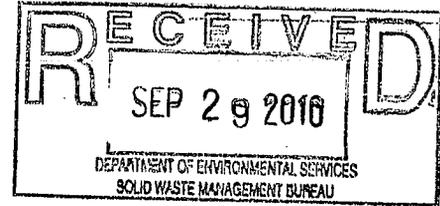


# OPERATING PLAN

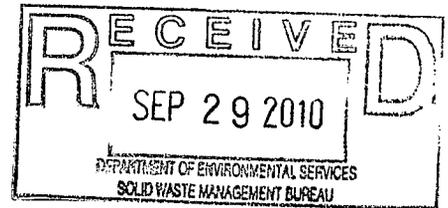


for

## Hebron–Bridgewater Refuse District Solid Waste Processing & Treatment Facility

2008

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**SECTION I  
FACILITY IDENTIFICATION**

**FACILITY NAME:** Hebron-Bridgewater Refuse District  
(The Towns of Hebron and Bridgewater established the Refuse District by vote of their respective Town meetings in 1976. The Selectmen of both towns act as the governing Board)

**MAILING ADDRESS:** 297 Mayhew Turnpike, Bridgewater, NH 03222

**STREET ADDRESS:** 290A Dick Brown Rd, Bridgewater, NH 03222

**PERMIT NUMBER:** Air: PO-C-0382  
Solid Waste: (pending)

**FACILITY TYPE:** Processing / Treatment  
(The facility is a collection, storage and transfer facility, coupled with recycling and incineration of some municipal waste.)

**DESIGN CAPACITY:** 8 tons per day average (55 tons per week)

**INCINERATION CAPACITY:** 750 Lb/Hr Maximum

**QUANTITY OF WASTE TO BE STORED AT THE FACILITY:** 80 Tons Maximum

**FACILITY SERVICE TYPE:** Limited Public (Residents and haulers/contractors that pick up within the district)

**FACILITY SERVICE AREA DESCRIPTION:** The facility serves the towns of Bridgewater and Hebron

**FACILITY OWNER / PERMITTEE:** Hebron-Bridgewater Refuse District

**PROPERTY OWNER:** Hebron-Bridgewater Refuse District

**OPERATOR(S) NAME:** Hebron-Bridgewater Refuse District

**TOWN OF HEBRON::** 7 School St., Hebron, NH 03241 Telephone # 744-2631

**TOWN OF BRIDGEWATER:** 297 Mayhew Tpke., Bridgewater, NH 03222  
Telephone # 744-5055

## SECTION II PROHIBITED AND AUTHORIZED WASTES

**1. PROHIBITED WASTE:** This facility is not permitted to receive any of the following types of solid waste: asbestos waste; explosive waste; contained gaseous waste; liquid waste; infectious waste (except for medical sharps); animal carcasses; contaminated soils and other absorbent media, and any waste generated outside the borders of New Hampshire.

**2. AUTHORIZED WASTE:** The facility is limited to receiving only the below listed types of solid waste, subject to the prohibitions specified above. The items checked below constitute the only types of solid waste the facility is authorized to collect, store and transfer.

<input checked="" type="checkbox"/>	Mixed municipal solid waste, as defined by Env-Sw 103.45, namely "solid waste generated at residences, commercial or industrial establishments, and institutions, but excluding construction and demolition debris, automobile scrap and other motor vehicle waste, infectious waste, asbestos waste, contaminated soil and other absorbent media, and ash other than ash from household stoves".							
<input checked="" type="checkbox"/>	Select recyclable materials, which have been sorted/separated by the generator (i.e. source separated), as follows:							
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	paper	<input checked="" type="checkbox"/>	Cardboard	<input checked="" type="checkbox"/>	plastic	<input checked="" type="checkbox"/>	glass
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	ferrous metal	<input checked="" type="checkbox"/>	non-ferrous metal	<input checked="" type="checkbox"/>	textiles	<input checked="" type="checkbox"/>	medical sharps
<input checked="" type="checkbox"/>	Bulky waste, as defined by Env-Sw 102.23, namely "large items that cannot be handled by normal solid waste processing, collection or disposal methods, such as appliances, furniture, large auto parts, tires, and . tree stumps"(*), as follows:							
<input checked="" type="checkbox"/>	appliances/ white goods (note: white goods potentially containing CFCs and/or PCBs are stored separately in a location accessible to qualified personnel who examine each article and remove/extract the CFCs and/or PCB components in accordance with applicable regulations)							
<input checked="" type="checkbox"/>	Furniture (Stripped)							
<input checked="" type="checkbox"/>	large auto parts (e.g., frames, fenders, bumpers)							
<input checked="" type="checkbox"/>	tires (Note: tires are collected and stored only in accordance with Env-Sw 905.)							
<input type="checkbox"/>	other (specify):							
<p>(*Note: Pursuant to Env-Sw 302.03(b) (6), no permit is required to actively manage stumps by above-ground methods, not including composting. Therefore, although stumps are classified as a "bulky waste", the collection, storage and transfer of stumps at this facility is permit-exempt and should be reported under Section VIII, 2. (d) of this manual; unless already reported in Section II of the application.</p>								
<input checked="" type="checkbox"/>	Inert construction and demolition debris as defined by Env-Sw 103.26, namely "construction and demolition debris which is comprised of materials that do not degrade, combust or generate leachate", as follows: (check all of the following which this facility will receive):							
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	asphalt	<input checked="" type="checkbox"/>	fiberglass	<input checked="" type="checkbox"/>	metal	<input checked="" type="checkbox"/>	shingles
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	brick	<input checked="" type="checkbox"/>	glass	<input checked="" type="checkbox"/>	plaster	<input checked="" type="checkbox"/>	tile
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	concrete	<input checked="" type="checkbox"/>	insulation	<input checked="" type="checkbox"/>	porcelain fixtures	<input checked="" type="checkbox"/>	drywall
<input checked="" type="checkbox"/>	Other construction and demolition debris, limited to:							
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	untreated/unpainted wood and lumber			<input checked="" type="checkbox"/>	treated/painted wood and lumber		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	carpeting			<input checked="" type="checkbox"/>	plastic/vinyl		
<input checked="" type="checkbox"/>	Wood ash from household stoves							

## SECTION III ROUTINE OPERATIONS PLAN

**1. HOURS OF OPERATION:** The days and hours the facility is open to receive and transfer wastes are as specified below. All active and routine facility operations, including waste disposal, facility inspections, maintenance, repairs, and monitoring, occurs between 6:00 a.m. to 6:00 p.m. under normal non-emergency circumstances.

