



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Central Regional Office • 627 Main Street, Worcester MA 01608 • 508-792-7650

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

RICHARD K. SULLIVAN JR.
Secretary

KENNETH L. KIMMELL
Commissioner

AIR QUALITY OPERATING PERMIT With Modification

Issued by the Massachusetts Department of Environmental Protection ("MassDEP") pursuant to its authority under M.G.L. c. 111, §142B and §142D, 310 CMR 7.00 et seq., and in accordance with the provisions of 310 CMR 7.00: Appendix C.

ISSUED TO ["the Permittee"]:

Clark University
950 Main Street
Worcester, MA01610

FACILITY LOCATION:

Clark University
950 Main Street
Worcester, MA 01610

NATURE OF BUSINESS:

Private University

RESPONSIBLE OFFICIAL:

Name: R. Michael Dawley
Title: Director of Physical Plant

INFORMATION RELIED UPON:

Transmittal No. X228200
Transmittal N. X253338 Minor Modification

FACILITY IDENTIFYING NUMBERS:

AQ ID: 118-0105
FMF FAC NO. 9807
FMF RO NO. 161330

STANDARD INDUSTRIAL CODE (SIC):

8221

**NORTH AMERICAN INDUSTRIAL
CLASSIFICATION SYSTEM (NAICS):**

611310

FACILITY CONTACT PERSON:

Name: Mark Leahy
Phone: (508) 793-7728

This operating permit shall expire on May 12, 2015.

For the Department of Environmental Protection, Bureau of Waste Prevention

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.

Roseanna E. Stanley
Acting Permit Chief

May 15, 2013

Date

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SPECIAL CONDITIONS FOR OPERATING PERMIT

A Legend to Abbreviated Terms found in the following Tables is located in Section 28 of the Operating Permit.

1. PERMITTED ACTIVITIES

In accordance with the provisions of 310 CMR 7.00:Appendix C and applicable rules and regulations, the Permittee is authorized to operate air emission units as shown in Table 1 and exempt, and insignificant activities as described in 310 CMR 7.00:Appendix C(5)(h) and (i). The units described in Table 1 are subject to the terms and conditions shown in Sections 4, 5, and 6 and to other terms and conditions as specified in this permit. Emissions from the exempt activities shall be included in the total facility emissions for the emission-based portion of the fee calculation described in 310 CMR 4.00 and this permit.

DESCRIPTION OF FACILITY AND OPERATIONS

Clark University is a private university and as such belongs to SIC Code 8221. The University maintains and operates its own boiler plant and cogeneration plant to provide steam and electricity to the classrooms and dormitories.

The boiler plant consists of three dual fuel fired boilers that produce high pressure steam for direct heating. The cogeneration plant consists of one generator that utilizes natural gas to generate steam, hot water, and electricity. The burning of fuel in the boilers and generator result in emissions of criteria air pollutants to the ambient air. The facility is not a major source of Hazardous Air Pollutants (HAPS).

Table 1 lists the equipment (emission units or EUs) subject to this Operating Permit. Table 2 describes the exempt activities that are not mentioned further in the Operating Permit. Tables 3, 4, 5, and 6 describe the applicable requirements that the EUs are subject to in the Operating Permit. Table 7 lists the requirements that the Permittee is currently not subject to. The Permittee is not subject to Compliance Assurance Monitoring (CAM) because the boilers do not have air pollution control devices and EU4, the new Cummins Generator, is subject to emission limitations under Section 111 of the Clean Air Act proposed by the Administrator after November 15, 1990, specifically 40 CFR 60, Subpart JJJJ. A source subject to such an emission limitation is exempt from CAM under §64.2(b)(1)(i). EU4 must meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ. Section 5 “Special Terms and Conditions” lists requirements not mentioned in the Tables 1-6.

2. EMISSION UNIT IDENTIFICATION

The following emission units (Table 1) are subject to and regulated by this operating permit:

Table 1			
Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)
1	Union Iron Workers Boiler	21 MMBTU/hr	none
2	Union Iron Workers Boiler	21 MMBTU/hr	none
3	Union Iron Workers Boiler	29.4 MMBTU/hr	none
4	Cummins Generator	17.08 MMBTU/hr; 2108 brake kilowatts mechanical output	Selective Catalytic Reduction (“SCR”) and Oxidation Catalyst

3. IDENTIFICATION OF EXEMPT ACTIVITIES

The following are considered exempt activities in accordance with the criteria contained in 310 CMR 7.00: Appendix C(5)(h):

