



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

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November 29, 2016

Mr. Patrick Christopher  
Operations Manager  
Excel Recycling, LLC  
37 Charlotte White Road  
Westport, MA 02790

**RE: FREETOWN**  
Transmittal No.: X267930  
Application No.: SE-15-028  
Class: *SM-50*  
FMF No.: 572194  
**FINAL AIR QUALITY PLAN  
APPROVAL**

Dear Mr. Christopher,

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Air and Waste, has reviewed your revised Non-Major Comprehensive Plan Application dated November 1, 2016, and supplemental application materials dated November 3, 2016 and November 18, 2016 (“Application”). This Application concerns the proposed construction, and operation of a Wendt Model 6090 Shredder with separation equipment and ancillary processes at your Scrap Metal Processing facility located at 17 Ridge Hill Road in Freetown, Massachusetts (“Facility”). The Application bears the seal and signature of George S. Lipka, Massachusetts Registered Professional Engineer Number 29704.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 “Air Pollution Control” regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-N, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP’s review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

The revised Application replaces the application approved by MassDEP on April 1, 2016. MassDEP has determined that the revised Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Final Plan Approval** for said Application, as submitted, subject to the conditions listed below. This Final Plan Approval supersedes the Plan Approval issued on April 1, 2016, and is issued final in

accordance with the Final Decision in OADR Docket No. 16-006. The effective date of this Final Plan Approval is the date of the Final Decision.

Please review the entire Final Plan Approval, as it stipulates the conditions with which the Facility owner/operator (“Permittee”) must comply in order for the Facility to be operated in compliance with this Final Plan Approval.

## **1. DESCRIPTION OF FACILITY AND APPLICATION**

Excel Recycling, LLC, has submitted an application for the construction and operation of a new scrap metal processing facility located on approximately 5 acres, north of the Campanelli Business Park, near the interchange of State Routes 24 and 79. The Facility will consist of three principal operations; a Wendt Model M6090 Shredder (S1), ferrous separation operations (F1), and non-ferrous separation operations (NF1). The facility equipment will process metal scrap including flattened auto bodies, appliances, sheet metal and household goods. All equipment will have electric drive motors. Electric power will be supplied by the local electric utility; there will be no fuel combustion on site for electric generation or process power.

The Wendt Model M6090 Shredder has a nominal design capacity of 60 tons of scrap metal per hour and will be limited to 20,000 tons of scrap metal per month. The scrap metal will be delivered to the Facility by truck; processed materials and waste will be removed by either truck or by rail. All incoming scrap will be inspected in accordance with the Facility’s Scrap Acceptance Guidelines and Scrap Acceptance Procedures to ensure the removal of fluids and any hazardous materials, and weighed before processing.

All incoming scrap will be processed through a Wendt Model M6090 Shredder. The shredder will be enclosed to provide sound and dust mitigation. The enclosure roof will be constructed of 60-inch wide panels consisting of a 3-ply rubber belting material, with wire mesh as the middle layer. A portion of the roof above the in-feed conveyor will consist of a 5-foot by 10-foot half-inch steel, hinged and spring-loaded plate that will be raised upwards during maintenance or as needed to clean a jam at the in-feed rollers. A 20,000-cubic foot per minute centrifugal fan, located within the shredder enclosure will exhaust through a stack equipped with a perforated metal silencer. The fan will draw air from outside and through the enclosure, creating negative pressure and directing exhaust air, including any entrained emissions from the shredder process through and out a 2.5-foot diameter stack extending 15 feet above the roof of the shredder enclosure, providing an overall height of 55 feet above ground level. The enclosure walls will be constructed of a 3-ply rubber belting material, with wire mesh as the middle layer. The vertical edges of the panels, which will overlap by approximately 3 inches, will be bolted to each other. A portion of the paneling on the northerly side will be removable to provide access for maintenance.

The in-feed opening on the westerly side of the shredder enclosure will be 8-feet by 8-feet with a double curtain of belt panels hanging down 5 feet into the opening. The exit opening on the

easterly side will have belt panels hanging down to the surface of the discharged material. The belt panels will have a minimum surface density of 5 pounds per square foot for noise mitigation.

After shredding, all material will be processed in the ferrous separation process for the separation of ferrous metals. All remaining material is sent to the non-ferrous operations to separate shredder residue (“SR”) (i.e. plastics, rubber, and foam) and non-ferrous metals, including copper and aluminum. The non-ferrous operations will be completely enclosed, except for material inflow and outflow points.