Days	Facility Hours	Incinerator Hours
Monday	9 am – 5pm (5/30 - Labor Day)	6am – 6am* as needed
Tuesday	Maintenance –No Public	
Wednesday	Closed (App't only)	
Thursday	Closed (App't only)	6am – 6am* as needed
Friday	9am – 5pm	6am – 6am* as needed
Saturday	9am – 5pm	6am – 6am* as needed
Sunday	9am – 4pm	6am – 6am* as needed

\* Incinerator runs as needed. No public access.

**2. FACILITY ACCESS CONTROL:** The types of access control employed by the facility to prevent unauthorized use are indicated below

- √ Locked building(s)
- √ Locked gate
- √ Locked container(s)
- √ Natural Barriers: Dense Tree Line; Steep Grades
- √ Access Restricted gate signs which read as follows: Facility Closed – Authorized Personnel Only

**3. SIGNS AND POSTINGS:** Signs and Postings at the facility include the items listed below.

- (a) Legible signs will be posted near the public entrance to the facility and will include: (1) the facility name and permit number; (2) the name, address and telephone number of the permittee; (3) the days and hours that the facility will be open to receive waste; (4) the types of waste accepted; and (5) a statement that unlawful dumping shall be subject to fine and prosecution.
- (b) A copy of the Solid Waste permit, the Air Resources permit to operate, a complete copy of the approved operating plan and a complete copy of the facility closure plan will be maintained at a location accessible for use by the facility operators and for inspection by the New Hampshire Department of Environmental Services.
- (c) A copy of the authorization page of the facility's Solid Waste Permit, bearing the permit number and the authorization signature, will be prominently displayed at the facility.
- (d) Current operator certification certificates, obtained pursuant to the provisions of Env-Sw 1105.05, will be prominently displayed at the facility control room.

- (e) All municipalities and waste haulers will affix ownership identification and/or the facility or company logo to all waste containers used in conjunction with the operation of the facility. The ash dumpster will have our identification added to the container. Any future containers owned by the District will have that identification added.
- (f) Signs are posted on the premises to aid the public in separation and waste placement.

**4. ON-SITE TRAFFIC PATTERNS:** Facility operations are conducted in a manner that does not allow incoming or exiting vehicles to obstruct the safe passage of traffic on any public road leading to and from the facility. Facility operations are conducted in a manner as to accommodate on-site traffic flow in a safe and efficient manner. Signs direct users to appropriate drop-off areas for MSW, recyclables, e-waste, C&D, white goods, etc. are to be placed. Traffic will enter the facility as shown on the attached site plan and proceed as indicated by signage and as directed by attendants. *See attachment #1 Site Plan*

**5. WASTE ACCEPTANCE AND REJECTION PROCEDURES:** Only authorized wastes, as specified in the permit, are accepted by the facility. Incoming wastes are inspected and, if necessary, sampled and analyzed to assure the facility accepts authorized waste only. All unauthorized waste is rejected by the facility. The operator advises the transporter of a rejected waste as to potentially available alternative facilities which the operator believes or knows to be authorized to receive the type of waste being rejected.

(a) Unloading and sorting procedures are as described below

- √ Wastes are unloaded directly into the appropriate containers by the person(s) delivering the wastes. Wastes unloaded in this manner include metal cans, batteries, aluminum foil, . *See accompanying recycling/ separation rules attachment #2:*
- √ Wastes are unloaded onto a tipping floor or pad and sorted into designated containers by the facility's √grade waste paper, and kitchen waste. Burnable wastes which are not immediately incinerated are stored in a enclosed container for later incineration. This material is handled both in and out of the container with a skid-steer. *See accompanying picture attachment #5*
- √ Medical sharps are placed by the person delivering the waste in a durable plastic container which is placed by the attendant in a specially marked container for later incineration.. That container, when full, is placed in the incinerator by the attendant. *See accompanying rules attachment #2:*
- √ Containers of waste oil are dropped off by residents at the window. These are moved inside by attendants and later poured into a large container. A spill containment system is in place. The oil is sent to a qualified facility. *See accompanying rules attachment #2:*
- √ Universal wastes are received at the window and taken by the resident, accompanied by an attendant, to the Storage building, where they are stored indoors on an impermeable surface, until picked up by an approved vendor.. *See accompanying rules attachment #2:*
- √ Other unloading procedures: *See accompanying rules attachment #2:*

(b) Waste inspection procedures. All transfer containers (and/or stockpiles of waste, as may apply to tires, scrap metal, appliances or other waste stored in accordance with Env-Sw 504.05) are visually screened by the facility attendant on a routine basis to identify and remove unacceptable waste. Additional waste inspection procedures are as described below.

- √ Individual users of the facility are expected to participate in the inspection and sorting of the wastes which they deliver. The facility attendant oversees such activities and instructs users to immediately remove any unacceptable waste which they may deliver. Wastes which are inspected in this manner include those on the accompanying recycling/ separation rules attached. All materials not intended for the processing will be inspected..
- √ Relative to the collection, storage and transfer of mixed municipal solid waste, the attendant on duty periodically intercepts bags of wastes prior to their placement in the authorized transfer container and visually inspects the contents to determine that no unacceptable wastes, as specified in Section II of this manual, have been received. All bags and containers are opened prior to disposal.
- √ All material entering the facility must be visually inspected by the attendant prior to acceptance at the facility
- √ All power equipment (lawn mowers, small engines, etc.) is inspected to ensure that fluids (gas, oil, etc.) have been properly drained prior to acceptance at the facility.

## 6. WASTE QUANTITY, SOURCE AND DESTINATION MONITORING PROCEDURES

- (a) Waste Quantity The quantity of each waste is measured and recorded by the method(s) described below
- √ Scales (located on the tipping floor) are used by the facility to provide a weight record for the following outgoing wastes: Baled newspaper: Baled Cardboard: Baled Plastics: Baled aluminum: Baled tin: Electronic waste; Wood waste: Glass
  - √ Designated storage container(s) provide a volume measurement record for the following outgoing wastes: C&D material: Polystyrenes: Misc. non-recyclable products
  - √ The final destination facility provides scale receipts to record the quantity of the following outgoing waste: C&D material: Polystyrenes: Misc. non-recyclable products. Hauler provides weight and destination with invoice.
  - √ Waste Incinerator load weights are recorded by the Data Acquisition Systems of the Incinerator. Each hopper load is automatically weighed by floor scales and recorded prior to insertion into the incinerator.
- (b) Source Monitoring: All users must have identification affixed to the car: Users must be taxpayers of the Towns of Hebron or Bridgewater. Renters must bring letter from taxpayer to be issued a temporary permit. Contractors must produce building permit or other document for temporary permit.
- (c) Destination Monitoring: Haulers and brokers presently produce bills of lading and/or other records with their invoicing. No payments are authorized until those are present.

