



Wheelabrator Concord Company, L.P.

A Waste Management Company

11 Whitney Road
Penacook, NH 03303
(603) 753-8411
(603) 753-8413

August 27, 2014

Wayne Wheeler
Solid Waste Bureau, Permitting and Design Section
New Hampshire Department of Environmental Services
PO Box 95
Concord, NH 03302-0095

Re: Application for Solid Waste Permit Modification
Solid Waste Permit No. DES-SW-SP-03-001, Type 1-B Permit Modification

Dear Mr. Wheeler,

Attached are three copies of a Type 1B application to modify the above reference permit. As explained in the application the facility is proposing to undertake the following three projects.

- Upgrading the ash building scrubber system and undertake other internal work environment improvements.
- Installing a system to pump grit produced during the lime slaking process to the bottom ash conveyor.
- Installation of an 18 x 20 equipment storage enclosure.

The benefits of these projects are explained in more detail in the application. Please note that the facility has developed a new Operating Plan that is laid out to meet the requirements of Env Sw 1105.11. The new plan is included in the application.

Please contact me if you require additional information about this application or this project.

Sincerely,

John LaRiviere
General Manager

**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**, 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: Wheelabrator Concord Company L.P.
(2)	Functional classification: <input type="checkbox"/> collection/storage/transfer <input checked="" type="checkbox"/> processing/treatment <input type="checkbox"/> landfill
(3)	Mailing address: 11 Whitney Road Penacook NH 03303
(4)	Permit number: DES SW-SP-03-001
(5)	Location, by street address and municipality: 11 Whitney Road Penacook NH ,03303

SECTION II. PERMITTEE IDENTIFICATION

(1)	Permittee/applicant name: Wheelabrator Concord Company L.P.		
(2)	Mailing address: 11 Whitney Road Penacook NH, 03303		
(3)	Telephone number: 603-753-8411		
(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: John LaRiviere	(b)	Title: General Manager
	(c) Mailing address: 11 Whitney Road Penacook NH, 03303		
	(d) Telephone number: 603-753-8411 X12	(e)	E-Mail: jlariviere@wm.com

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"/>		
	Wheelabrator Concord undertaking three projects under this application. (1) Upgrading the ash building scrubber system and internal work environment improvements. (2) Installing a system to pump grit produced during the lime slaking process to the bottom ash conveyor. (3) Installation of an 18 x 20 equipment storage enclosure.		
(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 type="checkbox"/>		
	This modification will not effect any current permit conditions.		
(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 checked="" type="checkbox"/>	Facility design plans/specifications	3/20/86, 6/27/00, 8/21/01, 12/23/11, 4/5/12, 2/26/13, 6/6/14
	<input checked="" type="checkbox"/>	Facility operating plan	6/6/14
			WMD LOG # (Find this number on your copy of the approval)
			33-86, 200000264, 200100255, 2011736, 10320/10321, 11893, 13324, 13325, 13590, 13608, 13681
			13324, 13325, 13590, 13608, 13681

<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 checked="" type="checkbox"/>	Facility design plans must be prepared in accordance with Env-Sw 1103.05.
	<input checked="" 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 type="checkbox"/>)	
	The proposed modification meets all applicable requirements of the rules.	

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)

Installation of the ash building improvements is expected to take 4 to 6 weeks. The lime grit pumping project will take approximately 3 weeks to complete installation, and the maintenance equipment enclosure will take approximately 1 week to complete.

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)

Upgrading the ash building scrubber system and making other internal working environment improvements will help ensure building integrity, and result in an overall improvement of working conditions for employees. The presence of elevated heat and humidity in the ash building can impact structural members over time resulting in the need for replacement. These conditions also negatively impact working conditions for employees while working in this area.

Installation of the lime grit pumping system would eliminate the need to transport lime grit by forklift from the slaker building to the Tipping Floor. During transport there was the potential for a spill. By keeping the grit within enclosed piping that is run within enclosed structures the chance for a spill is eliminated.

The installation of the equipment storage enclosure will eliminate exposure of the equipment to precipitation which can result in impacts to stormwater.

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.

- (1) The effect the modification will have on facility function, capacity, life expectancy, service type and service area.
- (2) The effect the modification will have on the environment, public health and safety.
- (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.
- (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].
- (5) Consistency with the state solid waste management plan and the applicable district plan, pursuant to RSA 149-M:12,1(b). If necessary, contact the P&DRS at (603) 271-2925 for plan information.

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.

- 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.

<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.
<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.

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
Building Permit	TBD	The only project that will require a building permit is the maintenance enclosure tent. The other projects are in-plant process work that do not require a building permit.

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 (803) 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) Wheelabrator Concord Company L.P., John LaRiviere, General Manager

Permittee/Applicant Signature 

Date 8/22/14

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) Wheelabrator Concord Company L.P., John LaRiviere, General Manager

Permittee/Applicant Signature 

Date 8/22/14

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) Wheelabrator Concord Company L.P., John LaRiviere, General Manager

Property Owner Signature 

Date 8/22/14

Section VI
Positive and Adverse Impact Evaluation

Wheelabrator Concord Type 1B Permit Modification Application

Section VI

Positive and Adverse Impact Evaluation

Positive Impacts:

1. The effect the modification will have on facility function, capacity, life expectancy, service type and service area.
 - **This modification will have no effect on facility function, capacity, life expectancy, service type and service area.**

2. The effect the modification will have on the environment, public health and safety.
 - **The modifications will have a positive effect on the environment or public health and safety, as outlined below.**

 - **Upgrading the ash building scrubber system and making other internal working environment improvements will help ensure building integrity, and result in an overall improvement of working conditions for employees. The presence of elevated heat and humidity in the ash building can impact structural members over time resulting in the need for replacement. These conditions also negatively impact working conditions for employees while working in this area.**

 - **Installation of the lime grit pumping system would eliminate the need to transport lime grit by forklift from the slaker building to the Tipping Floor. During transport there was the potential for a spill. By keeping the grit within enclosed piping that is run within enclosed structures the chance for a spill is eliminated.**

 - **The installation of the equipment storage enclosure will eliminate exposure of the equipment to precipitation which can result in impacts to stormwater.**

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.
 - **This modification's affect on RSA 149-M: 2 objectives is aligned with avoiding the disposal of recyclable materials in a lined landfill with a leachate collection system. Reusing the lime grit in this manner will be beneficial to maintaining ash alkalinity prior to the ash being disposed. The ash building improvements installation of an equipment storage enclosure will have no impact on waste generation.**

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].

- **This modification will facilitate reuse of materials that have historically been processed through the combustor and landfilled. As such the modification supports the RSA 149-M: 3 hierarchy. The ash building improvements installation of an equipment storage enclosure have no impact on waste generation**

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.

- **This modification will facilitate reuse of materials that have historically been processed through the combustor and landfilled. As such, this project is consistent with the state solid waste management plan, and is also consistent with the district plan (to the extent that it exists). The ash building improvements installation of an equipment storage enclosure have no impact on waste generation**

Adverse Impacts:

There are no adverse impacts associated with this proposed modification.

Section IX-Legal Notices

Capron, Eric

From: UPS Quantum View <auto-notify@ups.com>
Sent: Thursday, August 28, 2014 10:39 AM
To: Capron, Eric
Subject: UPS Delivery Notification, Tracking Number 1ZX136120393684079



***Do not reply to this e-mail. UPS and Wheelabrator Concord Co will not receive your reply.

At the request of Wheelabrator Concord Co, this notice is to confirm that the following shipment has been delivered.

Important Delivery Information

Message from Wheelabrator Concord Co:
WCC Solid Waste Permit Modification App. Notice of Filing. Proposed Lime Grit Management Project. DES-SW-SP-03-001

Tracking Number: 1ZX136120393684079
Delivery Date / Time: 28-August-2014 / 10:29 AM

Delivery Location: OFFICE
Signed by: FIFE

Shipment Detail

Ship To:
Michael Santa
City of Concord, Code Enfr. Office
37 GREEN ST
CONCORD
NH
03301
US
Number of Packages: 1
UPS Service: GROUND
Weight: 1.0 LBS

Capron, Eric

From: UPS Quantum View <auto-notify@ups.com>
Sent: Thursday, August 28, 2014 12:35 PM
To: Capron, Eric
Subject: UPS Delivery Notification, Tracking Number 1ZX136120391600064

***Do not reply to this e-mail. UPS and Wheelabrator Concord Co will not receive your reply.

At the request of Wheelabrator Concord Co, this notice is to confirm that the following shipment has been delivered.

Important Delivery Information

Message from Wheelabrator Concord Co:
WCC Solid Waste Permit Modificaiton App. Notice of Filing, Proposed Lime Grit Mngt, Proj. DES-SW-SP-03-001

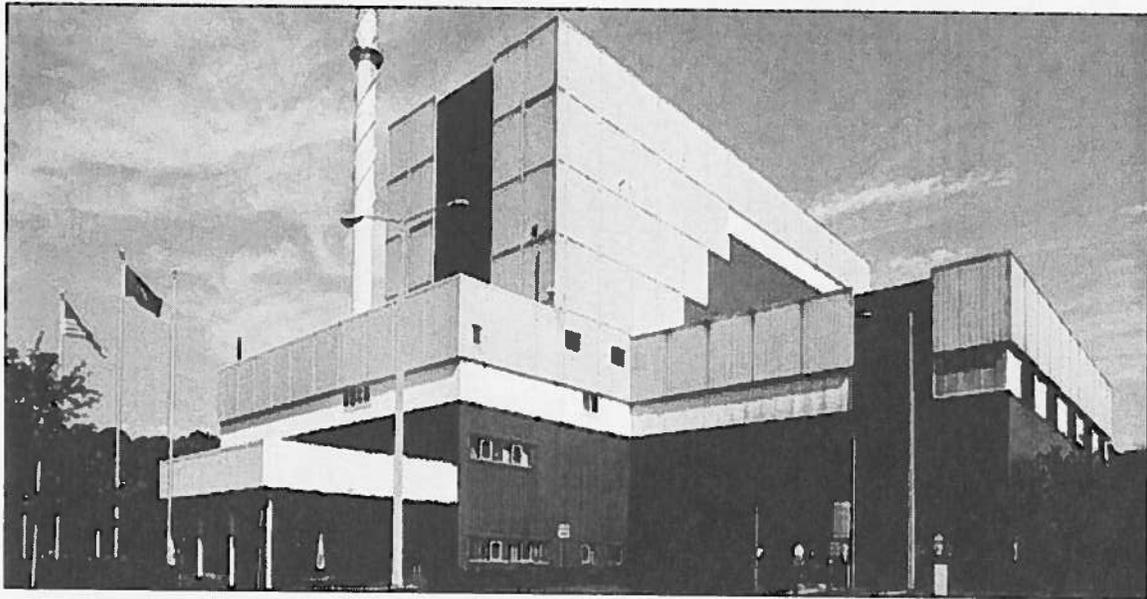
Tracking Number: 1ZX136120391600064
Delivery Date / Time: 28-August-2014 / 12:23 PM