Table 2	
Description of Current Exempt Activities	Reason
The list of current exempt activities is contained in the Operating Permit application and shall be updated by the Permittee to reflect changes at the facility over the permit term. An up-to-date copy of exempt activities list shall be kept on-site at the facility and a copy shall be submitted to the MassDEP's Regional Office. Emissions from these activities shall be reported on the annual emissions statement pursuant to 310 CMR 7.12.	310 CMR 7.00:Appendix C(5)(h)

4. APPLICABLE REQUIREMENTS

A. EMISSION LIMITS AND RESTRICTIONS

The permittee is subject to the emission limits/restrictions as contained in Table 3 below:

Table 3						
EU #	Fuel	Pollutant	Emission Limit/Standard	Applicable Regulation and/or (Approval No.)		
EU1, EU2, and EU3	Natural gas, and #6 fuel oil	PM (Note 1)	≤ 0.12 lbs/MMBTU (#6 fuel oil)	310 CMR 7.02(8) Table 4		
			≤ 0.10 lbs/MMBTU (natural gas)			
	and waste oil	#6 fuel oil and waste oil	NO _x		310 CMR 7.19(6)	
				opacity	Not to exceed 20% opacity for a period or aggregate period of time in excess of two minutes during any one hour provided that at no time during the said two minute shall the opacity exceed 40%.	310 CMR 7.06(1)(b)
				smoke	Not to exceed No.1 of the Chart for a period or aggregate period of time in excess of six minutes during any one provided that at no time during the said 6 minutes, shall the shade, density or appearance be equal to or greater than No. 2 of the Chart.	310 CMR 7.06(1)(a)
				sulfur in fuel	≤ 1% sulfur in fuel, by weight, equivalent to 0.55 lbs/MMBTU	310 CMR 7.05(1)(a)1.
				Total Halogens	≤ 4000 PPM in used fuel	310 CMR 7.05(8)
	waste oil	waste oil	Arsenic	≤ 5 PPM in used fuel	(Massachusetts State Requirement Only)	
			Cadmium	≤ 2 PPM in used fuel		
			Chromium	≤ 10 PPM in used fuel		
			Lead	< 100 PPM in used fuel		
			PCB's	< 50 PPM in used fuel		
		NO _x	0.53 lbs/MWh, 1.12 lbs/hr, 4.91 TPY			
		CO	0.59 lbs/MWh, 1.25 lbs/hr, 5.46 TPY			

Table 3				
EU #	Fuel	Pollutant	Emission Limit/Standard	Applicable Regulation and/or (Approval No.)
4	Natural Gas	CO ₂	1,075 lbs/MWh, 2,261 lbs/hr, 9,933 TPY	Plan Approval Transmittal No. X251282 dated August 22, 2012
		VOC	0.29 lbs/MWh, 0.63 lbs/hr, 2.73 TPY	
		HAP	0.068 lbs/MWh, 0.14 lbs/hr, 0.63 TPY	
		PM	0.18 lbs/MWh, 0.37 lbs/hr, 1.64 TPY	
		SO ₂	0.005 lbs/MWh, 0.01 lbs/hr, 0.05 TPY	
		NH ₃	5 ppm, 0.13 lbs/hr, 0.57 TPY	
		opacity	Not to exceed 20% opacity for a period or aggregate period of time in excess of two minutes during any one hour provided that, at no time during the said two minutes shall the opacity exceed 40%.	
		smoke	Not to exceed No.1 of the Chart for a period or aggregate period of time in excess of six minutes during any one hour, provided that at no time during the said six minutes shall the shade, density or appearance be equal to greater than No. 2 of the Chart.	

Table 3 Notes:

Note 1: Based on a one-hour average.

Note 2: The Permittee shall meet the BACT emission limits established in the Plan Approval at all times, except during startup and shutdown, as measured by certified CEMS or performance testing as determined by Table 4 conditions relative to monitoring provisions for determining direct compliance, with the following provisions:

A. The initial direct compliance determination shall be doing performance tests as specified by 40 CFR Subpart JJJJ. Such testing may not be conducted during periods of startup, shutdown, or malfunction; and the averaging period for the emission limits shall be determined as follows: In accordance with 40 CFR 60.4244, the Permittee must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour. The results of the performance test consist of the average of the three 1-hour or longer runs.

B. If the Permittee proposes to use a certified CEMS as a direct compliance monitor, it shall be certified as specified in Table 4, Condition 13 and approved in writing as specified in Section 5. Special Terms and Conditions, Condition D.3. MassDEP reserves the right to impose specific startup and shutdown limits as measured by the CEMS, as well as allowable durations of startup and shutdown.