**7. STORAGE TIME AND CAPACITY LIMITS:** The maximum total quantity of waste permitted to be stored at the facility is indicated in Section I of this manual. All waste storage and transfer procedures must also meet the following additional requirements:

(a) All waste is actively managed: Cardboard, Newspaper, and Type 1-4 plastics are bundled and warehoused in a storage building until a trailer load is shipped. "Tin" cans and aluminum are compacted and stored on pallets until sufficient quantity for shipment is accumulated. C&D material is separated and placed in the bulky waste/C&D dumpster. Clean wood is burned in an open berm in accordance with appropriate forestry rules. Contaminated wood is shredded for efficient packing in the bulky waste/C&D dumpster, and then transported off site through approved brokers to landfills. All shredded material shall be moved immediately to dumpsters for transport. No other intermediate on-site storage for shredded wood will be allowed. Wire, insulation, non-recyclable plastics are loaded into dumpster for transport to approved landfills. E-Wastes are warehoused in an auxiliary building until sufficient quantities are met for shipment. Shingles, ferrous metals, and white goods are externally stored with limited access to the public until sufficient quantities are met for shipment. Glass is crushed in accord w/CWDP# 11 and stockpiled for use in construction projects by the towns of Bridgewater and Hebron Highway departments. Brush is burned in accordance with appropriate forestry rules. Clippings and leaves are collected on site.

All recyclable products are weighed and tagged. Bulk products (shingles and metals) are weighed by the vendor and reported to the facility on the invoice. The weight of dumpster shipped is reported by the vendor. Putrescible wastes (low grade waste paper, food waste etc) are stored in an enclosed fire resistant container until 6-8 thousand pounds are accumulated. This waste is incinerated and weights recorded by our digital acquisition system. (DAS) Our continuous emission monitoring system records emission levels 24/7. On the average, we burn one day a week. A spreadsheet is maintained on all products for review updated monthly.

- (b) Only approved haulers and authorized facilities are used by the District
- (c) Waste is not stored at the facility for a period of time which could result in a condition adversely affecting the environment, public health or safety, including conditions that attract insects and vectors, generate odors or leachate, or have the potential to cause fire or explosion.
- (d) Putrescible wastes are accepted and stockpiled in an enclosed, fire-resistant container for later incineration. This material is handled both in and out of the container with a skid-steer. *See attachment #1 Site Plan and picture attachment #5.*
- (e) Tires are stored and transferred in accordance with the applicable requirements of Env-Sw 905.02. The tire storage area is shown on Attachment #1 (*Site Plan*).
- (f) Universal waste is received and taken to the Storage building, where it is stored indoors on an impermeable surface, until picked up by an approved vendor in accord with Env-Hw 1100. *See attachment #1 Site Plan*

Procedures for monitoring compliance with the above-listed requirements are as follows.

All recyclable materials are stored inside and/or undercover with the following exceptions: Steel and white goods: wood, shingles, glass and tires.

Excess waste for incineration is stored in an enclosed, fire resistance container until processed.

Attendants accept tires and store as above.

White good, e.g., refrigerators, freezers, air conditioners, washers and dryers are accepted and stored until sufficient quantity is met for pickup by scrap dealer. Gases are removed from refrigerators by qualified contractors. When gases have been removed, units are marked with a large red "X" to indicate they are ready for the scrap dealer pickup.

Ash is stored indoors except during cool down.

Ash from wood stoves is accepted in a designated container and mixed with incinerator ash for disposal to a certified landfill.

## 8. COLLECTION, STORAGE AND TRANSFER PROCEDURES

**Collection** All material is separated prior to acceptance at the facility. Burnables are dumped through the collection window and move to either temporary storage or onto the incinerator loading center. Plastics and cardboard are handed to the attendant at an adjacent window for grading and compacting. Newspaper is disposed in a bin in the drop-off area. Cans, Aluminum and glass are disposed by the public into the appropriately labeled processing machines available at the window. The attendants periodically cycle the machinery and move the items to processing. Other items (Batteries, steel, wood, non-recyclables) are deposited by the public into the appropriately labeled bin/areas for later processing. No hazardous wastes are accepted by the Refuse District.

**Storage:** The H-B Refuse District has 7 balers to compact recyclable materials, which are then stored in an adjacent storage building. Steel, glass, bulky items, wood and shingles are stored in appropriately designated areas for later transport. A "z-fold" dumpster area is available for products transported off site to approved landfills or other processors. Incinerator ash is stored in a dumpster inside the facility except during cool down. Blown down water from the incinerator is processed and stored on-site. The district estimates this incinerator by-product has a storage capacity of over 15 years. It will be disposed of by an appropriate licensed hauler and landfill. (After 5 years of operation, we have accumulated about 15-20 gallons of that residual waste.

### Transfer

Facility will not collect waste for which it has no arrangements for removal to an authorized facility.

• Recyclable materials: Newspaper, Plastics, OC:	Approved vendor list posted
• Steel, Aluminum, Tin and other metals:	Approved vendor list posted
• Non-Recyclables: Type 4-7 plastics, Rugs, Polystyrene products, insulation etc:	Approved vendor list posted
• Shingles:	Approved vendor list posted
• Incinerator Ash.	Approved vendor list posted
• C&D (Construction & Demolition):	Approved vendor list posted
• Sharps	Approved vendor list posted
• Tires:	Approved vendor list posted
• E-Waste	Approved vendor list posted
• Universal Waste	Approved vendor list posted
• Ash	Approved vendor list posted
• Ash Testing	Approved vendor list posted
• Waste Oil	Approved vendor list posted

The current list of approved vendors and phone numbers will be posted in the control room.

## 9. INCINERATION PROCESS:

All waste identified for incineration is processed in an Advanced Combustion Systems (ACS) Model CA-750 MSW incinerator. Waste, deposited by users directly onto the tipping floor (monitored by attendants), is picked up by a small bucket loader, which moves onto a platform floor scale where the total weight of loader and waste is recorded by a digital scale, the waste is deposited into the hopper of the incinerator and the unloaded weight of the bucket loader recorded by the scale. The net weight of the waste is recorded by the DAS system. Loads of approximately 400 pounds are processed in this manner. The system automatically controls the loading schedule to ensure proper burn. A copy of the ACS operating manual is maintained in the facility control room. . See attachment #3 *Incinerator Plan*

## SECTION IV RESIDUAL WASTE MANAGEMENT PLAN

The facility receives only residential MSW. The only two byproducts produced are incinerator ash and sludge from the incinerator scrubber.

Incinerator Ash: The ash is removed from the incinerator into an ash cart and then transferred to a 15 cubic yard dumpster for storage until it is disposed of.

The dumpster is stored under cover after cooling. The dumpster of ash is disposed of at an authorized facility when it has been filled.