Delivery Location: RECEIVER
Signed by: TOM

Shipment Detail

Ship To:
Jim Presher
Concord Regional Resource COOP
347 VILLAGE ST
CONCORD
NH
03303
US
Number of Packages: 1
UPS Service: GROUND
Weight: 1.0 LBS

Wheelabrator Concord Company
Env-Sw 1105.11 Facility Operations Manual



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Section 1 Facility Identification

Facility Name: Wheelabrator Concord Company LP
Mailing Address: 11 Whitney Road, Penacook, NH 03303
Telephone Number: 603-753-8411
Permit Number: DES-SW-SP-01-001

Permittee Property Owner: Wheelabrator Concord Company LP
Mailing Address: 11 Whitney Road, Penacook, NH 03303
Telephone Number: 603-753-8411

Operator: Wheelabrator Concord Company LP
Mailing Address: 11 Whitney Road, Penacook, NH 03303
Telephone Number: 603-753-8411

The type of the facility: Incineration Facility

The capacity of the facility: The facility's rated through-put capacity, as defined by Env-Wm 102.09(a), shall not exceed 575 tons per day.

The facility service type: Commercial

The facility service area; This facility is a commercial facility, as defined by Env-Wm 102.37, and shall thereby provide capacity for New Hampshire generators pursuant to the requirements of condition (12) of this permit.

Section 2 Authorized and Prohibited Waste

Authorized Wastes: This facility is authorized to accept waste consisting of residential, commercial; nonhazardous industrial and other pre-approved special wastes.

Prohibited Wastes: This facility is not permitted to accept:

- (a) Hazardous waste;
- (b) Wet cell batteries;
- (c) Untreated infectious waste;
- (d) Radioactive materials;
- (e) Wastewater treatment sludge;
- (f) Asbestos;
- (g) Leaf and yard wastes

Section 3 Routine Operations Plan

3.1. Hours of operations

The facility operates 24 hours per day, 365 days per year. Refuse is received 12 hours per day Monday through Friday and 11 hours on Saturday. The facility does not accept waste on Sunday, Thanksgiving, Christmas or New Year's Day in addition to Sundays.

3.2. Facility access control and on-site traffic patterns

Access to the facility is controlled by site monitoring. The entrance/exit road to the facility is monitored by video surveillance cameras, these are monitored from the Control Room on a continuous basis.

Traffic patterns are controlled through signage that directs waste delivery vehicles to the scale and Tipping Floor. Ash and metal transportation vehicles are directed to the container storage area by facility staff if needed, or the route is known by the driver based on previous visits to the facility. All waste and residue hauling vehicles are weighed in order to track incoming and outgoing materials. These records are maintained in the facility scale system.

3.3. Waste acceptance and rejection procedures, including unloading, sorting and inspection procedures

Waste is received on the tipping floor. The tipping floor provides ample space for refuse trucks to unload refuse, pull out and exit the receiving building. The tipping floor also provides an area to unload refuse for spot checking of truck loads. The front end loader operator (tipping floor attendant) manages the tipping floor for truck unloading and minimum truck turnaround time. They, along with the crane operators, observe the refuse as it is unloaded into the refuse pit. Occasionally, a truck is requested to unload to the tipping floor for spot checking of refuse. This procedure reduces the receipt of unacceptable or unprocessable wastes. After a truck has completed its unloading, it exits the tipping floor and is reweighed. The front end loader is used to clean the tipping floor of trash and to push the spot checked material into the pit.

A random load inspection is performed at least six times/week to screen loads delivered to the Tipping Floor for unacceptable materials. Load inspections are performed by the loader operator, following a written procedure. All records of load inspection documentation shall be kept on file in the electronic records storage system. All records of load inspections are maintained by the Environmental Manager for a minimum of 3 years at which time the department allows the information to be disposed of.

In the storage pit and on the tipping floor, large noncombustible objects are removed from the refuse before it is sent to the charging hopper. These objects will not burn and could possibly damage the boiler furnace and grates and are therefore removed from the mass refuse piles. These items are either reloaded on the vehicle that delivered the item, or these are sent for proper offsite disposal at a landfill or other suitable facility. For unacceptable wastes that require special handling such as hazardous waste or untreated medical waste, these wastes are isolated on the tipping floor while proper offsite disposal can be arranged. A location on the tipping floor has also been established to securely store CRTs or Freon containing appliances. Proper offsite disposal is then arranged for CRTs. In both instances, Wheelabrator Concord Management will notify the respective haulers stating unacceptable waste was

identified while unloading. The hauler is then responsible for removing the unacceptable items from the site.

3.4. The procedure by which the quantity and source(s) of all wastes received by the facility shall be determined and recorded;

The facility employs platform truck scales that provide the gross weight, net weight, or tare weight of a truck. The net weight of trash dumped at the plant site is required for billing purposes. There are two platform truck scales, one for incoming trucks and one for exiting trucks. The scales are located to the northwest of the plant on the entrance road. Scale instrumentation is located in the scale house between the two scales. The scale is automatically operated with two remote stations located in the plant. A radiation meter is installed at the scale house to detect radiation sources in the incoming refuse. An alarm will sound in the plant control room on detection of radiation. The truck will be detained and the appropriate state agency notified. After being weighed, the refuse truck leaves the incoming scale and proceeds to the entrance ramp and up onto the tipping floor from the north side.

3.5. The procedure by which the quantity and destination of all outgoing waste and certified waste-derived products shall be determined and recorded;

Outgoing wastes are tracked through the facility scale system, the facility maintains these records through the scale system. The majority of the outgoing materials are ash, ferrous and non-ferrous metals. Each of these are hauled by different haulers using trucks dedicated for this purpose. This ensures that the different materials being shipped only go to their pre-assigned destination.

Other wastes that are managed as hazardous waste are shipped for offsite treatment and disposal using a suitable transporter. These wastes are tracked separately using other means such as a spreadsheet waste generation log. Manifest records are also maintained and include copies from the destination facility that are provided to Wheelabrator Concord once the load has reached the destination facility.

3.6. The storage time and capacity limits for all wastes received by the facility and the procedures by which the limits shall be monitored to assure compliance therewith;

The facility has no storage time limits for wastes received by the facility. The facility's refuse storage pit can accommodate approximately 3,500 tons of refuse, or about four to six days of boiler processing capacity. The facility can also store waste on the Tipping Floor adjacent to the pit during periods of high inventory.

3.7. All collection, storage, transfer, processing, treatment and disposal methods and procedures employed by the facility for managing waste following receipt;

Refuse/Waste Processing

The overhead refuse cranes provide a means of transporting the refuse from the refuse pit to the boiler charging hoppers. The refuse cranes also sorts and removes any oversize bulky waste from the pit, and mix and stack refuse in the pit. All refuse must be properly mixed (wet with dry, commercial with

residential, high Btu with lower Btu) and "fluffed" prior to feeding the refuse hopper. This assures better combustion control when MSW enters the furnace.

The boiler charging hoppers store and guide an adequate supply of refuse into the furnace for combustion. There are two charging hoppers, one for each boiler. Each of the hoppers is supplied with refuse from either of the two overhead cranes. All refuse must be properly mixed (wet with dry, commercial with residential, high Btu with lower Btu) and "fluffed" prior to feeding the refuse hopper. This assures better combustion control when MSW enters the furnace. The charging hoppers are sized to supply approximately 20 minutes of refuse for the furnace.

To maintain proper levels in the hoppers, crane operators observe the video screen which shows the hopper level. Usually, the hopper level is maintained at a low level to minimize the risk of plugging. The amount of refuse fed to the hopper should be based on a desired hopper level. Exceeding this level may cause bridging and plugging within the hopper throat and could cause uneven refuse flow to the furnace.

The hydraulic arch breaker dislodges or compresses any objects that may interrupt the refuse flow to the furnace. The arch breaker may also be used as a cutoff gate to prevent any refuse from entering the furnace, and to provide an air seal during start-up and shutdown. Each of the refuse feed hoppers is provided with two hydraulic flap valve/arch breakers. The arch breaker door is pushed through the hopper throat using a hydraulic cylinder actuated by a hydraulic power unit. The door and hydraulic power unit are sized to supply 2000 psig to crush any objects that could be obstructing the refuse path.

The control panel, mounted next to the arch breaker, supplies necessary controls for arch breaker unit operation. The arch breaker control system controls movement of the flap gate door using either the CLOSE, OPEN or ARCH BREAK cycle program located at the SCP (system control panel) for each boiler. The crane operators, while keeping the charging hoppers filled with trash, should also be aware when a "bridge" or "arch" in the hopper is preventing the trash from feeding evenly into the furnace. The arch breaker may then be utilized to compact the trash and cause it to fall into the charging chute. Smoke or fire in the hopper may be an indication of a "bridged" situation. The crane operators also have responsibility to monitor the tipping floor.

Proper boiler operation requires a control system that can coordinate steam production (temperature, pressure and flow) with fuel combustion (air-fuel mixtures and gas temperatures). Maintaining the proper balance between these processes requires accurate measurement and a control system that can compensate for variations in the combustion process. Refuse fired boilers have an additional difficulty in combustion control because of the wide variation in both fuel size and composition.

