



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

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December 19, 2012

Michael Moats  
Styrolution America LLC  
950 Worcester Street  
Indian Orchard, Massachusetts 01151

**RE:** Indian Orchard  
Transmittal No.: X251814  
Application No.: WE-12-015  
Class: NM25  
FMF No.: 50156  
**AIR QUALITY PLAN APPROVAL**

## Administrative Amendment

Dear Mr. Moats:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Waste Prevention, has reviewed your Limited Plan Application (“Application”) listed above. This Application concerns the proposed modification of existing Plan Approval #PV-87-C-002 which is to increase the liquid fuel feed rate of styrene monomer, including methyl methacrylate monomer, that is combusted in the existing International Boiler Works, Model TH-14 fire tube boiler at your facility located at 950 Worcester Street in Indian Orchard, Massachusetts (“Facility”).

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-J, 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.

Plan Approval #WE-12-015, which was issued on December 17, 2012, has been administratively amended by MassDEP to correct a typographical error. The facility-wide individual and total hazardous air pollutant emission limit was listed as being less than or equal to ( $\leq$ ) 10 and 25 tons per year, respectively. The correct facility-wide individual and total hazardous air pollutant emission limit should be less than ( $<$ ) 10 and 25 tons per year, respectively. This amendment correctly reflects that the facility is not a major source of hazardous air pollutants.

MassDEP has determined that the 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 **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire 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 Plan Approval.

**This Plan Approval will supersede Plan Approval # PV-87-C-002 dated March 19, 1987, the amendment to Plan Approval # PV-87-C-002 dated March 22, 1991 and Plan Approval #WE-12-015, issued December 17, 2012, in its entirety.**

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

Styrolution America LLC has submitted an application to modify Plan Approval # PV-87-C-002, originally issued March 19, 1987 and amended March 22, 1991, to increase the liquid fuel feed rate of styrene monomer, including methyl methacrylate monomer (MMA), that is combusted in the existing International Boiler Works, Model TH-14 fire tube boiler. The rate of styrene monomer, including MMA monomer, has been requested to be increased from 407 pounds per hour to 679 pounds per hour. Styrene and MMA are both a volatile organic compound (VOC) and a hazardous air pollutant (HAP).

Styrolution America LLC conducts a polystyrene manufacturing process. This manufacturing process uses a styrene monomer and sometimes a styrene and MMA monomer in the commercial polymerization of polystyrene. The styrene and MMA monomer contain small quantities of polymer, inhibitor, ethylbenzene and trace organic contaminants. In addition, dimmers, trimers and other low molecular weight styrene oligomers are produced during the polymerization process. All of the abovementioned materials are non-reactive in the polymerization process and eventually increase in composition to the point that the required polystyrene specification cannot be produced. To eliminate the non-polymerizable materials, the process is designed to “purge” a by-product stream where these materials are concentrated. This purge monomer, or styrene and MMA monomer stream, is then used as an alternate fuel in place of fuel oil or natural gas. The purge monomer is combusted in the International Boiler Works, Model TH-14 fire tube boiler to heat a mineral oil heat transfer fluid that is used to heat the polystyrene process equipment.

Plan Approval #PV-87-C-002 included a Coen, Model 235 burner which had a maximum heat input rate of 17.5 million Btu per hour while firing purge monomer. Since then, the burner has been replaced with a 12.23 million Btu per hour burner for firing purge monomer and a separate burner rated at 10 million Btu per hour for firing natural gas. The purge monomer burner is equipped with a 1.5 gallon per minute nozzle. Based on this maximum flow rate, the maximum purge monomer feed rate is 679 pounds per hour (1.5 gallon per minute x 60 minute per hour x 7.55 pounds per gallon). The boiler primarily combusts purge monomer but can supplement with natural gas in the separate burner, if needed. If the purge monomer and natural gas are simultaneously fired, the maximum heat input rate will not exceed 12.23 million Btu per hour.

The boiler is equipped with instrumentation to continuously monitor the fuel flow rate in gallons per hour. The fuel flow rate is recorded by a data logger on an hourly basis.

### **Best Available Control Technology Analysis**

The International Boiler Works, Model TH-14 fire tube boiler must satisfy the best available control technology (BACT) requirements of 310 CMR 7.02(8)(a)2.