Incinerator Ash Sampling and Analysis: Incinerator ash samples shall be collected and analyzed in accordance with the QA/QC Plan included as Attachment 4 to the Operating Plan, prior to disposal. If the ash is determined to be non-hazardous it can be transported to a permitted solid waste landfill in accordance with the procedures in the QA/QC Plan.

Scrubber Sludge: The byproduct of the wet scrubber is ash particles suspended in water. Further processing of that product through the evaporator produces a viscous sludge that is stored on site in a steel holding tank. Liquid from the holding tank is decanted to the blow-down tank. The viscous sludge remaining in the tank contains high levels of metals and salts. As this product may be considered a Characteristic Hazardous Waste, special handling and disposal procedures must be observed, as follows:

1. The facility shall submit a RCRA C Site Identification Form to the NHDES Waste Management Division and obtain the appropriate EPA ID Number.
2. No more than 220 pounds of sludge shall be accumulated at any time.
3. Prior to disposal of the sludge, a representative sample shall be sent to a certified laboratory for a hazardous waste determination in accordance with Env-Hw 502.
4. If the sludge is determined to be a hazardous waste, it shall be transported and disposed of in accordance with State and Federal hazardous waste regulations at a licensed hazardous waste facility.
5. If the sludge is determined to be non-hazardous, it shall be managed in accordance with the solid waste rules.

## SECTION V FACILITY MAINTENANCE, INSPECTION AND MONITORING PLAN

This section of the manual addresses all routine maintenance, inspection and monitoring requirements necessary to assure the integrity of facility operations, including a description of the measures to be undertaken to monitor and inhibit the following:

**Spontaneous Combustion:** All materials to be incinerated either go directly to the incinerator or are stored in an outside enclosed fire proof container. That container has restricted oxygen to minimize combustion. In addition, the container has ports for flooding the interior with water in the unlikely event of a fire. No burnables are left within the building. Other transport containers are sited away from the tree line and buildings in case of fire.

**Other Fire Hazards:** Oils and any flammable materials are stored in fire resistant cabinets. All Propane regulators are vented to the outside of the building. All electrical components are in conduit and properly grounded.

**Vector Production:** No Putrescible wastes are stored in the open. No vector production or problem

**Incineration:** All waste entering the plant is separated, categorized and, recyclables are baled for market. The only materials incinerated are low grade residential waste paper and garbage. This is collected and stored in a closed, drive-in container until ~80 % full. Combined with that day's incoming waste, it is incinerated. It averages 6-8 thousand pounds of incinerated material and the loads are automatically registered by our DAS.

**Generation of Methane, Hazardous, or Explosive Gases:** No known methane is generated. All propane is transferred via 2" black iron pipe. Propane regulators are vented to the outside of the building in case of failure. All controls are fail safe and will force an immediate shutdown. The building has numerous fans and vents to move air constantly. Sodium Hydroxide and Diesel fuels are stored in double wall containers within the building and on-site respectively. See attachment #3 Incinerator Plan and attachment #1 Site Plan

**Odors:** No putrescible wastes are stored in the open. No odors exist.

**Noise:** The induction fan was noisy and, in 2005-2006, the system was modified to reduce and eliminate the problem. This site abuts the town highway department. The existing facilities pre-date all existing abutters. Any noise is minor and is well below noise standards for residential neighborhoods.

**Dust:** The site is paved and grassed.

**Windblown Litter:** None: The little waste that falls at the incinerator window is regularly maintained.

**Leachate:** None produced

**Spills:** The main production floor is concrete. Spills associated with processing are cleaned immediately. A spill kit is available on site. Batteries are stored on concrete in accordance with universal waste rules..

### **Additional procedures include the following:**

The building is relatively maintenance free. Baler, skidsteer and incinerator maintenance is outsourced to qualified vendors. The staff performs minor service such as lubrication, belt adjustment etc.

To prevent the discharge of pollutants to the air, surface water, or groundwater, the systems in place are closed loop. The few dumpsters are on concrete pads surrounded by asphalt. Shingles and waste wood are in bins and on top of asphalt.

The incinerator exhausts through an approved wet scrubber and is monitored by a Continuous Emission Monitoring Device. The airflow is monitored 24/7 and computer recorded into a database. We are currently upgrading air monitoring systems to meet new EPA air requirements by 2010.

No known pollutants are discharged

We deal with only approved vendors.

No wetlands exist at the site, nor any shoreline. Closure of a pre 1981 old burn site was approved by DES in 2004. The discontinued C&D land fill and ash land fill are being closed and monitoring wells installed and managed. Nearby brooks are parts of the monitoring program (twice yearly by Eastern Analytical)

The production position occupies about 2 acres of a twelve acre site. Through a land boundary agreement, we added additional area near the pre 1981 burn area for additional buffers to the neighbor. 85% of the area is dense vegetation and trees.

Incinerator ash is analyzed for hazardous waste determination, semi-annually by a qualified lab in accordance with the QA/QC plan (*which is included as Att. 4*) and removed by a qualified hauler to a double lined landfill (presently North Country Environmental Services)

The enclosed container for solid waste waiting to be burned is inspected monthly for damage to the structure and fan operation and is cleaned periodically to prevent odors. The container has connections for fire suppression, if that occurs. *See accompanying picture attachment #5*

## SECTION VI CONTINGENCY PLANS

**FIRE:** In the event of a fire, manual pull stations exist throughout the building in addition to automatic detectors. A call list exists to notify appropriate persons and agencies. Standard and specialty fire extinguishers are placed throughout the building.

**EXPLOSION:** If entering the building, the smell of propane exists, personnel are trained to leave immediately. The master shut off is located away from the building and can be shut off safely. The propane tank farm is underground and has safety mechanisms to shunt to an off position if demand exceeds a predetermined level. (e.g. A ruptured pipe) All propane piping is located in such a manner to avoid direct contact. (All piping is located 8' or more off the floor.) Cement bollards are placed throughout the building to avoid damage. All personnel are to retreat to the Highway building to call for emergency services. The Town has a full time public safety Department and can call for mutual aid.

**OPERATOR INJURY:** A medical kit is available for minor emergencies. Platforms and ladders are OSHA approved. In the event of a serious injury, call 911. The Town of Bridgewater staffs an ambulance.

**LOCKOUT EQUIPMENT,** respirators, gloves, thermal protective suits, burn kits and hard hats are available and required for the employees. The District pays for various immunizations for all employees.

**OTHER POTENTIAL EMERGENCIES:** Some cleaning procedures can be dangerous if performed alone. For example, lubricating the ash lift requires that a lockout be in place prior to the procedure. The supervisor must be present and verify the procedure.