Operations at the Facility will result in the emission of air contaminants to the ambient atmosphere. These contaminants include particulate matter (“PM”), particulate matter with an aerodynamic diameter of 10 microns or less (“PM<sub>10</sub>”), particulate matter with an aerodynamic diameter of 2.5 microns or less (“PM<sub>2.5</sub>”), volatile organic compounds (“VOC”) and hazardous air pollutants (“HAP”). The Permittee will limit scrap metal processing to 196,000 tons per year to limit the formation of air contaminants, and the shredder enclosure will be equipped with a fan and stack to disperse emissions.

The Wendt Model M6090 shredder will use an integrated water injection system to control the heat created by the shredding. A surfactant wetting agent (with dust suppressant) additive, “Momar DustNot F430” or an equivalent, will be used in conjunction to the water injection system. The wetting agent encapsulates hydrocarbons, inhibiting spontaneous combustion. This wetting agent also reduces “hot spots” in the shredder thereby reducing the formation of 1, 3-butadiene. Both the water injection and the wetting agent will serve to minimize particulate and visible emissions from the shredder.

The Permittee submitted a top-down Best Available Control Technology (“BACT”) analysis and BWP AQ BACT form as part of this application to evaluate air pollution control equipment options. BACT is defined in Table 2.

Operation of the shredder and other equipment will be a source of sound. The Facility shall be constructed, or will be operated, with the following measures to mitigate sound impacts:

- The afore-mentioned shredder enclosure, including the heavy-gauge roofing, siding, and opening curtains,
- two 10-foot high by 6-foot long concrete-block sound barriers located at the exit opening of the shredder enclosure and running along and parallel to the conveyor
- A 6-foot high by 6-foot long concrete sound barrier, located beneath the conveyor approximately 6 feet from the exit opening of the shredder enclosure at the outer ends of the two 10-foot by 6-foot sound barriers,
- A 25-foot or higher sound barrier will extend from the northeast property corner running at least 715 linear feet along the northern edge of the property. The sound barrier will consist of double stacked, 8-foot wide shipping containers on top of an approximately 2-foot tall base constructed of concrete blocks. All visible holes and gaps between the stacked containers

(sides, tops, and bottoms) and between the containers and the concrete blocks on the north and south sides of the sound barrier will be closed with foam insulation.,

- A wooden sound barrier running 248 linear feet along the east edge of the property shall be of solid construction (i.e., no visible gaps) reaching a minimum of 18 feet in height,
- A perforated metal silencer in the stack on the shredder enclosure.

The Application included MassDEP form “BWP AQ Sound” and a supporting noise study for the Facility. The noise study used computerized noise modeling, which was based on the inclusion of the proposed sound mitigation, including the sound barriers, and the shredder enclosure.

MassDEP’s Noise Policy limits the maximum sound impacts attributable to a noise source to an increase in the broadband sound level of no more than 10 dB(A) above ambient. The ambient sound level for the neighborhood was established at 37.3 dB(A). The noise study and associated modeling identified one property, southeast of the Facility that could experience an additional sound impact of approximately 7 dB(A) in excess of the allowable impact established by MassDEP’s Noise Policy. The total modeled sound (background plus incremental impact) would be approximately 54.3 dB(A) at a location approximately 700 feet from the residence located on the property southeast of the Facility. The modeled noise impacts were found to be less than 10 dB(A) above ambient at all other residential locations off the Facility property. As part of this Final Plan Approval, MassDEP is requiring noise impact testing to confirm the accuracy of the predicted results and confirm that operation will not cause a nuisance condition (with the exception located southeast of the Facility as noted above) as defined by MassDEP’s Noise Policy. Additional noise mitigation may be required in the southeastern corner of the Facility property pending review of the noise impact testing. MassDEP reserves the right to require additional noise mitigation should the Facility be found to be causing a nuisance condition at other locations.

MassDEP’s Noise Policy also prohibits a “pure tone” condition, which is defined as when any octave band center frequency sound pressure level exceeds the two adjacent center frequency sound pressure levels by 3 decibels or more. A review of the sound analysis and associated supplemental forms submitted with the Application indicate operation of the Facility will not create a pure tone condition on any property.