Boiler control in this refuse fired plant is accomplished through the VONROLL combustion controller. The combustion controller computer unit contains the control logic which utilizes the measurement of process variables to provide output signals for the control elements of the boiler.

The Bailey Flowmaster (combustion control) system allows operator monitoring and control of the boiler. The interaction of the boiler variables is so complex that it would be difficult for an operator to maintain the proper relationship. However, the controller allows for certain variables to be altered

automatically within the limits of the control system. The crane operator should become familiar with the plant combustion control logic diagrams as a means of more completely understanding the combustion control process.

Each of the boilers is controlled independently by a Bailey (distributive control system, or DCS) Flowmaster. The controller operates the refuse boiler based on the output steam flow. The Bailey Flowmaster compares the actual steam flow with the setpoint. When the actual steam flow is lower than the setpoint it increases the output signal. A higher output signal makes the ram feeder move forward faster and the grates move more often, besides that it forces the combustion air (underfire and overfire) flow to increase. If the actual steam flow is higher than the setpoint the output signal is decreased, that means the opposite of what is described above will take place. If you increase or decrease the Bailey Flowmaster output signal, the proportion of the ram feeder to the grate is still the same. The total steam flow signal is also sent to the boiler drum level control circuit in a feed forward control arrangement.

Video cameras provide the crane and control room operators with a means to monitor areas of the plant not directly in their eyesight. The crane operator has video cameras that monitor the level within the boiler charging hoppers for feeding purposes and allow constant monitoring of the tipping floor. The control room operator has views of the two charging hoppers, as well as the plant entrance and truck ramp.

Cameras located at the entrance and exit of the plant are used to pan the entire area. Cameras over the charging hoppers show the level of the charging hopper. The crane operators can set the television controller to switch from camera to camera or to lock on one camera, depending on the need.

Fire hose stations are provided on the tipping floor for extinguishing fires if they occur in the refuse pit or on the floor. In addition, two water cannons are available and which can be deployed remotely from the crane pulpit. The tipping floor is covered by a dry pipe sprinkler system. The refuse pit is protected by a pre-action sprinkler system. During emergency use only the exhaust fans located on the south wall can be put in-service.

Ash Handling System

The ash handling system handles the residue from the combustion process. This system serves the following functions.

- Collect, cool, and transport bottom ash
- Provide, at the discharge of each boiler, a water seal that eliminates air infiltration into the furnace from the bottom ash system.
- To collect, condition, and transfer the flyash from the two boilers to the combined ash conveying system.
- To provide discharge points for loading the combined ash and recovered metals.

For discussion purposes, the ash handling system is divided into the following subsystems:

- Bottom Ash System
- Flyash System
- Post-Combustion Metal Recovery
- Metal Handling and Fate After Recovery at Wheelabrator
- Ash Sampling

Bottom Ash System

Three separate ash substreams collectively comprise the facility's bottom ash.

Grate ash is the residue that falls off the end of the boiler grates following waste combustion

Boiler heat recovery section ash is the particulate entrained in the boiler combustion air that drops out in the boiler's superheater, generator or economizer sections. This ash also adheres to the heat transfer tubes in the heat recovery sections, and it is periodically removed using mechanical rappers, rotary, and retractable soot blowers. Ash from all three heat recovery sections falls to a common hopper located beneath the boiler economizer section, and this collective ash is often referred to as "economizer ash."

Grate siftings (also called riddlings) is non-combustible material (metal and glass) that falls through small openings between the boiler grates or falls through combustion air holes in the grates.

The bottom ash system consists two separate handling trains (one is redundant). Only one of these trains operates at a time. Bottom ash from both boilers is directed into the operating train. Having a redundant train allows for continued boiler operation in the event that the primary bottom ash train malfunctions. The primary train is called "bottom ash handling system No. 2," and the backup train is called "bottom ash handling system No. 1."

Bottom ash handling system No. 2 incorporates equipment for separately recovering ferrous and non-ferrous metals. Bottom ash handling system No. 1 does not include metal recovery equipment. Recovering metals has several advantages including: the metals are sold for a profit and, the costs of landfilling the metals are avoided. Therefore, the facility strives to maximize operation of system No. 2.

Bottom ash handling systems No. 1 and No. 2 are identical, except that No. 2 includes metal recovery equipment. Therefore, a single description of the both handling both systems is provided below. The additional equipment associated with metal recovery for system No. 2 is then separately described afterwards in section 9.3 of this document.

Most of the bottom ash consists of grate ash, with boiler heat recovery ash and riddlings as minor substreams. After the waste is fully combusted the grate ash falls off the last boiler grate through the clinker chute. Each clinker chute is bifurcated ("pant legs") and has a flop gate. The flop gate allows the ash from either boiler to be directed to either the No. 1 or No. 2 bottom ash drag chain conveyor. These two drag-chain conveyors are filled with water and they span the entire length of the boiler house. These conveyors serve three functions.

First, the ash falls into a horizontal water-filled section of the conveyor where the ash is quenched and cooled. The water in this conveyor section also forms a seal that prevents tramp air from entering the

boiler. Loss of the water seal at this location can cause combustion upset and associated air emissions problems.

Second, the ash travels up a dry inclined conveyor section where the ash is dewatered by gravity. The water released from the ash flows back down the conveyor and returns to the horizontal quench section.

Third, the conveyors transport the ash to the ash handling building.

Each bottom ash handling system also includes a boiler heat recovery ash subsystem. This consists of a 12" economizer boiler hopper ash chute equipped with a double flapper valve. The hopper chute directs the boiler heat recovery ash to an opening in the boiler roof above the last boiler grate. The heat recovery ash falls from the economizer chute, through the boiler and clinker chute, and into the water-filled section of operating the bottom ash conveyor.

Each bottom ash handling system also includes a riddlings collection system. Both boilers are equipped with ten riddlings hoppers, each controlled with single flapper valves. Both boilers are also provided with a two dedicated wet quench riddlings drag chain conveyors. Riddlings collect in the hoppers and then fall through chutes into the riddlings conveyors. The riddlings from the drag chain conveyors can be directed into the water-filled section of either the boiler No. 1 or No. 2 bottom ash conveyors.

When bottom ash conveyor No. 1 is operating (no metal recovery), conditioned flyash is directed to the dry inclined section of the bottom ash conveyor through a chute. At this point the material on the conveyor is called "combined ash." The combined ash on the conveyor then falls through a chute and into a roll-off box parked within the enclosed ash house. The filled boxes of combined ash are hauled to the landfill by truck, or are temporarily stored in the facility's ash storage building. Occasionally an ash container could be inadvertently overloaded and not be legal for over the road transport. In these cases, some amount of ash needs to be removed from the container. A secure location on the tipping floor would be used to store the ash until it can be reloaded.

The bottom ash systems connect with or supply the facility's process water system. The process water system is also called the "wastewater system," although this term is technically incorrect because all these waters are ultimately consumed in facility processes and no wastewater is discharged from the facility. The bottom ash system also receives grit produced by the lime slurry slaking process. The grit contains beneficial alkalinity that is used to ensure ash stability.

Process water is primarily supplied by cooling water blowdown, boiler blowdown, and ash-contact waters. Ash contact waters result from cleaning of building floors and equipment and from conveyor overflow. All facility floor drains and associated sumps route only to the process water system. Ash contact water is stored in the contact water sump and the process water storage tank (a/k/a "wastewater" storage tank). Process waters are drawn from the contact sump and storage tank to supply the bottom ash conveyors and clinker conveyors as needed.

Both of the two bottom ash conveyors are designed to permit drainage for access and maintenance to inside of conveyors. Drain valves low on the conveyors allow the water to drain to a recessed trough in the floor which in turn drains to the nearby contact water sump.

The bottom ash conveyors lose water through evaporation and because water is trapped in the small spaces between the quenched ash particles. Water from the ash-contact water sump is routinely pumped to the conveyors to replace these water losses, so that the bottom ash conveyors operate at a full water level. This practice causes design overflows from the conveyor back to the ash-contact water sump. Also, typically once per week the bottom ash conveyors are drained to the facility's ash contact-water sump. This serves to dewater the ash fines that have accumulated in the conveyor bottom and allows the conveyor to more easily move the fines through the ash system. The water that overflows or is drained from the conveyors carries suspended ash particles, and this material settles to the bottom of the ash-contact water sump as sediment. Equipment and floor wash waters also drain to the ash contact-water sump, and the ash associated with these flows similarly accumulates on the sump bottom. The ash sediments from these various sources are called "ash mud."

The ash contact water sump is sparged with air lances to keep the sediments ("ash mud") in suspension. This practice minimizes sediment accumulation in the ash contact water sump. These suspended ash sediments are transferred back to the bottom ash conveyors with the quench water. So the sediments are re-circulated between the contact water sump and the bottom ash conveyor until they eventually agglomerate and are dragged out with the bottom ash in the conveyor.

Flyash System

"Flyash" consists of two primary components. Ash particulate entrained in the combustion air is carried through the boiler to the air pollution control system. This is true flyash. The facility also injects lime slurry into the air pollution control (APC) system. This lime reacts with acid-gasses present in the boiler flue gas to form neutral calcium salts. Because the chemical reactions between the acid-gasses and lime occur under imperfect conditions, the facility must inject extra lime to ensure adequate acid gas removal. This mixture of calcium salts and unreacted lime is called "scrubber residue." So the material captured by the facility's APC systems is a mixture of true flyash and scrubber residue. By convention, this mixture is simply called "flyash."

The flyash system begins with facility's APC system specifically, the SDAs and the fabric filters. Flyash falls from the fabric filter hoppers (four per fabric filter) and from the SDA hoppers to the collecting drag conveyors through 12" double flapper valves. The flyash from the fabric filters and SDA is then normally discharged to a flyash transfer conveyor through a slide gate valve at the conveyor junction point. Two flyash transfer drag conveyors, in series, transfer the ash to the surge bins and flyash conditioners within the ash house. Closing of the slide gate valve at the discharge to the transfer conveyor provides an alternate (conditioner bypass) routing of the flyash to the horizontal water-filled section of either one of the bottom ash conveyors.