Styrolution America LLC has proposed that the boiler will have a maximum heat input rate of 12.23 million Btu per hour and will either fire the purge monomer (styrene or styrene and MMA) alone or in combination with natural gas which is fired in a 10 million Btu per hour burner. The purge monomer will be fired at a maximum rate of 679 pounds per hour.

The firing of purge monomer in the boiler is roughly equivalent to firing ultra low sulfur distillate (ULSD) oil since the purge monomer has no sulfur, no nitrogen and very low quantities of ash. The net heating value for the purge monomer is 17,500 Btu per pound and varies by no more than 2%. Due to the

similarities with ULSD oil, the MassDEP Top Case Best Available Control Technology (BACT) Guidelines (June 2011) for boilers was used in determining BACT.

The proposed NO<sub>x</sub> emission rates from the boiler are not to exceed 0.15 pounds per million Btu of heat input, 1.83 pounds per hour and 8.03 tons per year. The NO<sub>x</sub> emission rates are equivalent to the MassDEP Top Case BACT Guidelines for boilers and are therefore considered to be BACT.

The proposed particulate matter (PM) emissions, including PM with an aerodynamic diameter less than or equal to 10 microns and PM with an aerodynamic diameter less than or equal to 2.5 microns, from the boiler are based on a maximum ash content of 0.02% by weight and are not to exceed 0.011 pounds per million Btu of heat input, 0.136 pounds per hour and 0.6 tons per year. The PM emission rates are more stringent as compared to the MassDEP Top Case BACT Guidelines for boilers and are therefore considered to be BACT. Visible emissions shall not exceed 10% opacity at any time.

The proposed carbon monoxide (CO) emissions from the boiler are not to exceed 100 parts per million (ppm) on a 1-hour block average and 36 ppm on a 4-hour block average. The 100 ppm 1-hour block average corresponds to 0.08 pounds per million Btu of heat input and 0.978 pounds per hour. The 36 ppm 4-hour block average corresponds to 0.03 pounds per million Btu of heat input, 0.35 pounds per hour and 1.54 tons per year. The 1-hour and 4-hour block emission rate averaging times are necessary due to periods of non-steady state conditions when fuels are switched, when firing rates change significantly or during startup. The 1-hour block average CO emission rates are equivalent to the MassDEP Top Case BACT Guidelines for boilers and are therefore considered to be BACT. The 1-hour and 4-hour CO concentrations will be continuously monitored by a continuous emission monitoring system.

The VOC and HAP emissions from the boiler were determined using the boiler combustion efficiency and a maximum VOC/HAP inlet rate of 679 pounds per hour. The boiler combustion efficiency was determined for a 1-hour and 4-hour block average period taking into account the applicable CO concentration as well as a calculated CO<sub>2</sub> concentration of 145,700 ppm. The resultant 1-hour and 4-hour block average combustion efficiency or destruction removal efficiencies were calculated to be 99.93% and 99.99%. Therefore, the 99.93% 1-hour block average destruction removal efficiency for VOCs/HAPs corresponds to 0.039 pounds per million Btu of heat input and 0.4753 pound per hour. The 99.99% 4-hour block average destruction removal efficiency for VOCs/HAPs corresponds to 0.014 pounds per million Btu of heat input and 0.17 pounds per hour and 0.75 tons per year. MassDEP considers the 1-hour and 4-hour block average emission rates for VOCs/HAPs to be BACT since they correspond to the CO emission rates which MassDEP also considers to be representative of BACT. In addition, the 4-hour block average VOC emission rates are equivalent to the MassDEP Top Case BACT Guidelines for boilers.

### **Regulatory Applicability**

In addition to being subject to the BACT requirements of 310 CMR 7.02(8)(a)2, the boiler is subject to the visible emission requirements of 310 CMR 7.06, the dust, odor, construction and demolition requirements of 310 CMR 7.09 and the noise reduction requirements of 310 CMR 7.10.

The boiler is also subject to 310 CMR 7.04(4)(a) which requires that the boiler be inspected and maintained in accordance with the manufacturers recommendations and tested for efficient operation at least once in each calendar year. The results of said inspection, maintenance, and testing and the date upon which it was performed shall be recorded and posted conspicuously on or near the boiler.

An air quality computer dispersion modeling analysis was performed using USEPA approved AERMOD model (version 12060) for the proposed boiler to demonstrate that the predicted air quality impacts associated with the operation of the source will comply with the 1-hour nitrogen dioxide National Ambient Air Quality Standard (NAAQS) and the 24-hour styrene and methyl methacrylate Threshold Effects Exposure Limits (TELEs). The impacts of each pollutant were below their respective standard or limit.