B. COMPLIANCE DEMONSTRATION

The permittee is subject to the monitoring/testing, record keeping, and reporting requirements as contained in Tables 4, 5, and 6 below and 310 CMR 7.00 Appendix C (9) and (10) and applicable requirements contained in Table 3:

Table 4													
EU#	MONITORING/TESTING REQUIREMENTS												
EU1, EU2, and EU3	<p>1) In accordance with 310 CMR 7.00: Appendix C(9)(b)2., and to demonstrate compliance with 310 CMR 7.05(1)(a)1, monitor sulfur content of each new shipment of No. 6 fuel oil. Compliance can be demonstrated through testing or maintaining a shipping receipt from the fuel supplier. The shipment certification or testing of sulfur content of No. 6 fuel oil shall be in accordance with the applicable American Society for Testing Materials (ASTM) test methods or any other method approved by the Department and the EPA.</p> <p>2) Tune the emission units annually according to the procedure described in 310 CMR 7.19(6)(a)1.-12 in accordance with 310 CMR 7.19(6)(a).</p> <p>3) At least once per month, verify that the settings determined during the tune-up have not changed in accordance with 310 CMR 7.19(6)(b)2.g.</p> <p>4) Inspect and maintain the emission units in accordance with the manufacturers recommendations and test for efficient operation at least once each calendar year pursuant to 310 CMR 7.04(4)(a).</p>												
	<p>5) Analyze its WASTE OIL that it uses as a fuel source for its sulfur content on an annual basis by ASTM method D4294 in accordance with the provisions of the subject air quality operating permit application, TR# 100697.</p>												
	<p>6) Using the prescribed methodologies, analyze its waste oil used as a fuel source on an annual basis for the following parameters as provided at 310 CMR 7.05(8)(Massachusetts State Requirement Only)</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Halogens(as CL)</td> <td style="width: 33%;">ASTM Method D808</td> <td style="width: 33%;">Arsenic ASTM Method C1234</td> </tr> <tr> <td>Flash Point</td> <td>ASTM Method D3828</td> <td>Cadmium ASTM Method C1234</td> </tr> <tr> <td>PCBs</td> <td>EPA Method 8080A</td> <td>Chromium ASTM Method C1234</td> </tr> <tr> <td>Lead</td> <td>ASTM Method C1234</td> <td></td> </tr> </table>	Halogens(as CL)	ASTM Method D808	Arsenic ASTM Method C1234	Flash Point	ASTM Method D3828	Cadmium ASTM Method C1234	PCBs	EPA Method 8080A	Chromium ASTM Method C1234	Lead	ASTM Method C1234	
Halogens(as CL)	ASTM Method D808	Arsenic ASTM Method C1234											
Flash Point	ASTM Method D3828	Cadmium ASTM Method C1234											
PCBs	EPA Method 8080A	Chromium ASTM Method C1234											
Lead	ASTM Method C1234												
	<p>7) Monitor on an annual basis the total volume of waste oil consumed as provided by Plan Approval # CM-81-C-011.</p> <p>8) Notwithstanding 310 CMR 7.04(2)(c), the facility shall continually operate the smoke density sensing instruments and recorders in accurate operating condition, in accordance with 310 CMR 7.04(2)(b). Ensure that the opacity continuous emission monitor and recording devices are operated, calibrated, tested and maintained in accordance with the manufacturer's specifications, the Department's and the US EPA requirements. Quality assurance procedures must conform with 40 CFR 60, Appendix F.</p>												
EU4	<p>9) Pursuant to 40 CFR Part 60.4243(b)(2)(ii), the Permittee must conduct an initial performance test within 180 days of startup or within 90 days after maximum load has been achieved. The Permittee shall conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. The testing shall be for the 40 CFR Subpart JJJJ-listed air pollutants NOx, CO and VOC.</p> <p>10) Pursuant to 40 CFR Part 60.4244, owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.</p> <p>11) If and when MassDEP requires it, the Permittee shall conduct additional emission testing beyond the 40 CFR Subpart JJJJ requirements in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.</p> <p>12) The Permittee shall keep the CEMS system properly maintained and in an accurate</p>												

