampshire, sponsored in part by the Department, looked at treating drinking water at the residential scale for the removal of 1,4-dioxane. That research found that although it is difficult to treat drinking water to the 3.0 µg/L AGQS value, it would be nearly impossible to treat to 0.35 µg/L using currently available technology.

1,4-Dioxane has been reported to be in personal care products and is expected to be in most wastewater discharges. Treated wastewater from the Concord and Franklin wastewater treatment facilities was found to have 1,4-dioxane concentrations of 1.42 µg/L and 0.97 µg/L, respectively.

1,4-Dioxane is known to be present at 68 waste sites in the state and in six public water supplies at concentrations above 1 µg/L. At this time, the number of waste sites and public water supplies having concentrations of 1,4-dioxane greater than 0.35 µg/L is not known.

DES Web Site: www.des.nh.gov

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-2905 Fax: (603) 271-2456 TDD Access: Relay NH 1-800-735-2964

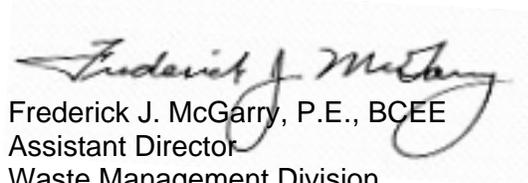
In order to obtain a better understanding of the possible extent of 1,4-dioxane contamination in groundwater, the Drinking Water and Groundwater Bureau of the Water Division has requested that all public water supplies sample for 1,4-dioxane using a reporting limit of 0.25 µg/L. The Groundwater Discharge permit program in the Water Division will be directing all permit holders to analyze for 1,4-dioxane using the same lower reporting limit.

Beginning with the 2011 November round of sampling, the Waste Management Division will require all analyses for 1,4-dioxane to utilize an analytical method which will have a reporting limit of 0.25 µg/L. Based on research conducted by the Department, the following methods have been found to be capable of achieving this reporting limit: EPA Method 522; EPA Method 8260B SIM; and EPA Method 8270C SIM. The Division will consider waiving this requirement if two consecutive rounds of sampling fail to detect this chemical above the reporting limit.

The overall intent of these actions is to determine the extent of 1,4-dioxane contamination in groundwater in the state and then determine if additional factors, such as technical and financial feasibility of treatment methods, should be considered in setting or revising an AGQS for this contaminant.

We thank you in advance for your assistance in this matter. If you have any questions or comments regarding this issue, please do not hesitate to contact me.

Sincerely yours,



Frederick J. McGarry, P.E., BCEE
Assistant Director
Waste Management Division
Tel: (603) 271-4978
Fax: (603) 271-2456
Email: Frederick.McGarry@des.nh.gov

cc: Brandon Kernen, P.G., Water Division
Mitchell Locker, P.G., Water Division



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095

603-271-3503 FAX 603-271-2867

TDD Access: Relay NH 1-800-735-2964



January 5, 1995

Board of Selectmen
Town of Bethlehem
P.O. Box 189
Bethlehem, New Hampshire 03574

**SUBJECT: Temporary Permit No. DES-SW-TP-95-001
Bethlehem Town Landfill
Prospect Street, Bethlehem, NH**

Dear Members of the Board:

Enclosed herewith is Temporary Permit No. DES-SW-TP-95-001, which has been issued by the Department of Environmental Services (DES) pursuant to the provisions of RSA 149-M:10 and Part Env-Wm 315 of the New Hampshire Solid Waste Rules, (Rules).

Please note that Temporary Permits are issued to solid waste facilities which have not previously held written permits from the DES, as required by RSA 149-M:10. A Temporary Permit is provided to existing unlined landfills as a first step toward closure of the facility, and is subject to call pursuant to Section Env-Wm 315.08 of the Rules. Once closure plans for the facility have been approved, the authorization to proceed with construction will be granted under the terms of Condition one of this permit.

Please maintain a copy of this permit with your facility file records for future reference and conspicuously post a copy of the permit at the facility. In addition, you should have available a full copy of the New Hampshire Solid Waste Rules, Env-Wm 100-300 and 2100-2600 for reference in correctly administering the provisions of your permit. Copies of the Rules are available from the Public Information & Permitting Office at 271-2975.

Questions regarding the issuance of this permit or questions regarding operational compliance should be directed to Mr. James Berg at the Solid Waste Compliance Section, Waste Management Division at 271-2925.

Sincerely,

Richard S. Reed, Supervisor
Waste Management Compliance Bureau

RSR/JWB/neo/permits:bethhem.tp

Enclosure: DES Permit Process Questionnaire

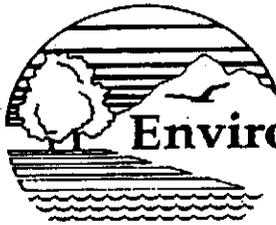
cc: WMEB-PAD&RS, WMCB-SWCS, PIP, Town, SW District
R. Scott Schillaber, Sanborn, Head & Assoc.