**2. EMISSION UNIT (EU) 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>
1	International Boiler Works, Model TH-14 fire tube boiler	12.23 MMBtu/hr (firing styrene/MMA monomer)  10 MMBtu/hr (firing natural gas)	None

**Table 1 Key:**

EU# = Emission Unit Number  
 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 below:

<b>Table 2a</b>			
<b>EU#</b>	<b>Operational / Production Limit</b>	<b>Air Contaminant</b>	<b>Emission Limit</b>
1	<p>1. The boiler shall maintain a minimum combustion efficiency/destruction removal efficiency of 99.93% based on a 1-hour average and 99.99% based on a 4-hour average.</p> <p>2. See Section 4. Table 6, Special Terms and Conditions</p>	NOx	≤0.150 lb/MMBtu
			≤ 1.83 lb/hr
			≤ 8.03 tons in any 12 consecutive month period
		PM/PM10/PM2.5	≤0.011 lb/MMBtu
			≤ 0.136 lb/hr
			≤ 0.6 tons in any 12 consecutive month period
		CO	≤ 100 ppm based on a 1-hour block average
			≤ 36 ppm based on a 4-hour block average
			≤0.08 lb/MMBtu based on a 1-hour block average
			≤ 0.03 lb/MMBtu based on a 4-hour block average
			≤ 0.98 lb/hr based on a 1-hour block average
			≤ 0.35 lb/hr based on a 4-hour block average
			≤ 1.54 tons in any 12 consecutive month period
		VOC/Total HAP	≤0.039 lb/MMBtu based on a 1-hour block average
			≤ 0.014 lb/MMBtu based on a 4-hour block average
			≤ 0.4753 lb/hr based on a 1-hour block average
			≤ 0.17 lb/hr based on a 4-hour block average
			≤0.75 tons in any 12 consecutive month period
		Smoke	Pursuant to 310 CMR 7.06(1)(a), shall not exceed No. 1 of the Chart no more than 6 minutes during any one hour, at no time to exceed No. 2 of the Chart
		Opacity	≤ 10% at any time

<b>Table 2b</b>			
<b>EU#</b>	<b>Operational / Production Limit</b>	<b>Air Contaminant</b>	<b>Emission Limit</b>
Facility -wide	None	Individual HAPs	< 10 tons of any individual HAP in any 12 consecutive month period
		Total HAPs	< 25 tons of any combination of HAPs in any 12 consecutive month period

**Table 2 Key:**

EU# = Emission Unit Number

NO<sub>x</sub> = Nitrogen Oxides

CO = Carbon Monoxide

VOC = Volatile Organic Compounds

HAP = Hazardous Air Pollutant

PM = Total Particulate Matter (including condensables)