**STACK CAP SERVICING:** Requires access from the roof. Safety lines, lifts and multiple personnel must be present for this once a year event.

**SPILLS:** The main production floor is concrete. Spills associated with processing are cleaned immediately. A spill kit is available on site. Batteries are stored on concrete in accordance with universal waste rules..

### **CALL LIST:**

The following local and state officials must be contacted in the event of an emergency at the facility:

Fire Department: Officer on duty 744-6047.

Ambulance Service: Officer on duty 744-6047.

Police: Officer on duty 744-6745

NH Dept of Environmental Services: Hazardous materials/waste spills: 8-4, Mon.-Fri. 603- 271-3899

N.H. State Police Hazardous Materials # 1-800-346-4009

Fire Marshal: Office of State Fire Marshal at: (603) 271-3294

Other: Terence Murphy, Level IV Operator-Manager; 744-8685; 398-2730

Other: Henry Woolner, Level IV Operator-Manager, 744-2092; 393-7304

Other: Kieran Murphy, Level IV Operator-Site Manager, 744-3594; 254-7001

Other: Commissioners via town offices at: 744-2631 and 744-5055.

*(This list is posted in the control room.)*

## SECTION VII EMPLOYEE TRAINING PROGRAM

**Operator Certification:** Facility operators are trained and certified in accordance with the requirements of Env-Sw 1600 of the Solid Waste Rules. In order to receive certification, applicants must fulfill the education and experience qualifications specified in Env-Sw 1605, submit an application on forms provided by the Department, attend the Department's operator training program, and pass an examination applicable to the level of certification being sought.

**Certification Workshops:** Operator certification is valid for one year from the date of issuance. In order to renew their certification, all certified facility operators must attend at least one annual workshop administered or approved by the Department of Environmental Services.

**Safety Training:** The operator-supervisor and operator-managers attend yearly workshops on both environmental and safety issues. Monthly reviews are held regarding safety and ideas are incorporated into policies. The operator-managers meet weekly to observe operations and suggest upgrades to policies.

**Special Equipment Training in Accordance with Manufacturer Recommendations:** Advanced Combustion Systems (the Incinerator manufacturer) evaluates operations and visits the site for training and updates as necessary. ACS can monitor operations online to correct problems should they occur.

**Certification Requirements:** Hebron-Bridgewater Refuse District is considered a Level III facility per Env-Sw 1602.07 and therefore will have a minimum of a level III Operator to be in responsible charge. Typical minimum staffing will be one Level III and one helper.

## SECTION VIII RECORD KEEPING AND REPORTING

Record keeping and reporting includes the following:

### 1. Facility Operating Record

- (a) The District compiles and maintains records at the facility which document all phases of facility operations, including the following information:
- (1) Identification of the facility by name, location by street and municipality and permit number;
  - (2) Identification of the permittee by name, address and telephone number;
  - (3) Identification of all facility operator(s) by name, address, certificate number, and date(s) of employment at the facility;
  - (4) Quantity, type, source and destination of all waste received by the facility;
  - (5) Quantity, type and destination of all waste generated by the facility, if any, including bypass waste and residual waste;
  - (6) Quantity, type and destination of all certified waste-derived products produced by the facility, if any;
  - (7) Record of inspections, maintenance, and repairs;
  - (8) Record of accidents, violations, remedial and emergency event response actions;
  - (9) Record of complaints received and related response actions;
  - (10) Data from all environmental monitoring performed at or for the facility, whether required by the solid waste rules or the permit or undertaken voluntarily;
  - (11) Documentation of contact with the waste management district(s) served by the facility as required by Env-Sw 1105.12;
  - (12) Other information and documentation as required by the terms and conditions of the permit.
- (b) The operating records identified in (a) above will be maintained at the facility office at all times during the active life of the facility,
- (c) Operating records will be made available for department inspection and copies provided to the department pursuant to Env-Sw 2000.
- (d) Following closure of the facility, the operating records will be maintained the Bridgewater Town office unless destruction of the records is approved pursuant to the provisions for a type V permit modification in Env-Sw 315.

### 2. REPORTING REQUIREMENTS

- (a) The permittee will notify the department in writing within 30 calendar days of any change in the facility address, telephone number, key certified operators and contact person(s).
- (b) The permittee will file an annual facility report by March 31 for the prior calendar year for each year, on forms provided annually by the Department of Environmental Services (Department
- (c) The permittee will report all changes in operational and ownership control in accordance with the provisions for a type III or type IV permit modification, as applicable, pursuant to Env-Sw 315.
- (d) Relative to co-existence with other activities, the permittee will notify the New Hampshire Department of Environmental Services in writing prior to conducting the following activities at the facility not specifically authorized in the permit (ref. Env-Sw 1101.02 and Env-Sw 1105.07(d)):

(1) Any activity not regulated by the Solid Waste Rules but involving a waste listed in Env-Sw 101.03 (The Solid Waste Rules do not apply to these wastes, but permittees must notify the NH Department of Environmental Services prior to conducting activities with any of them at the facility);

and

(2) Any activity that is permit-exempt in Env-Sw 302.03.

(e) The permittee will report, as soon as practicable, all incidents or situations which involve an imminent and substantial risk to human health, safety or the environment and/or constitute a violation of the solid waste rules or the facility permit. This reporting will be as specified in Env-Sw 1105.09.

(f) In accordance with the rules, reports must be submitted to the Department in writing of complaints made by abutters or third parties..

**3. OTHER REPORTING REQUIREMENTS SPECIFIC TO THIS FACILITY:** none

## SECTION IX ATTACHMENTS

Attachment #1 – Site Plan

Attachment #2 – Refuse Disposal Regulations

Attachment #3 – Incinerator Plan

Attachment #4 – Ash Testing QA/QC Plan

Attachment #5 – Storage Container Picture



**HEBRON-BRIDGEWATER REFUSE DISPOSAL DISTRICT  
REGULATIONS**

The Hebron-Bridgewater Refuse Disposal District was organized and put into operation in 1975 to comply with the State mandate requiring all open burning to cease by this date. Since this time we have learned a great deal about the operation of a small solid waste disposal plant. It has become obvious, the only way to lower the per capita cost of handling solid waste is by a system of separation and recycling. Experience confirms this fact.

The cooperation of each of us is essential in keeping the costs down. The more the people do before the waste matter reaches the facility, the less the expense involved in the handling.