An air dispersion modeling analysis was conducted to demonstrate that the Facility’s ambient air impacts, combined with the pre-existing background levels, will not cause or contribute to a violation of the National Ambient Air Quality Standards (“NAAQS”). The NAAQS are health based standards established under the United States Clean Air Act (“CAA”) that are designed to preserve public health and protect sensitive subpopulations, which include people with diseases (e.g. asthma, cardiovascular disease), children, and the elderly with an adequate margin of safety.

Based upon a review of the modeling analysis contained in the Application, emissions from operation of the proposed Facility will not cause an exceedance of the NAAQS.

The air dispersion modeling analysis also included an evaluation of the Facility’s impacts relative to the MassDEP’s 24-hour Threshold Effect Exposure Limits (“TELS”) and annual Allowable Ambient Limits (“AALs”) Guideline values for air toxics. Based upon a review of the modeling analysis contained in the Application, emissions from the proposed Facility will have maximum impacts below the AALs/TELS.

The air dispersion analysis included the shredder design and was based on a vertical exhaust stack and air flow as specified in Table 7 of this approval. Additionally, the Facility was assumed to be in operation for 15 hours per day (6 AM to 9 PM), as such, an operational restriction on the hours of operation is included in Table 2 of this Approval.

The Permittee is also subject to the terms and conditions of the Beneficial Use Determination (“BUD”) and a Conditional Exclusion Determination (“CED”), issued by MassDEP on June 23, 2016 and May 27, 2016, respectively. At times, the BUD and CED may require that a limited amount of Shredder Residue (“SR”) remain on site for a period longer than allowed by this Final Plan Approval. This is to allow for appropriate characterization testing prior to shipping. Any such material maintained on-site overnight is required to be appropriately covered.

## 2. EMISSION UNIT IDENTIFICATION

Each Emission Unit (“EU”) identified in Table 1 is subject to and regulated by this Plan Approval:

<b>Table 1</b>			
<b>EU</b>	<b>Description</b>	<b>Design Capacity</b>	<b>Pollution Control Device (PCD)</b>
S1	Wendt Model No. M6090 Hammermill shredder	60 tons/hour (nominal)	Acoustical enclosure, exhaust stack and fan, integrated water injection system, and dust suppression system
F1	Wendt Ferrous Separation System		n/a
NF1	Wendt Non-Ferrous Separation System		

**Table 1 Key:**

EU = Emission Unit Number  
N/A = Not applicable  
PCD = Pollution Control Device

### 3. APPLICABLE REQUIREMENTS

#### A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

<b>Table 2</b>			
<b>EU</b>	<b>Operational / Production Limit</b>	<b>Air Contaminant</b>	<b>Emission Limit</b>
S1	1. <u>Scrap Throughput</u> <sup>(Note 1)</sup> a. 20,000 tons per month b. 196,000 tons per year	PM	7.92 lb/hr <sup>(Note 3) (Note 6)</sup> 1.32 TPM 12.94 TPY
		PM <sub>10</sub>	4.04 lb/hr <sup>(Note 3) (Note 6)</sup> 0.67 TPM 6.60 TPY
	2. Water injection $\geq$ 10 gallons per minute <sup>(Note 8)</sup> (to be maintained in accordance with manufacturer’s specifications while in operation).  3. Dust suppressant/Wetting agent (e.g. “Momar DustNot F430” or equivalent product), in accordance with the manufacturer’s specification while in operation.	PM <sub>2,5</sub>	1.19 lb/hr <sup>(Note 3) (Note 6)</sup> 0.20 TPM 1.94 TPY
		VOC <sup>(Note 4)</sup>	15.0 lb/hr <sup>(Note 6)</sup> 2.5 TPM 24.5 TPY
	4. Processed scrap metal shall contain no fluids and no hazardous material. <sup>(Note 2)</sup>		
	5. Operating hour limitations for S1 <sup>(Note 7)</sup> a. Monday through Friday: 7:00 AM to 9:00 PM Eastern Standard time or Daylight Savings time (as in effect) b. Saturday: 7:00 AM to 3:00 PM Eastern Standard time or Daylight Savings time (as in effect) c. Operation prohibited on Sundays and on the following holidays: New Year’s Day, July 4, Labor Day, Thanksgiving Day and Christmas Day.	HAP <sub>(single)</sub> <sup>(Note 5)</sup>	0.7 lb/hr <sup>(Note 6)</sup> 0.12 TPM 1.2 TPY
	HAP <sub>(total)</sub> <sup>(Note 5)</sup>	1.9 lb/hr <sup>(Note 6)</sup> 0.31 TPM 3.1 TPY	