The flyash system consists of flyash collection systems (described above), flyash transfer systems, and two flyash conditioning systems. Each of the flyash conditioning systems is 100% capacity (i.e. only one conditioning system is run at a time).

The flyash collection system consists of double slide gate valves installed on the bottom discharge outlets of the two spray dryer absorbers (SDAs); four 12" double flapper valves installed on the bottom discharge outlets of each fabric filter (one fabric filter is installed for each boiler); and fabric filter and SDA flyash collecting drag conveyors 1 and 2.

The flyash conveyors beneath the boiler 1 APC train is called flyash conveyor 1 and the conveyor beneath the boiler 2 APC train is called flyash conveyor 2. The No. 1 and No. 2 flyash collection conveyors normally discharge into the No. 3 transfer conveyor and then to No. 4 conveyor into the ash house. However, the No. 1 and No. 2 conveyors can also discharge directly to either bottom ash quench conveyor, thus providing a backup to the flyash conditioners.

The flyash system is completely enclosed and sealed to the atmosphere until the flyash is moistened in the flyash conditioners. The flyash conditioning devices are dual-paddle mixers, also known as pug mills. After conditioning with water, the flyash is fed to the covered bottom ash conveyor within the ash house. Note: when the metal recovery system is operating, the flyash follows a different path within the ash house. This alternate flow path is discussed section 9.3 of this document, "Post-Combustion Metal Recovery." A wet-scrubber dust collection system located in the enclosed ash house building collects any fugitive dust that might arise from conditioning area and the truck load out points.

The flyash system connects with or supplies the following secondary flow paths:

- Dust collection system
- Plant air system
- Potable and process water system.

The dust collection system removes airborne dust produced during the conditioning process and the loadout of trucks. The dust collection system draws airborne flyash through a connection in the conditioner room and hoods at the truck loading stations. The airborne dust is drawn into the dust collector by an exhaust fan through a wet scrubber. The dust is collected in the hopper and discharges to the bottom ash conveyor. The dust collector system is dumped manually when system differential pressure rises above 6" H₂O.

The plant air system provides pressurized air to the flyash double flapper valves below the fabric filter hoppers, the double slide gate valves below the SDAs, the slide gates at conveyor transfer points, and the slide gates below the flyash surge bins. The compressed air flows to the air cylinder operators through a strainer, moisture trap, a pressure reducing valve, and a lubricator. The pressure reducing valve reduces the air pressure from 100 psi to 80 psi. The lubricator adds a small amount of oil to the compressed air to lubricate the internal moving parts of the air cylinders.

The process water system provides the process water to be used for ash conditioning. Process water flows through a pressure reducing valve and solenoid control valves before being discharged through the various spray nozzles. The filter removes debris that could be present in the process water. The pressure reducing valve reduces the pressure of the process water to 30 psi.

Post-combustion Metal Recovery System

Wheelabrator Concord Company LP
11 Whitney Road
Penacook, NH 03303
DES-SW-SP-01-001
Rev 0 8-10-14

When the facility operates Bottom Ash System No. 2, the bottom ash will be directed through a metal recovery system. All metal recovery occurs within the facility's enclosed ash house. In summary, the metal recovery system consists of the following processes. A vibrating finger deck will separate the bottom ash 6" minus fraction from the 6" plus fraction. The plus fraction is comprised primarily of ferrous metals and will be routed to the ferrous recovery roll-off. The minus fraction will be subjected to further processing. A drum magnet will be used to recover additional ferrous metals from the 6" minus bottom ash fraction. The ferrous metals reclaimed by the magnet are directed to the same ferrous recovery roll-off box that receives the 6" plus ash fraction removed by the finger deck. The 6" minus bottom ash continues through the system for additional processing. The 6" minus fraction is then processed through a 3/8" screen. The 3/8" minus bottom ash is deposited onto a final combined ash conveyor where it mixes with conditioned flyash and routes to a roll-off box for offsite disposal. The 3/8" plus material is routed to an eddy current separator to recover non-ferrous metals. The 3/8" plus bottom ash is processed through the eddy current separator. This machine induces a magnetic field into metals that are ordinarily non-magnetic (e.g., copper, aluminum). This induced magnetic field allows for magnetic separation of non-ferrous metals. The separated non-ferrous metals drop to the non-ferrous roll-off for delivery to an offsite metals recycler. The remaining 3/8" plus bottom ash drops to the common combined ash conveyor where it mixes with the 3/8" minus bottom ash and the conditioned flyash.

The bottom ash will fall from the bottom ash system No. 2 head pulley directly onto the vibrating finger deck. 6" plus "bottom ash" is primarily ferrous metals. This 6" plus fraction vibrates across the finger deck and falls directly into the ferrous recovery roll-off. The bottom ash 6" minus fraction passes through the finger deck and onto the lower pan of the machine. A Walker Magnetics rotating drum magnet is located above the discharge end of the vibrating finger deck lower pan, where the bottom ash transfers onto the 3/8" screen. This device recovers the ferrous metals present in the 6" minus bottom ash fraction and deposits it into a vibrating pan conveyor and into the common ferrous recovery roll-off. This recovered material is shipped offsite to a ferrous metals recycler.

The remaining 6" minus bottom ash fraction transfers from the lower pan of the vibrating finger deck onto a 3/8" screen. The 3/8" minus material passes through the screen and falls directly to the combined ash belt conveyor. This combined ash conveyor ultimately accepts all the facility's ash substreams (i.e., 3/8" minus bottom ash, processed 3/8" plus bottom ash and conditioned flyash). The 3/8" plus bottom ash fraction is then processed through a IMRO RecycleCraft eddy current separator. The recovered non-ferrous metal is directed to a vibrating pan conveyor and into the non-ferrous roll-off box. When the non-ferrous box is filled it is hauled offsite to a metals recycler.

When the metals recovery system is operating (i.e., bottom ash system 2 is operating), a slide gate in flyash conveyor No. 4 will be closed. When the gate is closed, the flyash will not fall to the No. 1 flyash conditioner. Instead the flyash continues traveling on the No. 4 flyash conveyor to the No. 5 flyash drag conveyor. An enclosed chute in the No. 5 flyash conveyor deposits the ash into the No. 2 flyash hopper. A rotary valve at the bottom of the No. 2 flyash hopper meters flyash into the No. 2 flyash conditioner. The wetted flyash exits the No. 2 conditioner and is directed to the common combined ash belt conveyor. The combined ash on this conveyor drops into the combined ash roll-off box for direct delivery to the landfill, or staged in the adjacent ash storage building, or in covered with tarps on impervious pavement outside awaiting transport.

The facility also culls metal objects from the incoming municipal waste on the tipping floor. Culled metal includes such things as bicycles or steel pipe that have the potential to plug the boiler's refuse feed chute. Metal culled on the tipping floor is periodically brought to the facility's post-combustion metal storage areas and is co-mingled with the post-combustion metal. The facility does not accept CFC-containing articles for disposal. If CFC-containing articles (e.g., air conditioners) are discovered on the tipping floor, they shall be re-loaded onto the delivery vehicle. If the delivery vehicle cannot be identified, then the facility will assume responsibility for CFC-evacuation by a certified technician, in accordance with procedures described in the facility's Waste Control Plan. The facility will manage damaged CFC-appliances as if they still contain CFCs, until a certified technician deems otherwise. Under no condition shall CFC-containing appliances be co-mingled with the post-combustion scrap metal.

Post-Combustion Metal Load Out

The 30 or 40-yard boxes receiving the post-combustion ferrous metal in the combustion building are either moved to the ash storage building when filled, or dumped within the ferrous metal bunker. Ferrous metals dumped in the ferrous metal bunker are then later transferred via a front-end loader to a 70 to 90 cubic yard truck-mounted dump trailer. After the trailer is filled, it is hauled to an offsite metal recycler. Ferrous metals remaining in the 30 or 40 yard boxes could also be direct hauled by the offsite metal recycler.

The post-combustion metals deposited in the ferrous metal bunker contain no free water, but are moist. Therefore, the fresh metal does not pose any dust potential. Wheelabrator anticipates moving the ferrous metal offsite typically every day and at least twice/week. The actual frequency will depend on metal removal rates. However, the transfer frequency provides assurances that the metal will not dry and become dusty. But, dusting is possible during hot weather if the metal is not moved offsite within a few days. If dusty conditions are observed or are anticipated during loading, the facility will wet the metal within the ash building. The building is equipped with a floor drain system, and this captured water routes to the facility's process water system where it is reused. All wetting must occur within the building.

Loading the ferrous trailers outdoors increases the potential for metals to fall onto outdoor paved surfaces during loading operations. Also, potential for trackout exists when the loader is moving back and forth from the storage building to the parked trailer. To address these concerns the outdoor loading area must be inspected immediately after each trailer is loaded. Metals that fell to the ground during loading must be collected and returned to the metals pile or to the trailer. The loadout area must be inspected and any non-metal residues on the outdoor pavement must be carefully swept up. These collected residues will be stored in a covered pail or drum with an accumulation start date and labeled "Solid Waste Ash Residues, TCLP Analysis Pending". Based on TCLP testing done on the raw post-combustion ferrous metal and the return residues from ferrous recycling—the facility is using generator knowledge to deem the swept-up residues a "non-hazardous waste" (pending analysis). The site's Environmental Manager will determine when a sufficient residue mass has accumulated in the container to allow for collection of representative samples. Since the objective is to avoid spilling onto the ground, several weeks or months may pass before enough residues have accumulated for testing, although we anticipate that samples will be sent for analysis within 60 days of push-wall operation.

Once sufficient sample volumes are available, the site's environmental manager (or designee) will collect one or more representative samples from the container and direct these to a contract lab for TCLP testing. Thereafter, the swept-up residues will be managed and disposed of in accordance with these TCLP results. If changes occur such that the applicability of this initial TCLP testing is in doubt, then the site's environmental manager will direct a re-characterization of the metal loading residues. Examples of such changes include a change in the facility's metal recovery equipment or practices, or a change in outdoor metal loading procedures.