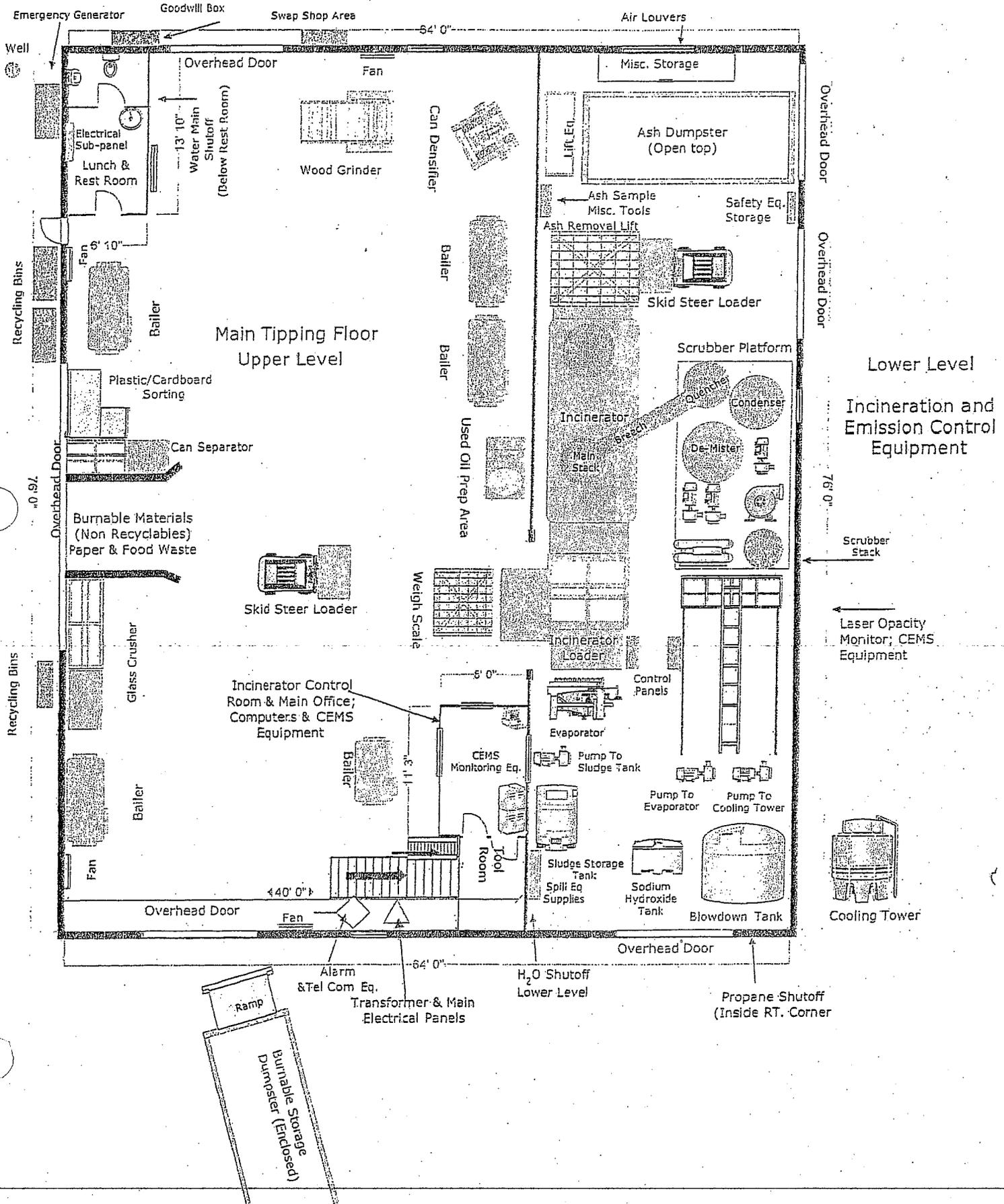
All solid waste, both residential and commercial must be completely separated and ready to dump before reaching the facility. Trash is subject to inspection by attendants and repeated failure to comply with the separation requirements will result in the loss of the privilege to use the facility. You are encouraged to ask for assistance from the attendants. They are there to answer your questions and help you. You may also call the center at 744-8938 if you have any questions. Separation sounds more difficult than it is. No hazardous wastes will be accepted. These regulations are the same for the last ten years

**SOLID WASTE TO BE SEPARATED AS FOLLOWS:**

<p><b>GLASS:</b> All <b>EMPTY</b> glass containers. Caps and rings should be removed. Metal caps go with cans, plastic caps go with plastic.</p> <p><b>PLASTIC:</b> All plastic containers must be empty and rinsed out. In this area also will go all plastic bags, wrap, covers, Styrofoam, rubber, (no tires), webbing from lawn chairs, etc. If you are not sure, ask an attendant. If containers are not empty and rinsed out, you will be required to take them back home with you.</p> <p><b>PAINT CANS &amp; OIL FILTERS:</b> To be placed as directed. All spray cans go in this area also. If paint cans have paint in them, save them for Hazardous Waste Disposal Day. Dates will be posted. If in doubt, ask an attendant.</p> <p><b>MAGAZINES:</b> To be placed as directed.</p> <p><b>MEDICAL:</b> Sharps that have been used in human or animal patient care including hypodermic needs, syringes, broken glass or scalpel blades. These items must be placed in a durable plastic container (bleach bottle) and distinctly labeled. No animal carcasses or body parts from wild, domestic or farm animals accepted.</p> <p><b>BURNABLE:</b> All bags must be opened and emptied. Plastic bags go with the plastic. Do <b>NOT</b> drop any plastic bags in with the burnables.</p> <p><b>SHEETROCK AND SHINGLES:</b> <b>LIMIT:</b> One standard-size pick-up truck load per day per household/jobsite. No dump-truck loads. No wood, paper, cardboard, plastic, or any other material allowed to be mixed in with sheetrock or shingles. Mixed loads will <b>NOT</b> be accepted. Do not expect to sort loads at facility.</p> <p><b>CLOTHES:</b> And items too good to be disposed of may be left with attendants for recycling.</p>	<p><b>CANS:</b> Beverage cans and food cans <b>ONLY</b>. All cans must be rinsed out. No aluminum foil or scrap metal. Place these items as directed in proper areas.</p> <p><b>BATTERIES:</b> To be placed as directed. This includes all dry cell and wet cell batteries. Do not place any kind of battery in with cans or burnables.</p> <p><b>FOIL:</b> To be placed were directed. Clean foil only. Do not expect to leave food or other material wrapped up in the foil. No cans or caps/rings in this area.</p> <p><b>SCRAP METAL:</b> To be placed as directed. All scrap metal must be free of any wood, plastic or glass. No closed containers accepted (steel drums, oil or fuel tanks, propane cylinders.)</p> <p><b>MOTOR OIL:</b> Will be accepted in plastic containers <b>ONLY</b>. No containers larger than two gallons. <b>LIMIT:</b> No more than one two gallon container of used oil.</p> <p><b>NEWSPAPERS:</b> To be placed as directed. Newsprint only please.</p> <p><b>LEAVES AND YARD WASTE:</b> To be placed as directed. No cardboard, plastic, paper, wood, branches or brush in this area.</p> <p><b>WOOD &amp; LUMBER:</b> Place as directed. <b>LIMIT:</b> One standard-size pick-up truck load per day per household/jobsite. No wood or stumps over 4 (four) inches in diameter allowed. No paper, cardboard, plastic, shingles, windows, etc. in this area. <b>WOOD ONLY PLEASE. MUST BE SEPARATED: PAINTED/UNPAINTED/TREATED</b></p> <p><b>FURNITURE:</b> All furniture, couches, chairs, mattresses, etc. <b>MUST</b> be broken down and stripped <b>BEFORE</b> reaching the facility. All wood, fabric, foam, cloth, plastic and cardboard must be removed from the metal and placed as directed. Do not expect to do this at the facility.</p>
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Attachment #3