<b>Table 2</b>			
<b>EU</b>	<b>Operational / Production Limit</b>	<b>Air Contaminant</b>	<b>Emission Limit</b>
F1	6. <u>Scrap Throughput</u> <sup>(Note 1)</sup> a. 20,000 tons per month b. 196,000 tons per year	PM <sup>(Note 3)</sup>	0.22 TPM 2.17 TPY
		PM <sub>10</sub> <sup>(Note 3)</sup>	0.08 TPM 0.79 TPY
		PM <sub>2.5</sub> <sup>(Note 3)</sup>	0.02 TPM 0.22 TPY
NF1	7. Water spray and tarpaulin use to minimize nuisance dust conditions in accordance with the Dust Management Plan.	PM <sup>(Note 3)</sup>	0.05 TPM 0.53 TPY
		PM <sub>10</sub> <sup>(Note 3)</sup>	0.02 TPM 0.19 TPY
		PM <sub>2.5</sub> <sup>(Note 3)</sup>	0.01 TPM 0.05 TPY
Facility-wide		Visible Emissions	0% opacity, exclusive of uncombined water vapor

**Table 2 Notes:**

**Note 1** = Scrap throughput as measured at the Shredder in-feed conveyor.

**Note 2** = As defined in the facility Scrap Acceptance Guidelines and Procedures. See also Table 6, Special Terms and Conditions.

**Note 3** = PM emissions for EU S1 are calculated on an uncontrolled emission factor of 0.132 lbs per ton of scrap processed based on stack testing conducted in 2012 at the SA Recycling facility in Terminal Island, California (includes condensable and filterable PM). The fraction of PM10 was assumed to be 51% of the total PM and the fraction of PM2.5 was assumed to be 15% based on Table B.2.2 (Category 3) of the US EPA “Generalized Particle Size Distributions.” (AP-42). PM emissions for EU F1 and EU NF1 are based on AP-42 Table 11.19.2-2 emission factors for crushed stone processing operations.

**Note 4** = EU S1 VOC emissions are “as propane” and are based on an uncontrolled emission factor of 0.25 lbs per ton of scrap processed as proposed based on the 2007 source test data from the SA Recycling of Los Angeles, Terminal Island Mega Shredder and the October 2009 source test data from the Omni Source Corporation Shredder in Jackson, MI as described in the “Summary of Shredder and VOC Emission Factor Information” contained in Table 3-2 and Figure 3-1 of the “Review of Information for Scrap Metal Shredder VOC Emission Factors”, dated December 28, 2011, as submitted to Oregon Department of Environmental Quality by Schnitzer Steel Industries.

**Note 5** = HAP emissions are based on the results of the 2007 source test data from the SA Recycling of Los Angeles, Terminal Island, CA Mega Shredder.

**Note 6** = Pound per hour emission limits for emission unit S1 are based on a 3-hour average at a maximum process rate of 60 tons per hour, and are for stack test purposes only.

**Note 7**=Limits apply to S1 only; no Facility-wide operating hours limits. This operational limitation does not intend to conflict with the authority of the Town of Freetown to establish hours of operation for the Facility.

**Note 8**= MassDEP may approve an optimized flow rate for the injection of the solution of water and dust suppressant/wetting agent, in order to conserve overall water use while still achieving acceptable dust suppression and temperature control.

**Table 2 Key:**

EU = Emission Unit Number

Lb/hr = pounds per hour

PM = Total Particulate Matter

PM<sub>10</sub> = Particulate Matter less than or equal to 10 microns in diameter

PM<sub>2.5</sub> = Particulate Matter less than or equal to 2.5 microns in diameter

VOC = Volatile Organic Compounds

HAP (single) = maximum single Hazardous Air Pollutant

HAP (total) = total Hazardous Air Pollutants.