Due to space constraints at the facility, outdoor metal loading operations are conducted on a paved area near the tipping floor access road. The front-end loader that transfers metal from the ash building to the trailer crosses the road used by trash trucks departing from the tipping floor. This situation increases the potential for vehicle accidents involving the departing trash trucks. To the extent practical, metal transfer operations are scheduled during periods when the tipping floor is closed or when the trash truck counts are low. During active metal loading periods, departing trash truck drivers must be notified that loading is occurring. These notices are made through the use of portable signs, traffic cones, and other signaling devices, as appropriate. The facility may use a "spotter" to direct traffic when metal loading operations are ongoing, particularly if loading occurs during high-traffic periods, during inclement weather, or after dark.

The 70 to 90 cubic yard truck trailers are typically filled promptly when the truck arrives onsite, and the truck leaves immediately after the box is filled. However, unanticipated events such as truck breakdown might occur necessitating temporary storage of a full or partially full trailers at the facility. When this situation arises, the facility assures that the trailer is covered with a weather-proof tarp.

Non-ferrous metals fall into a dumpster container and are weighed and emptied inside the non-ferrous metals bunker on a daily basis. The contents of the bunker are offloaded live onto a trailer using a front end bucket loader. Any outdoor loading of non-ferrous metals will follow all protocols described above for loadout of ferrous metals, including the TCLP characterization protocols described above.

Metal Handling and Fate After Recovery

All ash and post-combustion metal containers must be securely tarped before transport. The offsite ferrous metals recycler shreds Wheelabrator's ferrous scrap and magnetically recovers the ferrous fraction. The "reject" fraction associated with the recovered ferrous metal is mostly ash. However, a significant fraction of this "reject material" is comprised of other materials, such as; 6" plus material screened out during Wheelabrator's recovery process (e.g., stones, unburned wood, non-ferrous metal, etc.). The reject fraction associated with the recovered ferrous metal also includes some quantity of 6" minus debris such as bits of unburned paper or plastics. Typically the reject fraction, as determined by the offsite metals recycler, is about 30% of the weight of the ferrous metal shipped by Wheelabrator. However, this percentage is variable depending upon such factors as the capture efficiency of metal recovery operations at the scrap metal site. In some cases the scrap metal yard will further process the ferrous "reject" material to capture additional ferrous and non-ferrous metals in the reject stream. Wheelabrator strives to produce as clean a recovered metal as possible, since this is an important determinant in the price Wheelabrator receives for the recovered metal. Non-ferrous metals recovered by Wheelabrator typically have a smaller (< 25%) reject fraction, in part because the ash has been screened before introduction into the eddy current separator. Further, contamination associated

with the non-ferrous fraction is much more difficult to remove by simple shredding and further eddy current processing at the offsite recycling operation. A significant proportion of the reject material associated with the non-ferrous stream may not be removed until the non-ferrous is re-smelted by the end users.

Wheelabrator Concord's roll-off boxes of non-ferrous metal are directed to an offsite metals recycler (scrap yard) where the metal is further sorted to increase its value. From there the recovered non-ferrous metal is reloaded onto tractor trailers for further transport to an end user (e.g., a foreign or domestic smelter) or to a metals broker.

Wheelabrator's recovered ferrous metals are currently processed at a Massachusetts scrap yard to remove reject materials and to densify the scrap. Processing may include running the ferrous through a shredder and/or use of a crane magnet. Offsite processing generates a reject stream that is primarily comprised of unburned materials (e.g., paper and wood) and > 6" bottom ash clinkers. The reject stream has been characterized via TCLP testing as a non-hazardous waste, and it is disposed of in Massachusetts.

3.8. For facilities that process or treat waste, the methods or procedures for managing bypass waste and the quality assurance/quality control procedures relating to the management of processed or treated waste;

Bypass Waste

The facility does not routinely ship out bypass MSW received on the tipping floor. Incoming waste delivery volumes are managed according to waste inventory levels, boiler outages and seasonal variations. If a situation arises where MSW has to be bypassed out to another disposal facility, it will be bypassed to another facility that is permitted to accept MSW.

Ash Sampling

The New Hampshire Department of Environmental Services (NHDES) has established comprehensive procedures which address the sampling of ash residue from solid waste combustors. The facility's Ash QAQC plan requires quarterly sampling of combined bottom ash and flyash for the following eight TCLP Metals: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver.

The results of the quarterly sampling and analysis are submitted to the NHDES once the final lab reports are received and the data packaged for submission.

Section 4 Residual Waste Management Plan

The facility employs a Generated Waste Procedure that describes how waste is characterized for proper disposal. The procedure also describes what data is needed to determine the reportable quantity of a waste, if that waste should be spilled. Federal and State regulations require waste generators to determine if any of the wastes they generate are "hazardous wastes." We must also characterize our wastes so that we dispose of them properly, and so that we know reporting thresholds should any wastes be spilled.

A waste characterization is conducted for each potentially hazardous waste generated at the facility. This procedure lists several wastes that are commonly generated at the facility and that have some potential to be hazardous waste. This list is not all-inclusive. The waste generator is responsible for characterizing all wastes that have a reasonable potential to be hazardous waste. This procedure assumes that a waste undergoing evaluation is only potentially hazardous because it exhibits a waste hazard characteristic of toxicity, corrosivity or ignitability.

This procedure is adequate to allow for hazard determinations of the following wastes:

- Waste-to-energy ashes
- Facility process waters and wastewaters
- Acid or caustic wastes
- Other facility maintenance wastes or articles and cleanup debris contaminated with any of the above materials.

Other residual waste management practices at the facility are described in Section 3 of this plan. The facility also has a Waste Control Plan that describes the proper handling, storage and disposal of wastes generated by the facility. All operations and maintenance personnel participate in an annual training on the Waste Control Plan. The plan is incorporated by reference into this manual.

Section 5 Facility Maintenance, Inspection and Monitoring Plan

The facility uses a web based software program called Tabware to track equipment maintenance and inspections. The following generally describes how Tabware is used at the facility.

Work Orders are initiated or generated for the repairs, inspections, etc. to plant equipment including contract services related to repair and maintenance.

Work Order Approval

Routine Work Orders ("RT" series) are approved by the Maintenance Manager, the Operations Manager, or the Maintenance Manager Designee before work is started or planning activities begin.

Work Order Planning

All Routine and Preventative Maintenance work orders should go through a planning process prior to assignment. The planning process consists of the following steps.

Work Order Selection - The mitigation of hazards identified on safety and environmental work orders takes priority over Routine and PM work orders. Otherwise, work orders selected for planning should be determined by the PM schedule or by the work order priority and the equipment criticality as identified on the work order, unless directed otherwise by supervision.

Schedule for efficiency – Once the equipment has been identified upon which repairs will be completed, all open work orders for this equipment should be planned and scheduled for completion at the same time to avoid multiple shutdowns of the equipment for repairs.

Determine Job Requirements – Review the work order descriptions and inspect the worksite as required, to determine what is needed to complete the work requested. The intent is to identify to the extent practical all job requirements, so once the work is started it can proceed with no or minimal disruption.

Safety and/or environmental precautions, if any
LOTO requirements

Craft skill(s) required to perform the work

Estimated time to complete the requested work

Spare parts or materials required

Tools or rigging required

Special instructions, if any

Technical information such as: set points, tolerances, torque values, etc.

Relevant safe job procedures, if any

When all known requirements of the job have been identified and the parts and materials are confirmed to be on-hand, coordinate with the Lead Maintenance Technicians to assign WTI maintenance personnel or Contract Labor resources then schedule the work order for completion.

Work Order Status Change

A Work Order's Status should be changed appropriately as it progresses through the cycle between entry and completion.

Work Order Completion in TabWare

When a Work Order is completed, the Requestor of that Work Order will be notified via TabWare Messaging of the completion. The Requestor should review the work at the earliest convenience to make sure that everything was done to satisfaction. If the work was not completed to satisfaction, the Requestor has the option to re-open the Work Order. If additional problems are found, a new Work Order should be generated.

Canceling Work Orders

When a Work Order Reviewer cancels or rejects a Corrective Work Order, the Requestor is notified via TabWare Messaging of the action. The Reviewer must add comments to the Work Order explaining why it was canceled or rejected.

Safety or Environmental Work Orders

A Work Order is considered a Safety or Environmental Work Order when the appropriate box is checked on the first tab of the Work Order notebook. A Safety or Environmental Work Orders should only be used for situations that present a true safety risk or environmental compliance issue if not addressed in a timely manner.

Preventive Maintenance Master Plans

Preventive Maintenance Master Plans are actually Work Order templates that are created and modified in the Work Order Module, just like any other Work Order. However, Master Plans cannot be completed, or have work hours or costs charged against them.

Master Plans should be written for specific groups of like equipment, not individual pieces of equipment. When developing PM Master Plans, consideration should be given to the OEM recommendations. However, the final determination of required PM tasks and their frequency of occurrence should be based upon actual operating and maintenance experiences.

Master Plan Planning

Master Plan Work Order should be planned as much in advance as possible. All information entered on the Planning Tab will be transferred to any subsequent PM Work Order. Refer to the section on Work Order Planning of this document for more details on the planning requirements for PM work orders.

Scheduling

When scheduling PM work orders consideration should be given to the frequencies recommended by the original equipment manufacturer. However, the PM frequencies should be determined and adjusted as required in response to actual operating and maintenance experiences. The steps to schedule PM work orders are as follows:

Section 6 Contingency Plan

The facility maintains an integrated Spill Prevention, Countermeasure and Control Plan and Hazardous Waste Contingency Plan document. The following information was taken from this plan, additional detail on hazardous materials at the facility is provided in the plan, and is incorporated by reference.

FACILITY IDENTIFICATION AND GENERAL INFORMATION

Wheelabrator Concord Company NHD500003660

11 Whitney Road, Penacook, NH, 03303

Facility operates 24/7, office hours are Monday-Friday 8:00-5:00. Phone number: 603-753-8411

Facility periodically generates D006, D007 and D008 wastes.