AIR RESOURCES DIV.
64 No. Main Street
Caller Box 2033
Concord, N.H. 03302-2033
Tel. 603-271-1370
Fax 603-271-1381

WASTE MANAGEMENT DIV.
6 Hazen Drive
Concord, N.H. 03301
Tel. 603-271-2900
Fax 603-271-2456

WATER RESOURCES DIV.
64 No. Main Street
P.O. Box 2008
Concord, N.H. 03302-2008
Tel. 603-271-3406
Fax 603-271-6588

WATER SUPPLY & POLLUTION CONTROL DIV.
P.O. Box 95
Concord, N.H. 03302-0095
Tel. 603-271-3503
Fax 603-271-2181



NEW HAMPSHIRE
DEPARTMENT OF
**Environmental
Services**

SOLID WASTE MANAGEMENT FACILITY TEMPORARY PERMIT

as authorized by the

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

I. PERMIT/FACILITY IDENTIFICATION:

Facility No.: DES-SW-TP-95-001

Facility Type: Landfill

Facility Name: Bethlehem Town Landfill

Facility Location: Prospect Street, Bethlehem, NH; Tax Map 414, Lot 5; NH/Deed Ref. Grafton County Book 2200, Page 1909; Latitude 44° 17' 46" N, Longitude 71° 41' 38" W.

Permittee/Facility Operator: Board of Selectmen, Town of Bethlehem, P.O. Box 189, Bethlehem, NH 03574.

Service Type: Limited Public

Facility Owner: Board of Selectmen, Town of Bethlehem, P.O. Box 189, Bethlehem, NH 03574.

Property Owner: Board of Selectmen, Town of Bethlehem, P.O. Box 189, Bethlehem, NH 03574.

Facility Capacity: Facility discontinued accepting waste in the 1980's.

II. FILE REFERENCE/RECORD:

Date(s) Env-Wm 315 notification received: January 3, 1995
WMD Log #(s): 199500002.

III. TERMS AND CONDITIONS:

This facility operated as a landfill receiving municipal solid waste, bulky waste, and construction/demolition debris generated within Bethlehem, New Hampshire and is subject to the terms and conditions of Attachment A. The Facility shall comply with Parts Env-Wm 308, 311 and 312 of the New Hampshire Solid Waste Rules (Rules) as amended. This permit is subject to call by the Division pursuant to Env-Wm 315.08. No additional municipal solid waste is to be disposed of at this facility.

IV. EFFECTIVE DATE: From date of signature below.

V. AUTHORIZATION: Pursuant to RSA Chapter 149-M:10 and Part Env-Wm 315 of the New Hampshire Solid Waste Rules, this permit is hereby issued to the permittee as identified in Section I above for the solid waste management facility identified in Section I above, pursuant to the requirements of Section III above. **BY EXERCISING ANY RIGHTS UNDER THIS PERMIT, THE PERMITTEE HAS AGREED TO ALL TERMS AND CONDITIONS OF THE PERMIT.** Failure to comply with these terms and conditions could result in civil or criminal penalties, suspension or revocation of this permit.

No liability is incurred by the State of New Hampshire by reason of any approval of this solid waste facility. This temporary permit shall not be construed in any way as (1) an authorization of any activity which occurred prior to the effective date of the temporary permit; (2) an authorization of any activity that does not comply with the terms of the permit as set forth above; or (3) a waiver of any cause of action for violation(s) of RSA 149-M or of rules in effect when the violation(s) occurred.


Philip J. O'Brien, Ph.D., Director

1/5/95
Date

Contact the Waste Management Division, Solid Waste Compliance Section, 6 Hazen Drive, Concord, N.H. [telephone (603) 271-2925] if there are questions.

Bethlehem Town Landfill
Permit No.: DES-SW-TP-95-001
Temporary Permit
January 5, 1995