TPM = tons per month

TPY = tons per consecutive 12-month period

**B. COMPLIANCE DEMONSTRATION**

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:

<b>Table 3</b>	
<b>EU</b>	<b>Monitoring and Testing Requirements</b>
S1	1. The Permittee shall monitor the throughput of material through the shredder to document the tons of material processed on a monthly and consecutive twelve month period basis.
	2. The Permittee shall, continuously, while in operation, monitor water flow rate (gal/minute) to ensure shredder operation in accordance with the manufacturer’s specifications.
	3. The Permittee shall continuously, while in operation, monitor dust suppressant/wetting agent (e.g. “DustNot F430” or equivalent product) mixture flow rate (gal/minute) to ensure shredder operation in accordance with manufacturer’s specification.
	4. The Permittee shall, continuously, while in operation, monitor the shredder enclosure pressure drop to ensure the enclosure is continuously maintained in a vacuum, negative pressure collection mode.
	5. The Permittee shall conduct emission testing, in accordance with USEPA Reference Test Methods, Regulation 310 CMR 7.13 and a MassDEP-approved protocol, to demonstrate compliance with the PM, PM10, PM2.5, and VOC emission limits contained in Table 2. In addition, the Permittee shall collect emission samples from the shredder exhaust for analysis in accordance with U.S. EPA Method TO-15 to demonstrate compliance with specific VOC constituents regarding MassDEP’s Allowable Ambient Limits (AALs) and Threshold Effects Exposure Limits (TELEs), within 90 days from initial operation of the shredder. This testing shall be on a date mutually agreed upon with MassDEP, such that MassDEP representative may be present to witness the testing.
	6. At least 30 days prior to conducting emission testing, the Permittee shall submit for MassDEP approval a stack emission protocol.
	7. Within 45 days after emission testing is completed, the Permittee shall submit to MassDEP a final stack emission test results report.
Facility-wide	8. The Permittee shall inspect all loads of scrap metal received at the Facility, prior to processing through the shredder, to ensure compliance with the Facility Scrap Acceptance Guidelines and Scrap Acceptance Procedures as detailed in Appendix F of the approved application.
	9. The Permittee shall ensure that all parties delivering scrap metal certify in writing that fluids, including, but not limited to, coolants, oils, brake fluids and lubricants, have been drained from the scrap material and all fuel tanks have been removed.
	10. The Permittee shall ensure that all parties delivering scrap metal certify in writing that all refrigerants, PCB containing capacitors and mercury containing switches have been removed.
	11. The Permittee shall monitor ongoing operations to ensure all material being processed is sufficiently wetted down to avoid visible emissions of particulate matter.
	12. 40 CFR 60 Appendix A, Method 22 shall be used to determine compliance with the visible emission limit.

<b>Table 3</b>	
<b>EU</b>	<b>Monitoring and Testing Requirements</b>
Facility-wide	13. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	14. The Permittee shall conduct sound monitoring, in accordance with a MassDEP approved protocol, to demonstrate compliance with 310 CMR 7.10 and MassDEP’s Noise Policy within 90 days from the initial operation of the shredder.
	15. At least 30 days prior to conducting sound monitoring, the Permittee shall submit for MassDEP approval a sound monitoring protocol. The Permittee shall schedule the sound monitoring in consultation with MassDEP so that MassDEP can observe the monitoring.
	16. Within 45 days after the sound monitoring is completed, the Permittee shall submit to MassDEP a final sound monitoring results report.
	17. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13

**Table 3 Key:**

CFR = Code of Federal Regulations  
 CMR = Code of Massachusetts Regulations  
 EU = Emission Unit Number

PCB = Polychlorinated Biphenyl  
 USEPA = United States Environmental Protection Agency

<b>Table 4</b>	
<b>EU</b>	<b>Record Keeping Requirements</b>
S1	1. The Permittee shall maintain daily records of throughput, in tons of scrap material, through the shredder for incorporation into monthly and consecutive twelve month period records.
	2. The Permittee shall maintain a record of the shredder water flow rate to demonstrate continuous water flow, during shredder operation, in accordance with the manufacturer’s specifications.
	3. The Permittee shall maintain a record of the shredder dust suppressant/wetting agent (e.g. “DustNot F430” or equivalent product) flow rate to demonstrate continuous flow, during shredder operation, in accordance with the manufacturer’s specifications
	4. The Permittee shall maintain a record of the shredder (S1) operating hours, including daily startup and shutdown times.
	5. The Permittee shall maintain a record of the shredder enclosure pressure drop to document continuous negative pressure in the shredder enclosure during shredder operation.
Facility-wide	6. The Permittee shall maintain a record of inspection of all scrap deliveries to document compliance with the Facility Scrap Acceptance Guidelines and Scrap Acceptance Procedures.
	7. The Permittee shall maintain a record of all certifications made by parties delivering scrap metal documenting that fluids and hazardous materials have been removed.
	8. The Permittee shall maintain a complaint log, including time, date, and circumstances, recording any complaints registered with the facility from the Town of Freetown, or neighboring residents, regarding nuisance noise, dust, or odor.