EMERGENCY COORDINATOR(S)

Primary Coordinators

Eric Capron

11 Whitney Road, Penacook, NH, 03303 (Office)

16 Vine Street, South Berwick, ME 03908 (Home)

603-753-8411 (Office)

603-918-6657 (Cell)

The Shift Supervisor on shift can also serve as the Primary Coordinator. Shift Supervisor on duty varies.

11 Whitney Road, Penacook, NH (Office)

603-753-8411 (Office)

Coordinator's Responsibilities During an Emergency

The Emergency Coordinator shall be responsible for the safety of all employees, all facility equipment, and the cleanup with the assistance of the EH&S Manager and local and state authorities, if necessary. The Emergency Coordinator has complete authority to commit necessary resources of the Company in the event of an emergency.

Alternate Coordinators

Rob Carr

11 Whitney Road, Penacook, NH, 03303 (Office)

276 West Salisbury Rd. Salisbury NH 03268 (Home)

603-753-8411 (Office)

603-558-1181 (Cell)

Coordinator's Responsibilities During an Emergency

The Emergency Coordinator shall be responsible for the safety of all employees, all facility equipment, and the cleanup with the assistance of the EH&S Manager and local and state authorities, if necessary. The Emergency Coordinator has complete authority to commit necessary resources of the Company in the event of an emergency.

EMERGENCY EQUIPMENT

Table 1 Emergency Equipment

Personal Protective Equipment	Use	Capabilities	Location
Gloves	Chemical resistant gloves to protect hand and arm. (e.g. black butyl rubber, polyethylene or Teflon for sulfuric acid; nitrile can be used for other chemicals) Chemical resistant boots to protect feet from contact with chemicals.	Effectiveness varies with chemical; refer to Table 4 and information below table. Effectiveness varies with chemical; refer to Table 4. Leather gloves provide general protection and no chemical resistance. Thin nitrile (<0.3 mm) have limited chemical protection.	Chemical resistant gloves at yellow drum lab spill kit and Fire Water spill Kit (neoprene chemical resistant gloves) Disposable Nitrile typically in lab. Leather gloves available at warehouse for general protection.
Boots "Black" Chem. Resist boots (ANSI Z41-1991)	Chemical resistant boots to protect feet from contact with chemicals.	Effectiveness varies with chemical; refer to following Table 4.	Foot protection provided by Chem Max 1 suits.
Face shield and Goggles	Eye protection Face Shield protects against chemical splashes.	Face shields must be suitably supported. Provides limited eye protection. Does not protect adequately against projectiles. Indirect vented or non-vented splash. Goggles protects against vaporized chemicals, splashes, and projectiles. Face shield provide limited/basic face protection from chemical splashes.	Goggles(2)(splash type) and face shields(2) in lab spill kit and Fire Water spill kit.
Chemical Suits (e.g. Tychem SL (Saranax w/ foot covers) and Tyvek QC w/foot covers, chemical resistant boots)& Duct tape	Protects against some chemical splashes onto the body but not against vapors. Use only if allowed by chemical. See appendices for chemical on-site; otherwise, use MSDS/Chemical clothing guide; e.g., Dupont Permeation Guide.	Provides limited chemical protection against concentrated acid and alkalis and many hydrocarbons, but is useful if the risk of splashing is low. May use duct tape to connect overalls to boots and gloves. Duct tape can be used on chemical suit to aide in sealing between gloves, boots, respirator or other gaps.	Yellow Chemical Resistant Suits (2) (Chem Max1) at Lab spill kit and Fire Water spill kit. Duct tape available in warehouse and throughout plant.

Personal Protective Equipment	Use	Capabilities	Location
Firefighters Protective Clothing	Gloves, helmet, coat, pant, boots.	For trained firefighting personnel at facilities having a fire brigade. Meet NFPA standards. Protects against heat, hot water and some particles. Does not protect against gases, vapors, or chemical permeation.	None on-site. Use Concord Fire Department.
SCBA (Self-contained breathing apparatus)	Supplies clean air to the wearer from a source carried by the wearer. Recommended when entering an atmosphere that is immediately dangerous to life and health (IDLH), entering into an unknown situation and permit required confined space rescue.	Offers highest level of protection against most types and levels of airborne contaminants. SCBAs have short operating times and are bulky and heavy, adding to heat stress.	Scott Air-Packs are located in elevation 134 in the Control Room. To be used for IDLH atmospheres for PRCS rescue.
Air Purifying Respirators (APR) with cartridge	Supplies purified air, only to be used if: <ul style="list-style-type: none"> Identify and concentration of contaminants are known and the correct cartridge has been selected. O₂ content is at least 19.5% there is periodic air monitoring of the work area the respirator assembly is appropriate for protection against the specific contaminants and concentration levels respirator has been fit tested on the wearer 	Full face respirator provides better chemical splash protection than face shield Can only be used for protection against gases and vapors with adequate warning or for specific gases, provided the service life is known and the safety factor is applied.	3M & North cartridges available for particulate protection. P100. North organic vapor, acid gas, particulate are also available for use with full face respirators. External contactors will be used for major releases.
Decontamination Equipment	Clean PPE and response equipment in accordance with manufacturer's instructions. When decontaminated, store equipment in clean, dry areas to protect from further contamination.	Should be used as needed to re-use equipment and supplies.	Eye wash and showers can be used. Use plastic sheets when necessary to contain liquids. In general, use contractor equipment.

Table 2: Hazard Mitigation Equipment			
Hazard Mitigation	Use	Capabilities	Location
Speedi-Dry	For the containment and/or absorption of spill of oils, alkaline materials, and most non-acidic aqueous materials.	Do not use on acids unless first neutralized with lime at direction of Environmental Manager.	Speedi-dry is at Fire Water spill kit, Lab spill kit and behind universal waste shed.
Drums/Containers	Contain spills, etc.	Drums and containers must be compatible with contents.	A drum is at the lab spill kit (white drum and yellow drum). Cubic Yard boxes are obtained from contractor for hazardous waste.
Absorbent pads, socks and drain blockers.	Used to contain spilled material.	Use absorbents rated for spill type. Universal (acid/caustic/solvent) and Oil (oil/coolant/solvent) types available.	A variety of socks, dikes, pillows, booms, mats are available at the Lab & Fire Water Tower spill kits. Lab kits – both types. Fire Water Kit – Oil type and has Storm drain mat.
Plastic shovels/brooms	For cleanup of materials.	Use only plastic (i.e., non-sparking shovels).	Fire tower spill kit has broom and shovel. A spark free shovel is at lab spill kit.
Acid / Caustic Neutralizers	Neutralize acid and caustic spills.	Use caustic neutralizers (lime) with acids. Use acid neutralizers (acetic acid) only with caustics	Lime available at lime silo for minor releases of caustic. Sodium bicarbonate will be used for small acid spills. Contract services for major releases.
Colorimetric Indicator Tubes and Pump	To quickly estimate the concentration of a contaminant in air for specific gases in an emergency situation.	“True” concentrations versus “measured” vary. Tubes should be refrigerated to improve performance. Experienced users should be responsible for reading tube results.	None on-site. Can be utilized by emergency response contractors as needed.

Table 2: Hazard Mitigation Equipment			
Hazard Mitigation	Use	Capabilities	Location
1.5 inch hose lines, Masterstream Devices (water cannons), Fire Extinguishers, Fire Stations, Sprinklers.	Firefighting material supply	<p>Fire Extinguishers for incipient stage fires. Hoses and sprinklers as needed for larger fires. Limited to trained and authorized personnel or external firefighting department.</p> <p>Type ABC are capable of extinguishing all types of fires including flammable liquids.</p>	<p>Hoses: Stations throughout facility.</p> <p>Fire extinguishers throughout facility including near hazardous waste storage area. (directly across)</p> <p>Sprinklers and fire hose located on tipping floor.</p> <p>Masterstream devices(2) located on charging deck. Ele. 163</p>
Emergency Lights Pull Stations CO2 System	Lighting Alarms Fire suppression	Fire and emergency response. (Alarm, lighting, emergency signal, CO2 removes oxygen from atmosphere and are used for specific types of fires (e.g. electrical, etc.). Pull stations provide internal communication on fire alarms.	Emergency Lights & pull stations throughout facility
Plant paging system, telephones and/or 2-way radio	Communication	Internal communication to summon emergency response. External communication to summon response contractors, emergency personnel, etc.	Phones/paging throughout facility. Two-way radios are assigned to designated plant personnel.
Plug-n-seal	Plug leaks	Temporary patch.	<p>A culvert plug for retention pond and storm drain mat is at the Fire Water Tower spill kit.</p> <p>Use emergency contractor as needed.</p>
Yellow Caution Tape and Red Danger Tape	Provide warning barrier	Communication barrier. Not a physical barrier.	Safety equipment supply closet in control room & warehouse.

Table 3: Medical/First Aid Equipment			
Medical/First Aid	Use	Capabilities	Location
Stretchers	Remove victim from emergency location.	<u>Movement of victim at discretion of medical response personnel.</u> Immediate removal in life or death situations. May only be available from professional emergency medical response personnel.	Tool crib closet adjacent to control room. Otherwise, utilize emergency services.
Eyewash stations	Flush any possible substances from eyes	Continue flushing with fresh water for a full 15 minutes. The time water is needed to flush the eyes is critical to preventing injury.	Marked locations throughout facility.
First aid stations	Provide first aid to victim.	<i>Trained First Aid Personnel shall determine usage.</i>	First Aid Kits are in admin offices, maintenance shop and control room.

EVACUATION PLAN

Evacuation route maps have been developed and posted in numerous locations in the facility. The need to evacuate the facility will be determined by the Emergency Coordinator or other First Responders, if necessary. The primary muster area is located at the scale house. The secondary muster area is the contractor parking lot.

COORDINATION AGREEMENTS

The facility has discussed response agreements with the local Police and Fire Departments. No written agreement exists, but it is fully expected based on verbal discussions that both Police and Fire will respond to the facility if called.

The facility does maintain a service agreement with Clean Harbors Environmental Services for emergency response services.