Table 4

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
	operating condition whenever the engine is operating.
	13) If Permittee elects to certify the CEMS, then initial certification shall be performed in accordance with 40 CFR Part 60 Appendix A and ongoing compliance shall be demonstrated in accordance with 40 CFR Part 60 Appendix B and F.
	14) The engine and HRSG shall be constructed to accommodate the emissions testing requirements as stipulated in 40 CFR Part 60, Appendix A or the latest test methods recommended by USEPA.
Facility-wide	<p>15) Compliance with the allowable smoke and opacity limits shall be determined in accordance with EPA Method 9, as specified in 40 CFR 60 Appendix A pursuant to 310 CMR 7.00 Appendix C(9)(b).</p> <p>16) Conduct emission testing in accordance with 310 CMR 7.13(1), to demonstrate compliance with the Emission Limits specified in Table 3 and when the Department has determined that such stack testing is necessary to determine compliance with the Department's regulations or design provisos. Testing shall be in accordance with EPA approved reference test methods unless otherwise approved by EPA and the Department or unless otherwise specified and shall include test Methods 1 through 4 and for Particulate Matter (Method 5), Sulfur Dioxide (Method 6C), Nitrogen Oxides (Method 7E), Carbon Monoxide (Method 10), Gaseous Organic Compounds (Method 18), Total Gaseous Organic Concentration (Method 25A), Hydrogen Chloride (Method 26A), Metals (Method 29). Such stack testing shall be conducted:</p> <ul style="list-style-type: none"> (a) by a person knowledgeable in stack testing, (b) in accordance with procedures contained in a test protocol which has been approved by the Department, and (c) in the presence of a representative of the Department when deemed necessary. <p>17) Monitor the operations of the entire facility such that necessary information is available for the preparation of the annual Source Registration/Emission Statement Forms as required by 310 CMR 7.12.</p>

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
EU1, EU2 and EU3	<p>1) Maintain on site the following records for five (5) years from the date of generation and have the records readily available to the Department and EPA personnel in accordance with 310 CMR 7.00 Appendix C(10)(b):</p> <ul style="list-style-type: none"> a. Fuel purchase receipts in order to demonstrate compliance with sulfur contents requirements as provided in 310 CMR 7.05(1)(a)1.; b. All fuel and waste oil analyses completed on behalf of the Permittee; c. Records of the date of tune-up; person(s) conducting tune up; O₂/CO (for gas) or O₂/smoke spot (for oil) correlations obtained during tune-up; boiler/burner manufacturer's recommended set-points; final boiler set-points as result of tune-up; normal boiler/burner maintenance records; and verification that the settings determined during the tune-up have not changed in accordance with 310 CMR 7.19(6)(b)2; d. Records of all repairs and maintenance conducted on the smoke sensing instruments and recorders; e. Inspection, maintenance, and testing results of the emission unit and the date upon which it was performed in accordance with 310 CMR 7.04(4)(a).
EU4	<p>2) Subpart JJJJ records—40 CFR Part 60.4245:</p> <ul style="list-style-type: none"> a. Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section. <ul style="list-style-type: none"> (1) All notifications submitted to comply with this subpart and all documentation supporting any notification. (2) Maintenance conducted on the engine. (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable. (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR Part § 60.4243(a)(2), documentation that the engine meets the emission standards. <p>3) Subpart JJJJ--40 CFR Part 60.4243(b)(2)(ii): (ii): If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance.</p>
Facility -Wide	<p>4) Maintain on site the following records for five (5) years from the date of generation and have the records readily available to the Department and EPA personnel in accordance with 310 CMR 7.00 Appendix C(10)(b):</p> <ul style="list-style-type: none"> a. Records of emissions testing conducted to demonstrate compliance with the applicable requirements in Table 3 in accordance with 310 CMR 7.13(1)(d), b. Records of all monitoring data and supporting information required by this permit. <p>5) In accordance with 310 CMR 7.12, maintain records for the annual preparation of a Source Registration/Emission Statement Form.</p> <p>6) Keep copies of Source registration/ Emission Statement Forms submitted annually to the Department as required per 310 CMR 7.12(3)(b).</p> <p>7) Maintain records of any EPA Test Method 9 opacity determinations performed according to 40 CFR part 60, Appendix A, including detached plumes, required by the Department or EPA.</p>