<b>Table 4</b>	
<b>EU</b>	<b>Record Keeping Requirements</b>
Facility-wide	9. The Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15 <sup>th</sup> day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at <a href="http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping">http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping</a> .
	10. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	11. The Permittee shall maintain on-site a copy of this Plan Approval, underlying Application and the most up-to-date SOMP (including Scrap Acceptance Guidelines, Scrap Acceptance Procedures, and Dust Management Plan) for the EU(s) approved herein.
	12. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	13. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
	14. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	15. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	16. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

**Table 4 Key:**  
CMR = Code of Massachusetts Regulations  
EU = Emission Unit Number  
PCD = Pollution Control Device  
SOMP = Standard Operating and Maintenance Procedure  
USEPA = United States Environmental Protection Agency

<b>Table 5</b>	
<b>EU</b>	<b>Reporting Requirements</b>
Facility-wide	1. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	2. The Permittee shall notify the Southeast Regional Office of MassDEP, BAW Compliance & Enforcement Chief by telephone: 508-946-2817, or fax : 508-947-6557, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to Compliance & Enforcement Chief at MassDEP within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	3. The Permittee shall report to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.
	4. The Permittee shall notify MassDEP within 7 days upon the completion of the installation of all approved equipment and startup of facility operations. The notification shall include certification by a Massachusetts professional engineer that the shredder and sound mitigation structures have been constructed in accordance with the Final Plan Approval and the plans approved by the Final Plan Approval.

**Table 5 Key:**  
 BAW = Bureau of Air and Waste  
 CMR = Code of Massachusetts Regulations  
 EU = Emission Unit

**4. SPECIAL TERMS AND CONDITIONS**

A. The Permittee is subject to, and shall comply with, the Special Terms and Conditions as contained in Table 6 below:

<b>Table 6</b>	
<b>EU</b>	<b>Special Terms and Conditions</b>
S1	<p>1. The Permittee shall incorporate Scrap Acceptance Guidelines and Scrap Acceptance Procedures as documented in Appendix F of the approved application to ensure that hazardous materials are not processed through the Wendt Model M6090 Shredder. The materials that shall be excluded include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Refrigerants (including CFCs and HCFCs) in refrigerators and air conditioners. Customers are required to sign a statement certifying that all refrigerants have been properly removed.</li> <li>• Asbestos or asbestos containing materials, such as pipe insulation, acetylene tanks and surfacing material commonly found on I-beams, tanks, and other structural and demolition debris.</li> <li>• Oils, gasoline, other petroleum products and antifreeze. This includes hydraulic fluids, gear oils and grease. Hydraulic equipment must have hydraulic hoses removed and cylinders cut open and drained.</li> <li>• Items that contain or have contained PCBs, including small capacitors, fluorescent light ballasts and electrical transformers or transformer components and paint.</li> <li>• Non-empty paint cans or other non-empty paint containers.</li> <li>• Fluorescent lights, neon, high intensity mercury vapor lights, high pressure sodium, metal halide and associated ballasts.</li> <li>• Circuit boards.</li> <li>• Any material containing hazardous or toxic substances.</li> <li>• Military scrap of any kind, unless approved in advance.</li> <li>• Explosives or explosive residues.</li> <li>• Radioactive materials of any kind.</li> <li>• Tires, wood, dirt, yard debris, concrete, asphalt, glass, rubber, or other non-metallic materials.</li> <li>• Computers, televisions, computer monitors, CRT, LCD.</li> </ul> <p>2. The Wendt Model M6090 Shredder, including centrifugal exhaust fan, shall be enclosed by a roofed structure. The enclosure, including roof, shall have no visible gaps except the in-feed opening, the exit opening, and the stack. The shredder enclosure hinged maintenance doors shall be closed at all times during operation of the shredder. The enclosure shall be maintained in order to provide the required sound mitigation.</p> <p>3. The centrifugal exhaust fan on the shredder enclosure shall be in operation, at all times, when the shredder is in use.</p> <p>4. The shredder enclosure in-feed opening shall be fitted with a double curtain of belt panels hanging down 5 feet into the opening. The shredder enclosure exit opening shall have belt panels hanging down to the surface of the discharged material. The belt panels shall be maintained in good condition to achieve the required sound mitigation.</p>