Hebron-Bridgewater Refuse District  
Recycling/Incineration Building Layout



Attachment #4

HEBRON-BRIDGewater REFUSE DISTRICT

QUALITY ASSURANCE/QUALITY CONTROL PLAN  
FOR TESTING OF INCINERATOR ASH

The Hebron-Bridgewater Refuse District will test the ash residue from its incinerator at the Hebron-Bridgewater Recycling Center/Incinerator on Dick Brown Road according to the following plan:

1. Sampling Procedure

Facility operators shall obtain an ash sample after every burn event. Ash sample collection from each burn shall be collected per Lab specs and stored in a fixed location inside the incinerator building. Facility operators shall mix the contents of the sample container each time ash is added. Operators shall obtain a representative sample of ash from the sample container and ship the sample to a NH State certified laboratory for analysis prior to disposal. The ash filled dumpster at the facility from which a portion of the ash sample was obtained must remain at the facility until after the protocol discussed below demonstrates the ash is either a solid or hazardous waste.

Every July and December, operators shall obtain a representative sample of ash from the sample container and ship the sample to a NH State certified laboratory for analysis.

The composite sample shall be analyzed for the following parameters:

- A. Toxicity Characteristic Leaching Procedure [TCLP] [EPA Test Method 1311] for arsenic, barium, cadmium, lead, chromium, mercury, selenium, silver, and nickel.
- B. PH.

If the ash test results for each parameter are below the regulatory criteria for characterization as a hazardous waste, then the ash in the container and the ash filled dumpster may be disposed of as a solid waste.

If the ash sample results fail for any one or more of test parameters then a retest shall be required.

If,

- a. the retest results does not exceed either pH or TCLP metals criteria, then the ash shall be considered a solid waste and transferred as a solid waste to the disposal facility listed in the permit,
- b. any of the test parameters fail the retest, then the ash in the dumpster is considered a characteristic hazardous waste and the District shall be required to manage the ash as a hazardous waste.

*NOTE: Each time a sample of ash is submitted to the Lab for analysis the District should include enough ash for two analyses in case the initial sample test fails.*

NOTE: If the ash retest results indicate the ash is a hazardous waste then:

1. the District shall immediately initiate a review of its methods and procedures for those wastes being incinerated and include recommendations in a report to the DES on how to mitigate the problem, and
2. the dumpster at the facility shall be tested for those parameters that failed the hazardous waste determination, and
3. the District shall be required to test each subsequent ash filled dumpster for those parameters which continue to fail the testing requirements. The per-dumpster testing frequency shall cease only after two successive ash filled dumpsters have successfully passed the hazardous waste determination testing requirements identified above. Ash in any dumpster determined to be a hazardous waste must be managed as a hazardous waste.

2. Reporting Procedure

The analytical results obtained from these samplings and analyses shall be sent in duplicate, to the Waste Management Division and to the landfill receiving the ash within fourteen (14) days of receipt from the laboratory.

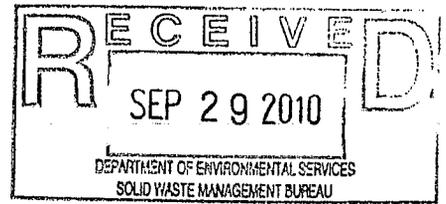
3. Certified Testing Laboratory

The Hebron-Bridgewater Refuse District will have the ash samples analyzed by a State approved testing laboratory.



08/24/2010

Attachment #5

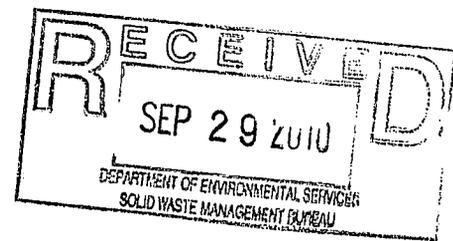


# **Hebron-Bridgewater Refuse District Solid Waste Processing & Treatment Facility**

## **Closure Plan**

This facility closure plan is for the Hebron-Bridgewater Refuse District incorporated in 1976 by the voters of Hebron and Bridgewater, NH. The facility is located in Bridgewater at 290a Dick Brown Road.

2008



**SECTION I  
FACILITY IDENTIFICATION**

**Facility Name:** Hebron-Bridgewater Refuse District  
(The Towns of Hebron and Bridgewater established the Refuse District by vote of their respective Town meetings in 1976. The Selectmen of both towns act as the governing Board)

**Mailing Address:** 297 Mayhew Turnpike, Bridgewater, NH 03222

**Street Address:** 290A Dick Brown Rd, Bridgewater, NH 03222

**Permit Numbers**      **Air: PO-C-0382**  
**Solid Waste: (pending)**

**Facility Type:** Processing / Treatment  
(The facility is a collection, storage and transfer facility, coupled with recycling, and incineration of some municipal waste.)

**Design Capacity:** 8 tons per day average

**Incineration Capacity:** 750 Lb/Hr Maximum

**Quantity of Waste to Be Stored at the Facility:** 80 Tons Maximum

**Facility Service Type:** Limited Public

**Facility Service Area Description:** The facility serves the towns of Bridgewater and Hebron

**Facility Owner / Permittee:** Hebron-Bridgewater Refuse District

**Property Owner:** Hebron-Bridgewater Refuse District

**Operator(s) Name:** Hebron-Bridgewater Refuse District

**Town of Hebron:** 7 School St., Hebron, NH 03241 Telephone # 744-2631

**Town of Bridgewater:** 297 Mayhew Tpke., Bridgewater, NH 03222 Telephone # 744-5055

## SECTION II CLOSURE SCHEDULE:

There is no specific known date of closure of this facility. Some form of municipal waste management has been ongoing at this site since the 1950's. It has been upgraded on various occasions depending on municipal needs as well as State and Federal requirements.