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

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

ppm = parts per million

≤ = Less than or equal to

lb/hr = pounds per hour

lb/MMBtu = pounds per million British thermal units

**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 below:

<b>Table 3a</b>	
<b>EU#</b>	<b>Monitoring and Testing Requirements</b>
1	<p>1. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a), the boiler shall be equipped with instrumentation which is capable of continuously monitoring the amount of monomer fuel combusted in the boiler.</p> <p>2. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a), the boiler shall be equipped with instrumentation which is capable of continuously monitoring the amount of natural gas combusted in the boiler.</p> <p>3. The Permittee shall conduct initial compliance emission stack tests for the boiler at 100% of maximum load to determine compliance with the emission limits established herein for nitrogen oxides (lb/MMBtu), carbon monoxide (1-hour and 4-hour ppm, and 1-hour and 4-hour lb/MMBtu), volatile organic compounds (1-hour and 4-hour lb/MMBtu) and opacity. The stack testing for nitrogen oxides, carbon monoxide and volatile organic compounds shall be conducted simultaneously. Compliance with the pound per hour emission rates for nitrogen oxides, carbon monoxide and volatile organic compounds may be calculated using the stack test results for the boiler heat input rate (MMBtu/hr) and the associated lb/MMBtu value for each air contaminant.</p> <p>4. The Permittee shall submit emission test protocol(s) for review and written MassDEP approval at least 30 days prior to the proposed test date. The test protocol(s) must describe the test methods and procedures to be used in the performance of testing, shall include dimensioned sketches of the exhaust systems showing the locations of all proposed sampling ports, shall identify all process data, including fuel feed rate and boiler heat input rate, which will be monitored and recorded during testing.</p> <p>5. The initial boiler emission stack tests shall be performed within 90 days from the issuance date of this plan approval.</p> <p>6. The Permittee shall ensure that the boiler stack is constructed so as to accommodate the emissions testing requirements as stipulated in 40 CFR Part 60, Appendix A. The two outlet sampling ports (90 degrees apart from each other) for each stack must be located at a minimum of one duct diameter upstream and two duct diameters downstream of any flow disturbance.</p> <p>7. All emissions testing shall be conducted in accordance with the MassDEP's "Air Contaminant Emission Test Guidelines" and in accordance with the Environmental Protection Agency tests as specified in the 40 CFR Part 60, Appendix A, or by a methodology approved by MassDEP.</p> <p>8. The Permittee shall conduct quarterly sampling and analysis of the monomer fuel to determine the styrene and methyl methacrylate content (% by weight), the net heating value (Btu/lb), water content (% by weight) and ash content (% by weight)</p> <p>9. In accordance with 310 CMR 7.04(4)(a), no person shall cause, suffer, allow, or permit the operation of any fossil fuel utilization facility rated by the Department as having an energy input capacity equal to or greater than 3,000,000 Btu per hour unless said facility has been inspected and maintained in accordance with the manufacturers recommendations and tested for efficient operation at least once in each calendar year.</p> <p>10. The Permittee shall install, calibrate, operate, and maintain a data acquisition and handling system(s) (DAHS) and stack CEMs to continuously monitor the flue gas emissions of carbon monoxide from the boiler stack.</p> <p>11. The Permittee shall equip the CEM with audible and visible alarms which activate when carbon monoxide concentrations exceed the limits established herein.</p> <p>12. The Permittee shall operate the CEM at all times the boiler is operating, except for periods of CEMs calibration checks, zero and span adjustments, and preventive maintenance.</p>

<b>Table 3b</b>	
<b>EU#</b>	<b>Monitoring and Testing Requirements</b>
1	13. The Permittee shall obtain and record emission data from each CEMS at all times while the emission unit is operating except for periods of calibration checks, zero and span adjustments, and preventive maintenance.
	14. The Permittee shall maintain on-site for the CEMs equipment an adequate supply of spare parts to maintain the on-line availability and data capture requirements contained herein.
	15. The Permittee shall use and maintain all its CEMS systems as “direct-compliance” monitors to measure compliance with the emission limits contained herein. “Direct-compliance” monitors generate data that legally documents the compliance status of a source. MassDEP may also use the CEMs or any credible evidence in its determination of compliance with the limits and conditions specified in this approval.
	16. The permittee shall ensure that the CEMS equipment complies with MassDEP approved performance and location specifications, and conforms with the USEPA monitoring specifications specified in 40 CFR Part 60, Appendix B and F.
Facility-wide	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:**

- EU# = Emission Unit Number
- lb/MMBtu = pounds per million British thermal units
- CEM = continuous emission monitor
- CFR = Code of Federal Regulations
- MMBtu/hr = million British thermal units per hour of heat input
- USEPA = The United States Environmental Protection Agency

<b>Table 4</b>	
<b>EU#</b>	<b>Recordkeeping Requirements</b>
1	<p>1. The Permittee shall maintain comprehensive and accurate records for the amount of monomer and natural gas combusted in the boiler. The fuel rate shall be recorded at a minimum frequency of once per hour.</p> <p>2. The Permittee shall install, calibrate, operate, and maintain a data acquisition and handling system(s) (DAHS) and stack CEMs to continuously record flue gas emissions of carbon monoxide from the boiler stack.</p> <p>3. The Permittee shall maintain comprehensive and accurate records of the monomer fuel quarterly sampling and associated analysis results. The records shall include:</p> <ul style="list-style-type: none"> <li>a. The date that the monomer fuel sample was taken.</li> <li>b. The location where the monomer fuel sample was taken.</li> <li>c. The date of the analysis.</li> <li>d. The test methods used in the analysis.</li> <li>e. The results for the styrene and methyl methacrylate content (% by weight), the net heating value. (Btu/lb), water content (% by weight) and ash content (% by weight).</li> </ul> <p>4. In accordance with 310 CMR 7.04(4)(a), the Permittee shall maintain records of the results of the inspection, maintenance, and annual testing required by this Regulation and shall post these results conspicuously on or near the boiler.</p>
Facility-wide	<p>5. The Permittee shall maintain adequate records onsite to demonstrate compliance 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/dep/air/approvals/aqforms.htm#report">http://www.mass.gov/dep/air/approvals/aqforms.htm#report</a></p> <p>6. The Permittee shall maintain records of monitoring and testing as required by Table 3.</p> <p>7. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) approved herein on-site.</p> <p>8. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(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.</p> <p>9. 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.</p> <p>10. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.</p> <p>11. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.</p>