Table 5	
EU#	RECORD KEEPING REQUIREMENTS

Table 6	
EU#	REPORTING REQUIREMENTS
EU1, EU2, EU3 and EU4	<ol style="list-style-type: none"> 1) In accordance with 310 CMR 7.19(13)(d) 9. submit compliance records within ten (10) days of written request by the department or EPA. 2) Submit fuel-oil, waste oil and sulfur content test results, obtained from the fuel supplier and or requisite analyses, to the Department upon request, as provided for in 310 CMR 7.05. 3) Summarize and submit to the Department the results of stack testing as prescribed in the Department's approved pretest protocol stack testing that was determined by the Department to be necessary to ascertain compliance with Department's regulations or design approval provisos in accordance with 310 CMR 7.13(1) and 310 CMR 7.13(2). 4) Upon the Department's request, any records required by the applicable requirements identified in Section 4 of the operating permit, or the emissions of any air contaminant from the facility, shall be submitted to the Department within 30 days of the request by the Department, or within a longer time period if approved in writing by the Department. Said response shall be transmitted on paper, on computer disk, or electronically at the discretion of the Department, pursuant to 310 CMR 7.00 Appendix C (10)(a) incorporated herein by reference. 5) Submit a Source Registration/Emission Statement form to the Department on an annual basis as required by 310 CMR 7.12(2). 6) Submit by January 30 and July 30 a summary of all monitoring data and related supporting information to the Department as required by 310 CMR 7.00: Appendix C(10)(c).for the previous six months respectively, 7) A responsible official of the Permittee as provided in 310 CMR 7.00 must certify all required reports: Appendix C(10)(h). 8) Promptly report to the Department all instances of deviations from permit requirements (including but not limited to testing for efficient operation, fuel sulfur and fuel ash content, emission limitations/standards, inoperable smoke sensing instruments and recorders) by telephone or fax, within three days of discover of such deviation, as provided in 310 CMR 7.00: Appendix C(10)(f).
EU4	<ol style="list-style-type: none"> 9) 40 CFR Part 60.4245(c): (c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in § 60.4231 must submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section. <ol style="list-style-type: none"> (1) Name and address of the owner or operator; (2) The address of the affected source; (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; (4) Emission control equipment; and (5) Fuel used. 10) 40 CFR Part 60.4245(d): (d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in § 60.4244 within 60 days after the test has been completed.

C. GENERAL APPLICABLE REQUIREMENTS

The permittee shall comply with all generally applicable requirements contained in 310 CMR 7.00 et. seq. and 310 CMR 8.00 et. seq., when subject.

D. REQUIREMENTS NOT CURRENTLY APPLICABLE

The permittee is currently not subject to the following requirements:

Table 7	
REGULATION	DESCRIPTION/REASON
40 CFR 64	Compliance Assurance Monitoring Rule
310 CMR 7.16	Single Occupant Commuter Vehicle Use
42 U.S.C 7401, §112(r)	Prevention of Accidental Releases

5. SPECIAL TERMS AND CONDITIONS

The permittee is subject to the following special provisions that are not contained in Table 3, 4, 5, and 6:

A) The Permittee is subject to, and has stated in their operating permit application TR#100697 and #X228200, that the Permittee is in compliance with the requirements of 40 CFR 82: Protection of Stratospheric Ozone. These requirements are applicable to this facility and the United States Environmental Protection Agency enforces these requirements.”

B) Per data supplied through the Permittee's operating permit application (Transmittal No. 100697), two Union Iron Worker boilers shall emit combustion by-products through one stack having the following parameters; stack height of 90 feet, stack exit diameter of 48 inches, and the stack material of tile and brick.

The third Union Iron Worker boiler shall emit combustion by products through a separate stack with the same parameters.

The Cummins reciprocating engine shall emit combustion by-products through a stack with the following parameters; stack height of 102 feet, stack exit diameter of 24 inches and stack material of carbon steel and brick.

The stacks shall not be altered without prior written Department approval.

C) Should any nuisance condition(s) occur as a result of the operation of the boilers or engine, then appropriate steps shall immediately be taken to abate said nuisance condition(s) in accordance with 310 CMR 7.01(1) (Massachusetts State Requirement Only).

D) The following conditions apply to the Cummins reciprocating engine:

1. The SCR shall be operated at all times when the engine is operating.
2. The oxidation catalyst bed shall be in use at all times when the engine is operating.
3. In accordance with 40 CFR Part 60.8, MassDEP may alter the requirements for compliance determination by performance testing. The Permittee may propose alternative compliance determination methods, which may include continuous emissions monitoring systems (CEMS) or parametric monitoring systems. Such alternative methods must be approved in writing by MassDEP prior to their use instead of the Table 3 performance test requirements.
4. In accordance with 40 CFR 60 Subpart JJJJ, the Permittee must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

6. ALTERNATIVE OPERATING SCENARIOS

The permittee did not request alternative operating scenarios in its operating permit application.