<b>Table 6</b>	
<b>EU</b>	<b>Special Terms and Conditions</b>
S1	5. The Permittee shall construct and maintain a three-sided concrete-block sound barrier to form a box located at the exit opening of the shredder enclosure with two sides running along and parallel to the conveyor and one side beneath the conveyor for sound emission mitigation.
Facility-wide	6. This Plan Approval letter supersedes the Plan Approval letter issued on April 1, 2016.
	7. Noise from the operation of the Facility shall not create a condition of air pollution in violation of 310 CMR 7.10 as defined in MassDEP’s Noise Policy. MassDEP reserves the right to require additional sound monitoring and/or mitigation should sound from the Facility be determined, by MassDEP, to create a condition of air pollution in violation of 310 CMR 7.10 and MassDEP’s Noise Policy.
	8. The Permittee shall construct a solid sound barrier wall along a portion of the north edge and the east edge of the facility. The north sound barrier wall shall be of solid construction (i.e. no visible gaps) consisting of a base of solid concrete blocks, topped by two rows of steel shipping containers. The north barrier shall reach a minimum 25 feet in height and will extend from the northeast corner for a minimum of 715 linear feet along the north edge. The east sound barrier wall shall be of solid pole and board construction (i.e., no visible gaps reaching a minimum 18 feet in height, and shall extend for a minimum of 248 linear feet along the east edge of the property. The sound barriers shall be maintained in good condition to achieve the required sound mitigation.
	9. All equipment shall be maintained and operated in accordance with the manufacturer’s recommended procedures.
	10. Scrap storage, shredder residue storage, separation equipment and ferrous/non-ferrous shred storage shall be monitored at all times for the potential for nuisance dust emissions. The Permittee shall utilize dust control equipment (e.g. water spray (Dust Boss), tarpaulins, etc.) as necessary to prevent visible emissions and windblown Shredder Residue (SR) and Non Ferrous Raw ( NFR) from the facility as detailed in the Dust Management Plan in Appendix G of the approved application. ) SR shall be moved off the property on a daily basis to eliminate stockpiling, except to the extent that daily removal would conflict with the Beneficial Use Determination or the Conditional Exclusion Decision issued by MassDEP to the Facility. Any material remaining overnight to comply with BUD or CED requirements shall be covered or stored in three-sided bins.
	11. The Permittee shall utilize best management practices with respect to maintaining a clean facility and avoiding contaminant track out as detailed in the Dust Management Plan in Appendix G of the approved application.
	12. The Permittee shall ensure all proposed sound mitigation barriers, enclosure curtains and the stack silencer are installed prior to any operation of the shredder, including initial shakedown and startup.

**Table 6 Key:**

SR = Shredder Residue  
CFC = Chlorofluorocarbon(s)  
CRT = Cathode Ray Tube  
EU = Emission Unit Number

HCFC = Hydrochlorofluorocarbon(s)  
LCD = Liquid Crystal Display  
PCB = polychlorinated biphenyl(s)

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including, but not limited to, rain protection devices known as “shanty caps” and “egg beaters.”
- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, for the Emission Units that are regulated by this Plan Approval:

<b>Table 7</b>				
<b>EU</b>	<b>Stack Height Above Ground (feet)</b>	<b>Stack Inside Exit Dimensions (feet)</b>	<b>Nominal Stack Gas Exit Velocity (feet per second)</b>	<b>Nominal Stack Gas Exit Temperature (°F)</b>
S1	55	2.5	68	Ambient +9 °F
F1	g.v.	n/a	n/a	n/a
NF1	g.v.	n/a	n/a	n/a

**Table 7 Key:**  
EU = Emission Unit Number  
°F = Degree Fahrenheit  
g.v. = general ventilation  
n/a = not applicable

## **5. GENERAL CONDITIONS**

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.

- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

## **6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT**

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Peter Russell by telephone at 508-946-2821, or in writing at the letterhead address.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Thomas Cushing  
Permit Chief  
Bureau of Air and Waste

Enclosure

ecc: Freetown Board of Health  
Freetown Fire Department  
George S. Lipka, P.E., Tetra Tech  
Thomas P. Killoran, Esquire, Killoran & Killoran  
John F. Shea, Esquire, Mackie Shea, PC  
MassDEP/Boston - Yi Tian  
MassDEP/Boston - MacDara Fallon, Esquire  
Mass DEP/SERO - Maria Pinaud, Lisa Ramos, Peter Russell