**Table 4 Key:**

EU# = Emission Unit Number  
SOMP = Standard Operating and Maintenance Procedure  
USEPA = United States Environmental Protection Agency

<b>Table 5</b>	
<b>EU#</b>	<b>Reporting Requirements</b>
1	1. In accordance with 40 CFR Part 60, Appendix F—Quality Assurance Procedures, submit the Cylinder Gas Audit (“CGA”) or the relative accuracy test audit (“RATA”) reports (required once per calendar year quarter) within 30 days after the date the test procedure was completed. The report format shall conform to the specifications in Appendix F.
Facility-wide	2. 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).
	3. The Permittee shall notify the Western Regional Office of MassDEP, BWP Permit Chief by telephone [413-755-2115], email [marc.simpson@state.ma.us] or fax [413-784-1149], as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements or continuous emission monitoring equipment failure. A written report shall be submitted to BWP Permit Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s) or continuous emission monitoring equipment failure, corrective actions taken, and action plan to prevent future exceedance(s).
	4. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP’s request.
	5. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.
	6. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements. This test report shall contain the results of the testing, a description of the test methods and procedures actually used in the performance of the tests, copies of all process data collected during the testing, copies of all raw test data and copies of all calculations generated during data analysis. The results of the testing shall be expressed in units which allow for a direct comparison, and determination of compliance, with the air contaminant emission limitations contained herein.

**Table 5 Key:**  
EU# = Emission Unit Number  
BWP = Bureau of Waste Prevention

**4. SPECIAL TERMS AND CONDITIONS**

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

A. The Permittee 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>
1	<p>1. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a), the boiler shall be equipped with a 12.23 million Btu per hour burner which fires styrene monomer or styrene and methyl methacrylate monomer as well as a natural gas-fired 10 million Btu per hour burner.</p> <p>2. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a), the boiler shall have a maximum heat input rate of 12.23 million Btu per hour.</p> <p>3. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a), the boiler shall combust no more than 679 pounds per hour of styrene monomer and styrene and methyl methacrylate monomer.</p> <p>4. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a), only styrene monomer, styrene and methyl methacrylate monomer and natural gas shall be fired in the boiler at any time. Natural gas shall only be fired in combination with a monomer fuel.</p> <p>5. EU #1 may be subject to Subpart JJJJJ of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR Part 63.11193 through 63.11226. Since MassDEP has not accepted delegation for 40 CFR Part 63 Subpart JJJJJ for sources which are not subject to 310 CMR Appendix C (Operating Permit sources), the facility is advised to consult with the EPA for additional information. There may be additional notification, recordkeeping and reporting requirements. The address is USEPA-Air Branch, 1 Congress Street, Suite 1100, Boston, Massachusetts, 02114-2023</p>
Facility -wide	<p>6. Any prior Plan Approvals issued under 310 CMR 7.02 shall remain in effect unless specifically changed or superseded by this Plan Approval. The Facility shall not exceed the emission limits and shall comply with approved conditions specified in the prior Plan Approval(s) unless specifically altered by this Plan Approval.</p>

**Table 6 Key:**

EU# = Emission Unit Number

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.” The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, 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>Stack Gas Exit Velocity Range (feet per second)</b>	<b>Stack Gas Exit Temperature Range (°F)</b>
1	80	2	19.9	400

**Table 7 Key:**

EU# = Emission Unit Number

°F = Degree Fahrenheit

**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. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.
- K. 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.

## **7. APPEAL PROCESS**

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts  
Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request

as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact Cortney Danneker by telephone at 413-755-2234, 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.**

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Marc Simpson  
Air Quality Permit Chief  
Bureau of Waste Prevention  
Western Region

cc: WERO AQ plan file  
WERO AQ approval file

ecc: Yi Tian – MassDEP Boston  
Peter Czapienski – MassDEP WERO