7. EMISSIONS TRADING

(a) Intra-facility emission trading

The facility did not request intra-facility emissions trading in its operating permit application.

(b) Inter-facility emission trading

The Permittee did not request inter-facility emissions trading in its operating permit application.

8. COMPLIANCE SCHEDULE

The Permittee has indicated that the facility is in compliance and shall remain in compliance with the applicable requirements contained in Sections 4 and 5.

In addition, the Permittee shall comply with any applicable requirements that become effective during the permit term.

GENERAL CONDITIONS FOR OPERATING PERMIT

9. FEES

The permittee has paid the permit application processing fee and shall pay the annual compliance fee in accordance with the fee schedule pursuant to 310 CMR 4.00.

10. COMPLIANCE CERTIFICATION

All documents submitted to the MassDEP shall contain certification by the responsible official of truth, accuracy, and completeness. Such certification shall be in compliance with 310 CMR 7.01(2) and contain the following language:

"I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."

The "Operating Permit Reporting Kit" contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification. The "Operating Permit

Reporting Kit” is available to the Permittee via the MassDEP’s web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>.

(a) Annual Compliance Report and Certification

The Responsible Official shall certify, annually for the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered by January 30 to the MassDEP and to the Regional Administrator, U.S. Environmental Protection Agency - New England Region. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- i. the terms and conditions of the permit that are the basis of the certification;
- ii. the current compliance status and whether compliance was continuous or intermittent during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods; and
- iv. any additional information required by the MassDEP to determine the compliance status of the source.

(b) Semi-Annual Monitoring Summary Report and Certification

The Responsible Official shall certify, semi-annually on the calendar year, that the facility is in compliance with the requirements of this permit. The report shall be postmarked or delivered by January 30 and July 30 to the MassDEP. The report shall be submitted in compliance with the submission requirements below.

The compliance certification and report shall describe:

- i. the terms and conditions of the permit that are the basis of the certification;
- ii. the current compliance status during the reporting period;
- iii. the methods used for determining compliance, including a description of the monitoring, record keeping, and reporting requirements and test methods;
- iv. whether there were any deviations during the reporting period;
- v. if there are any outstanding deviations at the time of reporting, and the Corrective Action Plan to remedy said deviation;
- vi. whether deviations in the reporting period were previously reported;
- vii. if there are any outstanding deviations at the time of reporting, the proposed date of return to compliance;
- viii. if the deviations in the reporting period have returned to compliance and date of such return to compliance; and
- ix. any additional information required by the MassDEP to determine the compliance status of the source.

11. NONCOMPLIANCE

Any noncompliance with a permit condition constitutes a violation of 310 CMR 7.00: Appendix C and the Clean Air Act, and is grounds for enforcement action, for permit termination or revocation, or for denial of an operating permit renewal application by the MassDEP and/or EPA. Noncompliance may also be grounds for assessment of administrative or civil penalties under M.G.L. c.21A, §16 and 310 CMR 5.00; and civil penalties under M.G.L. c.111, §142A and 142B. This permit does not relieve the permittee from the obligation to comply with any other provisions of 310 CMR 7.00 or the Act, or to obtain any other necessary authorizations from other governmental agencies, or to comply with all other applicable Federal, State, or Local rules and regulations, not addressed in this permit.

12. PERMIT SHIELD

(a) This facility has a permit shield provided that it operates in compliance with the terms and conditions of this permit. Compliance with the terms and conditions of this permit shall be deemed compliance with all applicable requirements specifically identified in Sections 4, 5, 6, and 7, for the emission units as described in the permittee's application and as identified in this permit.

Where there is a conflict between the terms and conditions of this permit and any earlier approval or permit, the terms and conditions of this permit control.

(b) The MassDEP has determined that the permittee is not currently subject to the requirements listed in Section 4, Table 7.

(c) Nothing in this permit shall alter or affect the following:

- i. the liability of the source for any violation of applicable requirements prior to or at the time of permit issuance.
- ii. the applicable requirements of the Acid Rain Program, consistent with 42 U.S.C. §7401, §408(a); or
- iii. the ability of EPA to obtain information under 42 U.S.C. §7401, §114 or §303 of the Act.

13. ENFORCEMENT

The following regulations found at 310 CMR 7.02(8)(h) Table 6 for wood fuel, 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22, 7.70 and any condition(s) designated as "state only" are not federally enforceable because they are not required under the Act or under any of its applicable requirements. These regulations and conditions are not enforceable by the EPA. Citizens may seek equitable or declaratory relief to enforce these regulations and conditions pursuant to Massachusetts General Law Chapter 214, Section 7A

All other terms and conditions contained in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the MassDEP, EPA and citizens as defined under the Act.