Copies of the integrated Spill Prevention, Countermeasure and Control Plan and Hazardous Waste Contingency Plan were distributed on April 26, 2013 to NHDES-Waste Management Division, Concord Fire Department, Concord Hospital, NH Department of Homeland Security and Emergency Management, and the Regional Emergency Planning Committee

IMPLEMENTATION OF THE CONTINGENCY PLAN

Oil Spill Reporting

State of New Hampshire Regulations (Env-Or 604.06) require that the responsible party or other person who becomes aware on an oil discharge (such as Wheelabrator, if a customer truck releases oil) shall notify NHDES immediately after obtaining knowledge that a discharge meeting one or more of the criteria listed has occurred. Any spill that meets one or more of the criteria listed below must be reported to NHDES.

1. A discharge of any oil into surface water (i.e., Burnham Brook) or groundwater of the state;
2. A discharge of 25 gallons or more of oil to land;
3. A discharge of less than 25 gallons to land, unless the discharge is cleaned up immediately and properly disposed of;
4. A discharge of oil that results in the presence of vapors that pose an imminent threat to human health (such as gasoline spilled where vapors enter a building);
5. A discharge of oil resulting in a violation of the groundwater quality criteria in a sample collected in a water supply well; or
6. A discharge of oil resulting in the detection of Non Aqueous Phase Liquid (NAPL)(includes a layer of oil floating on water surface or more dense liquids accumulating at the bottom of a pond or waterway for example).

Hazardous Material Spill Reporting Regulations

The State of New Hampshire Hazardous Waste regulations (Env-Wm 513.01) require reporting within 1 hour upon discovery of any discharge of hazardous waste or any discharge of a material which when discharged becomes a hazardous waste that poses a threat to human health or the environment, for example, into storm or sanitary sewers, onto the land or into the air, groundwater or surface waters. Wheelabrator Concord does not routinely have any materials on site that when spilled would be reportable since the materials, when waste are not listed hazardous waste. When non-routine materials are brought on site, the regulatory list in Env-Hw 402 is reviewed to determine if the material would be reportable to the NHDES if spilled.

The definition of Hazardous waste in NH includes Env-Hw 404.02 Spills Residues and Contaminated Soil, Water and Debris. Any residue or contaminated soil, water or other debris resulting from the spill or cleanup of a spill into or on any land or water of any hazardous waste or any material listed in Env-Hw 402 shall be regulated as a hazardous waste mixture in accordance with Env-Hw 404.01.

Hazardous Waste Contingency Plan Required Reporting

In addition to the reporting requirements of 40 CFR Part 265 Subpart D / Env – HW 509.02 the Emergency Coordinator must immediately (within 1 hour) notify the NHDES using the 24-hour spill response number or the National Response Center (1-800-424-8802) immediately (within 15 minutes), and provide the following information:

- Name, address and telephone number of the reporter,
- Name and address of the facility,
- Date, time and type of incident (e.g. fire, explosion);
- Name and quantity of material(s) involved, to the extent known;
- The extent of injuries, if any; and

An assessment of actual or potential hazards to human health and the environment outside of the facility.

Following contingency plan implementation, the Emergency Coordinator will notify NHDES and local authorities that the facility is in compliance with the following requirements.

- (1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
- (2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

Local Reporting Requirements

Any oil or chemical discharges to the municipal sewer system must be reported to the Concord Sewer Department. The facility is not subject to any other local release reporting requirements.

Wheelabrator Concord is a permitted Solid Waste Facility. As such, NH State Solid Waste Rules require facility management to keep the NHDES informed about any "environmental incidents" that threaten human health or the environment. Spills or releases significant enough to require reporting to any other agency qualify as an "environmental incident" and these must be reported to the NHDES. Wheelabrator Concord occasionally generates small quantities of hazardous waste. If hazardous waste is ever released at the site, then the spill must be reported to the NHDES in accordance with NH Hazardous Waste Rules.

The Concord Fire Department is the point of contact for the Local Emergency Planning Committee (LEPC). The Wheelabrator facility discharges sanitary wastes to the City of Concord sewer system and these discharges are regulated under the City's sewer ordinance. Environmental releases at the Wheelabrator Concord site are not regulated by any other city or county regulations or ordinances.

EMERGENCY RESPONSE PROCEDURES

- a) Immediate Notification - Include Phone Numbers of Local and State Agencies
- b) Control and Containment
- c) Follow-up
- d) Notification of Compliance Before Resuming Operation

REQUIRED REPORTS TO THE WASTE MANAGEMENT DIVISION

Within 15 days of an emergency requiring contingency plan implementation, the response coordinator will file a written report with NHDES. This report will include the following information:

- Name, address and telephone number of the reporter,
 - Name and address of the facility,
 - Date, time and type of incident (e.g. fire, explosion);
 - Name and quantity of material(s) involved, to the extent known;
 - The extent of injuries, if any; and
 - An assessment of actual or potential hazards to human health and the environment outside of the facility.
- Estimated quantity and disposition of recovered material that resulted from the incident.

Section 7 Employee Training Program

Procedures are in place to ensure that all personnel working at the facility understand the basic safety and environmental regulatory requirements, and the potential impacts associated with the performance of their job using appropriate education, training or experience. This procedure applies to all Wheelabrator personnel and contract employees who manage, or perform work at Wheelabrator facilities, to the extent applicable.

The facility maintains an annual training plan that identifies the employees in need of training, and at what frequency. The Training Attendance Form is used to identify all individuals participating in training that does not specifically require certification of competency by the trainer and the participant. Training Certification Form shall be used to identify individuals that have demonstrated competency in training that specifically requires certification of competency by the trainer.

Specific training requirements are outlined in more detail in WOHS-4.4.2 Health and Safety Procedure and WEMS-4.4.2 Environmental Training Plan. These are incorporated here by reference.

Section 8 Recordkeeping and Reporting

The facility uses a plan that defines the controls needed for the identification, storage, protection, retrieval, retention, and disposition of records required to ensure conformity with applicable regulatory recordkeeping requirements, and the effective operation of Wheelabrator Technologies Inc.'s Integrated Management Systems.

Records are to be legible and readily identifiable. Information on records or logs are to be documented in a manner or medium that if altered it would be obvious that changes have been made. Records shall be electronically stored, or if needed, a hardcopy placed in suitable containers or cabinets for storage and protected from loss, deterioration, and damage. Electronic workbooks, data, or spreadsheets maintained as a record are saved into a read only file folder or exported as a PDF at the applicable frequency to ensure the integrity of the electronic data.

Recurring regulatory reporting requirements are maintain in the facility task management system. This system is populated with applicable permit, plan or regulatory based compliance tasks. Tasks are assigned to an individual for completion and a review is done periodically to ensure all assigned tasks are completed within the required time frame.

When a new permit is received, a plan is changed, or new or revised regulations are issued, then the system is reviewed to determine if any new tasks need to be created, or existing tasks revised.

Section 9 Revision Log

Revisions to this manual are to be tracked in the log below. Provide details on

Revision Date and Number	Author	Revision Description
Revision 0 8-10-14	Wheelabrator Concord Company	Initial manual version

Lime Grit Analytical

Eric Capron
Wheelabrator Concord
11 Whitney Road
Penacook, NH 03303



Subject: Laboratory Report

Eastern Analytical, Inc. ID: 133700
Client Identification: Lime Grit
Date Received: 7/16/2014

Dear Mr. Capron :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.eailabs.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

- Solid samples are reported on a dry weight basis, unless otherwise noted
- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R : % Recovery

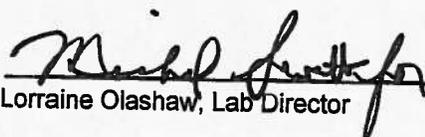
Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269) and Vermont (VT1012).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample(s) 30 days from the sample receipt date.

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

Sincerely,


Lorraine Olashaw, Lab Director

7/22/14
Date

6
of pages (excluding cover letter)



SAMPLE CONDITIONS PAGE

EAI ID#: 133700

Client: Wheelabrator Concord

Client Designation: Lime Grit

Temperature upon receipt (°C): 25.2

Received on ice or cold packs (Yes/No): N

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
133700.01	Lime Grit #1	7/16/14	7/10/14	solid		Adheres to Sample Acceptance Policy
133700.02	Lime Grit #2	7/16/14	7/10/14	solid		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitibility, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis. Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.

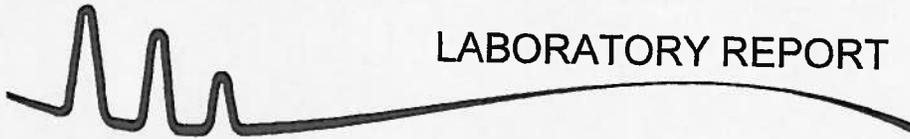
All results contained in this report relate only to the above listed samples.

References include:

- 1) EPA 600/4-79-020, 1983
- 2) Standard Methods for Examination of Water and Wastewater, 20th Edition, 1998 and 22nd Edition, 2012
- 3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- 4) Hach Water Analysis Handbook, 2nd edition, 1992

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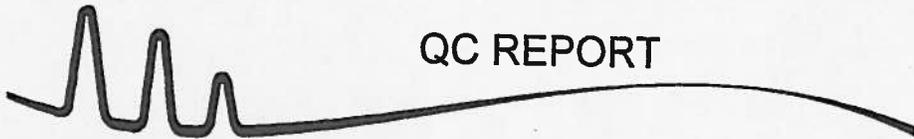
LABORATORY REPORT

EAI ID#: 133700

Client: **Wheelabrator Concord**

Client Designation: **Lime Grit**

Sample ID:	Lime Grit #1	Lime Grit #2	Analysis			
Lab Sample ID:	133700.01	133700.02				
Matrix:	solid	solid				
Date Sampled:	7/10/14	7/10/14				
Date Received:	7/16/14	7/16/14				
pH	12.2	12.2	Units	Date	Time	Method Analyst
			SU	7/17/14	16:45	9045 SCW



QC REPORT

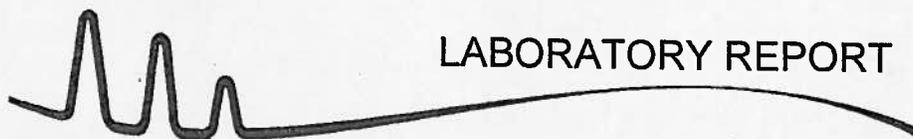
EAI ID#: 133700

Client: Wheelabrator Concord

Client Designation: Lime Grit

Parameter Name	Blank	LCS	LCSD	Date of Units Analysis	Limits	RPD	Method
pH	NA	7.97 (99% Rec)	7.96 (99% Rec)	SU 7/17/14	7.89 - 8.07	10	9045

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
*/! Flagged analyte recoveries deviated from the QA/QC limits.