The facility will be upgraded and maintained as long as it provides a viable service to the Towns of Bridgewater and Hebron. The estimated life of the facility is 35-40 years. An assumed date of closure is 2045. Any closure will take 90 days to complete after cessation of operations.

The following closure schedule is projected:

- Day 0 to 1: File Notice of Intent to Closure with NHDES prior to commencing.
- Day 2 - 10: Remove all solid waste and accumulated materials to authorized facilities. Clean exterior grounds
- Day 11 - 70: Remove Incinerator; Scrubber; Balers and all related equipment. Steam clean all building surfaces. Remove propane tanks.
- Day 71 - 90 Prepare and submit notification to NHDES that closure is complete. Notify the Towns of Bridgewater and Hebron and turn over the remaining buildings which are to be shared by both municipalities. The site will remain in the ownership of the District in perpetuity as there are preexisting (monitored) landfills on the site.

### SECTION III WASTE IDENTIFICATION

- Wastes accepted for processing/recycling are described in section 2 of the Hebron-Bridgewater Operation Plan. They include:
- RDF (MSW less recyclables = waste paper and putrescible materials destined for incineration)
- Bulky waste (white goods, appliances, furniture, auto parts, tires, as defined in the rules.
- Scrap metal
- Construction and demolition debris as defined in the rules.
- Recyclable materials including tires,
- E-waste, lead acid batteries and propane tanks, waste oil, anti-freeze. (These items are stored in appropriate containers for proper management and disposal.)
- Leaf and yard waste.

The facility does not intentionally handle hazardous waste as defined by RSA 147-A-2 VII and DES Hazardous Waste Rules.

**SECTION IV  
NOTIFICATIONS**

90 days prior to cessation of facility operations, H-B Refuse will provide written notification to all users of the facility and NHDES in accordance with the requirements of the solid waste rules. The notice will be posted at the facility, at the Town offices, and in two of the local newspapers including final date of the receipt of waste at the facility.

**SECTION V  
CLOSURE REQUIREMENTS;**

**Solid Waste Removal:**

All on-site wastes, including recyclables will be removed and transported to authorized disposal facilities in accordance with NHDES solid waste rules. All maintenance fluids and oils will be transported or recycled as appropriate.

**Equipment Removal and Decommissioning:**

All waste handling equipment will be sold. The incinerator and scrubber will be dismantled and removed by the manufacturer. If not financial viable, the units will be dismantled and sold as scrap steel. The refractory will be tested for contaminates and disposed of according to NHDES solid waste rules.

**Facility Cleanup:**

Following removal of solid waste and equipment removal, the buildings and exterior grounds will be cleaned.

**SECTION VI  
POST CLOSURE REQUIREMENTS:**

Solid waste and recyclable materials will be recycled, reused, incinerated and transferred depending upon the material. When those facility operations cease, the closure activities will assure that the remaining site will not adversely impact the environment, public health or safety.

Following removal of solid waste and equipment removal, the buildings and exterior grounds are to be cleaned.

In the event of closure, the intent of the District is to keep the buildings and site in perpetuity for seasonal storage and use by the Towns of Hebron and Bridgewater Highway Departments. As the 12 acre site had a pre-1981 burn site, ash and C&D landfills, it is impractical to sell or otherwise use the site.

On-going monitoring wells will continued to be bi-annually sampled for the next 30 years by the municipalities.

**SECTION VII  
RECORD KEEPING AND REPORTING**

Following completion of closure activities, written notice will be provided to NHDES that closure has been completed.

Pursuant to reporting requirements as described in the solid waste rules, a final annual report of the H-B Refuse District will be submitted to NHDES by March 31<sup>st</sup> of the year following closure.

Following closure, all records will be retained by the towns of Hebron and Bridgewater at their respective town offices

**SECTION VIII  
OTHER PERMITS**

Rev. 8/25/2010  
Hebron-Bridgewater Refuse District  
297 Mayhew Turnpike, Bridgewater, NH 03222  
Processing-Treatment Facility Operating Plan  
Permit Number: TBD  
Page 0 of 10

**SECTION IX  
CLOSURE COST ESTIMATES:**

The closure cost estimates for H-B Refuse District is to be prepared in accordance with this closure plan and the requirements of NHDES solid waste rules. The estimate forecast assumes compliance with applicable laws and rules which makes closure the most expensive. The items to be removed are as follows: *(Cost estimates can be found in appendix A.)*

- Municipal solid waste – 5 tons.
- Recovered metals – 15 tons
- C&D (separated wood) 15 tons
- Tires – 10 tons
- Propane tanks – 1 ton
- E-Waste – 4 tons
- Non-recycled goods 12 tons
- Newspaper and cardboard – 10 tons
- Ash and sludge 8 tons
- Equipment salvage and removal
- House keeping (Steam cleaning, dust removal etc)

*(Salvage values were not used to reduce the estimate.)*

H-B Refuse District  
 290 Dick Brown Rd  
 Bridgewater, NH 03222

Cost Estimate for  
 Closure of Solid Waste  
 Facility

8/01/2010]

DES Permit #

Hebron - Bridgewater Refuse District  
 Processing - Treatment Facility  
 Revision 1.1

Permitted Material	Quantity SPR (tons)	Quantity Non-SPR (tons)	Disposal Cost Non-SPR (per Ton)	Transportation Costs - Non SPR Material (per ton)	Total Costs	Disposal Destination
Municipal Solid Waste		5	46	10	280	Wheelabrator, Concord, NH
Recovered Metals		15		20	300	Gilpatric Metal Salvage, Bristol, NH
C & D		15	80	15	1425	Empire Recycling, Danvers, Ma
Tires		10	100	17	1170	NRRA, Epsom, NH
E-Waste		4	200	15	860	NRRA, Epsom, NH
Newspaper & cardboard		10		17	170	NRRA, Epsom, NH
Non Recyclables		12	50	15	780	Empire Recycling, Danvers, Ma
Propane tanks		1	50	17	67	Gilpatric Metal Salvage, Bristol, NH
Ash and sludge		8	75	30	840	North Country Env. Serv., Bethlehem, NH
	Totals	80		Totals	\$5,892	

Site Cleanup (Per approval closure plan)	Description of Work to be Performed	Costs	
Labor	General site cleanup	1,125.00	BG Environmental, Barrington, NH
Building Cleaning	Steam clean floors, walls, ceiling	1,400.00	BG Environmental, Barrington, NH
Equipment Removal	Deconstruct Incinerator; Remove Accessory Equipment	40,000.00	ACS, Bellingham, WA
	Sub-total	42,525.00	
10% Contingency	10%	4,252.50	
	Total Closure Cost	\$52,669.50	