A Permittee shall not claim as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

14. PERMIT TERM

This permit shall expire on the date specified on the cover page of this permit, which shall not be later than the date 5 years after issuance of this permit.

Permit expiration terminates the permittee's right to operate the facility's emission units, control equipment or associated equipment covered by this permit, unless a timely and complete renewal application is submitted at least 6 months before the expiration date.

15. PERMIT RENEWAL

Upon the MassDEP's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the MassDEP on the renewal application.

In the event the MassDEP has not taken final action on the operating permit renewal application prior to this permit's expiration date, this permit shall remain in effect until the MassDEP takes final action on the renewal application, provided that a timely and complete renewal application has been

submitted in accordance with 310 CMR 7.00: Appendix C(13).

16. REOPENING FOR CAUSE

This permit may be modified, revoked, reopened, and reissued, or terminated for cause by the MassDEP and/or EPA. The responsible official of the facility may request that the MassDEP terminate the facility's operating permit for cause. The MassDEP will reopen and amend this permit in accordance with the conditions and procedures under 310 CMR 7.00: Appendix C(14).

The filing of a request by the permittee for an operating permit revision, revocation and reissuance, or termination, or a notification of a planned change or anticipated noncompliance does not stay any operating permit condition.

17. DUTY TO PROVIDE INFORMATION

Upon the MassDEP's written request, the permittee shall furnish, within a reasonable time, any information necessary for determining whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall furnish to the MassDEP copies of records that the permittee is required to retain by this permit.

18. DUTY TO SUPPLEMENT

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a complete renewal application was submitted but prior to release of a draft permit.

The permittee shall promptly, on discovery, report to the MassDEP a material error or omission in any records, reports, plans, or other documents previously provided to the MassDEP.

19. TRANSFER OF OWNERSHIP OR OPERATION

This permit is not transferable by the permittee unless done in accordance with 310 CMR 7.00: Appendix C(8)(a). A change in ownership or operation control is considered an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between current and new permittee, has been submitted to the MassDEP.

20. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

21. INSPECTION AND ENTRY

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the MassDEP, and EPA to perform the following:

- (a) enter upon the permittee's premises where an operating permit source activity is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of

this permit;

(c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor at reasonable times any substances or parameters for the purpose of assuring compliance with the operating permit or applicable requirements as per 310 CMR 7.00 Appendix C(3)(g)(12).

22. PERMIT AVAILABILITY

The permittee shall have available at the facility, at all times, a copy of the materials listed under 310 CMR 7.00: Appendix C(10)(e) and shall provide a copy of the permit, including any amendments or attachments thereto, upon request by the MassDEP or EPA.

23. SEVERABILITY CLAUSE

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

24. EMERGENCY CONDITIONS

The permittee shall be shielded from enforcement action brought for noncompliance with technology based¹ emission limitations specified in this permit as a result of an emergency². In order to use emergency as an affirmative defense to an action brought for noncompliance, the permittee shall demonstrate the affirmative defense through properly signed, contemporaneous operating logs, or other relevant evidence that:

(a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;

(b) the permitted facility was at the time being properly operated;

(c) during the period of the emergency, the permittee took all reasonable steps as expeditiously as possible, to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and

(d) the permittee submitted notice of the emergency to the MassDEP within two (2) business days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emission, and corrective actions taken.

If an emergency episode requires immediate notification to the Bureau of Waste Site Cleanup/Emergency Response, immediate notification to the appropriate parties should be made as required by law.

¹ Technology based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain health based air quality standards.

² An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation would require immediate corrective action to restore normal operation, and that causes the source to exceed a technology based limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operations, operator error or decision to keep operating despite knowledge of any of these things.

25. PERMIT DEVIATION

Deviations are instances where any permit condition is violated and not reported as an emergency pursuant to section 24 of this permit. Reporting a permit deviation is not an affirmative defense for action brought for noncompliance. Any reporting requirements listed in Table 6. of this Operating Permit shall supercede the following deviation reporting requirements, if applicable.