ATTACHMENT A

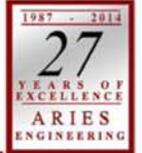
TERMS AND CONDITIONS

- (1) The facility shall be closed in conformance with the requirements of the New Hampshire Solid Waste Rules (Rules) and in accordance with plans to be approved by the Department of Environmental Services, Waste Management Division
- (2) A schedule is to be submitted to the Department identifying the proposed dates for submission of: the phase II hydrogeological investigation; the Groundwater Management Permit application; and the engineering plans, specifications, and contract documents; and closure construction.
- (3) The closed facility shall be maintained in conformance with Env-Wm 2507.04 of the Rules and in accordance with approved closure plans.
- (4) Facility closure shall comply with Parts Env-Wm 308, 311 and 312 of the Rules.
- (5) In accordance with Solid Waste Rule Env-Wm 2507.05(f), record drawings shall be submitted to the Department upon completion of closure construction.
- (6) In accordance with Solid Waste Rule Env-Wm 2507.05(g), notification that a landfill exists on the property shall be attached to the property deed. The notification, as a minimum, shall include the following information:
 - (a) A statement that a landfill exists on this property.
 - (b) Identification of the Registry of Deeds, book and page numbers where title to the property is recorded.
 - (c) Identification of the property tax map and lot numbers as identified by the political subdivision in which the facility is located.
 - (d) Identification of USGS coordinates listing the site of the landfill.
 - (e) Description of the type and size of the facility.
 - (f) Description of closure implemented and identification of the Permit issued by the Department of Environmental Services under which closure occurred, including a statement that the Permit may contain certain legal obligations regarding this site.
 - (g) A statement that post-closure use of the property shall not disturb the integrity of the final cover, liners, or any other components of the containment systems unless necessary to comply with the requirements of the New Hampshire Solid Waste Rules.
 - (h) A statement that any future change in use must be proposed to the Division for review and approval/denial determination.
 - (i) A statement that access shall be assured to Department inspection personnel and the permit holder for monitoring/maintenance purposes.
- (7) A copy of the deed notification as filed is to be provided to the Department.

APPENDIX C
NOTICE OF FILING LETTER



Solving Environmental Problems Since 1987



December 12, 2014
File No. 2010-015

Town of Bethlehem, NH
2155 Main Street, PO Box 189
Bethlehem, NH 03574

VIA CERTIFIED MAIL RETURN RECEIPT REQUESTED

Dear Town Clerk and Board of Selectman,

Pursuant to the New Hampshire Solid Waste Rules, you are hereby notified that Aries Engineering Inc. (Aries), will be filling an application with the New Hampshire Department of Environmental Services (NHDES) for a Type I-B Permit Modification to Solid Waste Facility Temporary Permit (#DES-SW-TP-95-001) on approximately December 8, 2014 for the landfill located at Propsect Street in Bethlehem, NH. The application, if approved, would enact the attached post-closure monitoring plan. Aries will be submitting the application for a Type I-B permit modification for this proposed post-closure monitoring plan in accordance with guidelines provided by the department.

For additional information regarding these applications you may contact George Holt at Aries Engineering Inc., 46 South Main Street, Concord, NH 03301, (603)228-0008.

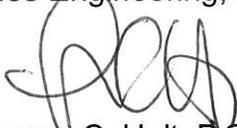
The application can be reviewed at Aries' offices at 46 South Main Street, Concord, NH 03301 during normal business hours, and at NHDES located at 29 Hazen Drive, Concord, NH. The permit applicant, facility owner, facility operator and property owner is the Town of Bethlehem.

The New Hampshire Solid Waste Rules have procedures in place for the review and issuance or denial of applications. A description of the application process as specified by the NHDES solid waste rules can be reviewed in the enclosed flow chart. If you have any questions regarding the permit application review process, or wish to

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comment on the subject, please contact Mr. Wayne Wheeler at NHDES- Waste Management Division, 29 Hazen Drive, P.O. Box 95, Concord, NH, 03302-0095, (603)271-2925.

Sincerely,
Aries Engineering, Inc.



George C. Holt, P.G.
Senior Hydrogeologist



Michael P. Donahue, P.E.
Principal Engineer

GCH:kd

Attachments: Proposed Post-Closure Monitoring Plan
Application Process Flow Chart

cc: NHDES

POST-CLOSURE MONITORING PLAN

Air and Landfill Gas Monitoring

Site landfill ambient air, four landfill gas vents and four landfill gas probes shall be monitored for methane release once every five years during the month of November beginning in 2018.

Settlement Monitoring

The surface of the landfill will be monitored for settlement and applicable off-cap features on an annual basis in the month of November starting in 2015. Such features include adequate access control, perimeter warning signs, maintained roads, and drainage systems. The condition of on site landfill equipment, such as culverts, soil gas probes, and groundwater monitoring wells, where present, will be monitored and replaced as necessary. Landfill settlement identified during the post-closure inspections which results in ponding or impedes drainage will be repaired.

Operations and Maintenance

November site inspections on an annual basis beginning in November 2015 will be conducted of each of the landfill cap systems and features. Onsite landfill surface will be monitored for maintenance, erosion, damage from outside sources, and cap settlement and depression. Where present drainage swales, culverts, and landfill gas vents will be monitored for obstructions and integrity to ensure good working condition.

Groundwater

Groundwater shall be monitored in accordance with site landfill Groundwater Management Permit (GMP). The current GMP, (# GWP-198400057-B-004) issued on January 11, 2012, is Attached in appendix B.



**STANDARD PERMIT APPLICATION PROCESSING PROVISIONS
AS PROVIDED IN PARTS Env-Sw 303 - 305
OF THE NEW HAMPSHIRE SOLID WASTE RULES**