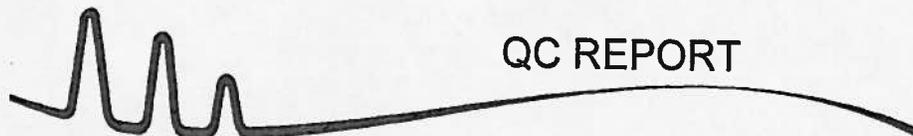
LABORATORY REPORT

EAI ID#: 133700

Client: **Wheelabrator Concord**

Client Designation: **Lime Grit**

Sample ID:	Lime Grit #1	Lime Grit #2					
Lab Sample ID:	133700.01	133700.02					
Matrix:	solid	solid					
Date Sampled:	7/10/14	7/10/14					
Date Received:	7/16/14	7/16/14					
			Analytical Matrix	Date of Analysis	Units	Method	Analyst
Arsenic	< 0.5	< 0.5	TCLPsolid	7/21/14	mg/L	6020	DS
Barium	< 0.5	< 0.5	TCLPsolid	7/21/14	mg/L	6020	DS
Cadmium	< 0.01	< 0.01	TCLPsolid	7/21/14	mg/L	6020	DS
Chromium	< 0.1	< 0.1	TCLPsolid	7/21/14	mg/L	6020	DS
Lead	< 0.01	< 0.01	TCLPsolid	7/21/14	mg/L	6020	DS
Mercury	< 0.01	< 0.01	TCLPsolid	7/21/14	mg/L	6020	DS
Selenium	< 0.1	< 0.1	TCLPsolid	7/21/14	mg/L	6020	DS
Silver	< 0.1	< 0.1	TCLPsolid	7/21/14	mg/L	6020	DS
Initial pH	12.22	12.25					
pH after HCl	12.08	12.07					
Final pH	12.19	12.18					
Fluid Used	#2	#2					



QC REPORT

EAI ID#: 133700

Client: Wheelabrator Concord

Client Designation: Lime Grit

Parameter Name	Blank	LCS	LCSD	Units	Date of Analysis	Limits	RPD	Method
Arsenic	< 0.5	1.0 (103 %R)		mg/L	7/21/14	80 - 120	20	6020
Barium	< 0.5	1.0 (104 %R)		mg/L	7/21/14	80 - 120	20	6020
Cadmium	< 0.01	1.0 (104 %R)		mg/L	7/21/14	80 - 120	20	6020
Chromium	< 0.1	1.0 (104 %R)		mg/L	7/21/14	80 - 120	20	6020
Lead	< 0.01	1.0 (102 %R)		mg/L	7/21/14	80 - 120	20	6020
Mercury	< 0.01	0.11 (111 %R)		mg/L	7/21/14	80 - 120	20	6020
Selenium	< 0.1	1.0 (103 %R)		mg/L	7/21/14	80 - 120	20	6020
Silver	< 0.1	1.1 (107 %R)		mg/L	7/21/14	80 - 120	20	6020

Parameter Name	MS/MSD Parent ID	MS/MSD Parent	Matrix Spike	MSD	Units	Date of Analysis	Limits	RPD	Method
Arsenic	133746.01	< 0.5	100 (102 %R)	100 (104 %R) (2 RPD)	mg/L	7/21/14	75-125	20	6020
Barium	133746.01	0.6	94 (93 %R)	94 (93 %R) (0 RPD)	mg/L	7/21/14	75-125	20	6020
Cadmium	133746.01	< 0.01	94 (94 %R)	96 (96 %R) (2 RPD)	mg/L	7/21/14	75-125	20	6020
Chromium	133746.01	< 0.1	93 (93 %R)	93 (93 %R) (0 RPD)	mg/L	7/21/14	75-125	20	6020
Lead	133746.01	< 0.01	87 (87 %R)	89 (89 %R) (2 RPD)	mg/L	7/21/14	75-125	20	6020
Mercury	133746.01	< 0.01	0.10 (101 %R)	0.10 (103 %R) (2 RPD)	mg/L	7/21/14	75-125	20	6020
Selenium	133746.01	0.2	100 (100 %R)	100 (103 %R) (3 RPD)	mg/L	7/21/14	75-125	20	6020
Silver	133746.01	< 0.1	86 (86 %R)	90 (90 %R) (5 RPD)	mg/L	7/21/14	75-125	20	6020

Samples were analyzed within holding times unless noted on the sample results page.

Instrumentation was calibrated in accordance with the method requirements.

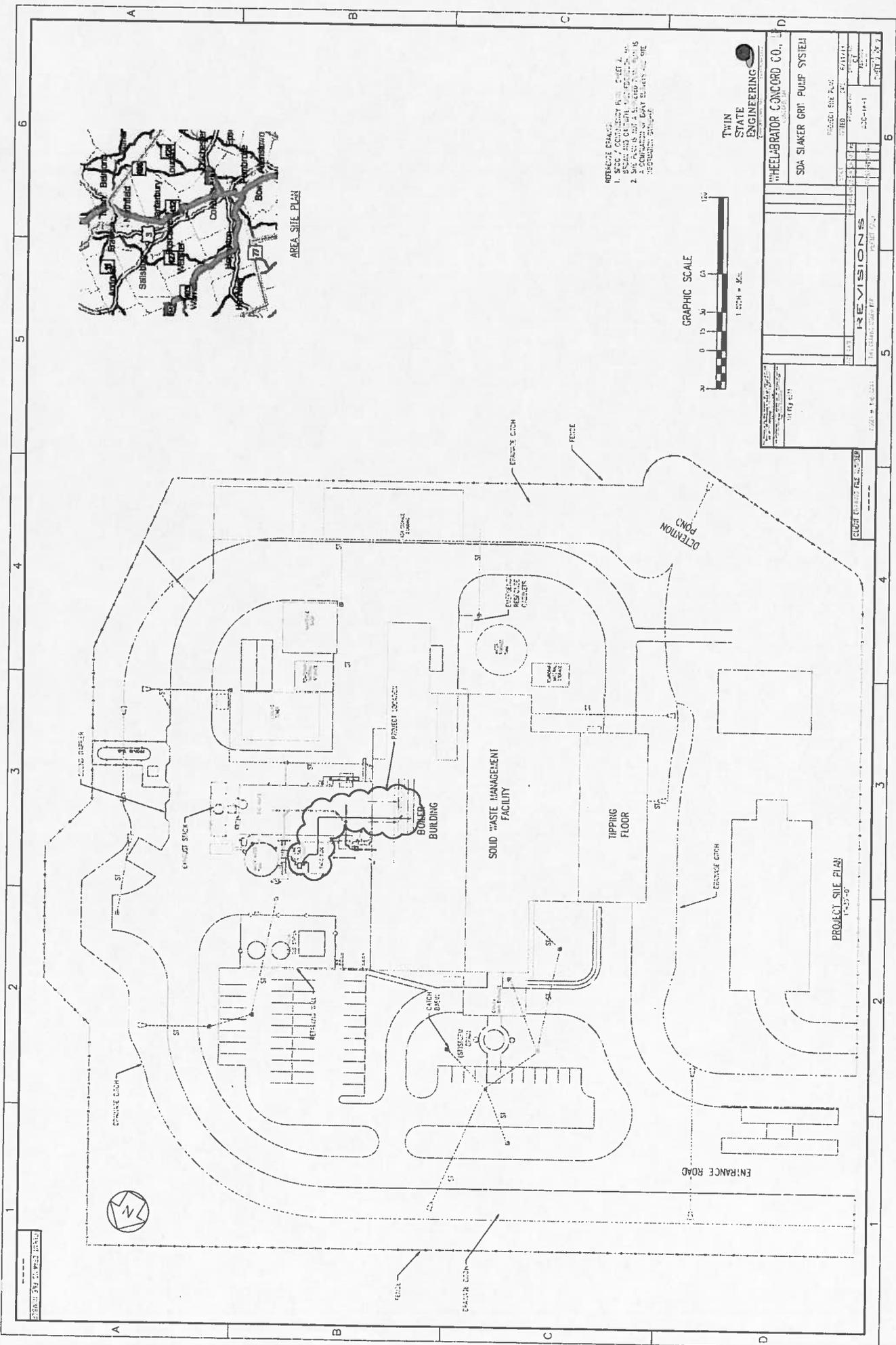
The method blanks were free of contamination at the reporting limits.

The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.

Exceptions to the above statements are flagged or noted above or on the QC Narrative page.

*// Flagged analyte recoveries deviated from the QA/QC limits.

Lime Grit Pumping System Design Drawings



AREA SITE PLAN

- REFERENCE FRAMES:
1. SDC / CONSTRUCTION PLAN SHEET 2.
 2. SDC / CONSTRUCTION PLAN SHEET 3.
 3. SDC / CONSTRUCTION PLAN SHEET 4.
 4. SDC / CONSTRUCTION PLAN SHEET 5.
 5. SDC / CONSTRUCTION PLAN SHEET 6.
 6. SDC / CONSTRUCTION PLAN SHEET 7.



TWIN STATE ENGINEERING
 1000 STATE STREET
 CONCORD, MASSACHUSETTS 01742

WHEELABRATOR CONCORD CO., INC.
 SDA SLAKER GRIP PULP SYSTEM

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

PROJECT SITE PLAN
 1"=25'-0"

DATE: 05/11/00
 DRAWN BY: J. W. HARRIS

Ash Building Scrubber System Design Drawings

18 x 20 Equipment Storage Tent Location