The Permittee shall report to the MassDEP's Regional Bureau of Waste Prevention the following deviations from permit requirements, by telephone or fax, within three (3) days of discovery of such deviation:

- Unpermitted pollutant releases, excess emissions or opacity exceedances measured directly by CEMS/COMS, by EPA reference methods or by other credible evidence, which are ten percent (10%) or more above the emission limit.
- Exceedances of parameter limits established by your Operating Permit or other approvals, where the parameter limit is identified by the permit or approval as surrogate for an emission limit.
- Exceedances of permit operational limitations directly correlated to excess emissions.
- Failure to capture valid emissions or opacity monitoring data or to maintain monitoring equipment as required by statutes, regulations, your Operating Permit, or other approvals.
- Failure to perform QA/QC measures as required by your Operating Permit or other approvals for instruments that directly monitor compliance.

For all other deviations, three (3) day notification is waived and is satisfied by the documentation required in the subsequent Semi-Annual Monitoring Summary and Certification. Instructions and forms for reporting deviations are found in the MassDEP Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is available to the Permittee via the MassDEP's web site, <http://www.mass.gov/dep/air/approvals/aqforms.htm#op>.

This report shall include the deviation, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and the corrective actions or preventative measures taken.

Deviations that were reported by telephone or fax within 3 days of discovery, said deviations shall also be submitted in writing via the Operating Permit Deviation Report to the regional Bureau of Waste Prevention within ten (10) days of discovery. For deviations, which do not require 3-day verbal notification, follow-up reporting requirements are satisfied by the documentation required in the aforementioned Semi-Annual Monitoring Summary and Certification.

26. OPERATIONAL FLEXIBILITY

The permittee is allowed to make changes at the facility consistent with 42 U.S.C. §7401, §502(b)(10) not specifically prohibited by the permit and in compliance with all applicable requirements provided the permittee gives the EPA and the MassDEP written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(h) and (i). The notice shall comply with the requirements stated at 310 CMR 7.00: Appendix C(7)(a) and will be appended to the facility's permit. The permit shield allowed for at 310 CMR 7.00: Appendix C(12) shall not apply to these changes.

27. MODIFICATIONS

(a) Administrative Amendments - The permittee may make changes at the facility which are considered administrative amendments pursuant to 310 CMR 7.00: Appendix C(8)(a)1., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(b).

(b) Minor Modifications - The permittee may make changes at the facility which are considered minor

modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)2., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(d).

(c) Significant Modifications - The permittee may make changes at the facility which are considered significant modifications pursuant to 310 CMR 7.00: Appendix C(8)(a)3., provided they comply with the requirements established at 310 CMR 7.00: Appendix C(8)(c).

(d) No permit revision shall be required, under any approved economic incentives program, marketable permits program, emission trading program and other similar programs or processes, for changes that are provided in this operating permit. A revision to the permit is not required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program under Title IV of the Act, provided that such increases do not require an operating permit revision under any other applicable requirement.

APPEAL CONDITIONS FOR OPERATING PERMIT

This permit is an action of the MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing within 21 days of issuance of this permit. In addition, any person who participates in any public participation process required by the Federal Clean Air Act, 42 U.S.C. §7401, §502(b)(6) or under 310 CMR 7.00: Appendix C(6), with respect to the MassDEP's final action on operating permits governing air emissions, and who has standing to sue with respect to the matter pursuant to federal constitutional law, may initiate an adjudicatory hearing pursuant to Chapter 30A, and may obtain judicial review, pursuant to Chapter 30A, of a final decision therein.

If an adjudicatory hearing is requested, the facility must continue to comply with all existing federal and state applicable requirements to which the facility is currently subject, until a final decision is issued in the case or the appeal is withdrawn. During this period, the application shield shall remain in effect, and the facility shall not be in violation of the Act for operating without a permit.

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. Additionally, the request must state why the permit is not consistent with applicable laws and regulations.

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:

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

The 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.

The 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.

28. LEGEND OF ABBREVIATED TERMS IN OPERATING PERMIT

*Not all abbreviations are present in every Operating Permit

< - Less Than
> - Greater Than
#/hr - Pounds Per Hour
10⁶ BTU/hr - 1,000,000 BTU Per Hour
AOS – Alternative Operating Scenario
AQCR - Air Quality Control Region
CEM - Continuous Emission Monitor
CO - Carbon Monoxide
CO₂ = Carbon Dioxide
EPA - Environmental Protection Agency
FMF FAC. NO. - Facility Master File Number
FMF RO NO. - Facility Master File Regulated Object Number
FT³/day - Cubic Feet Per Day
HAP = Hazardous Air Pollutant
HHV - Higher Heating Value
ISO – Represents 59°F , 60% Relative Humidity, 29.92 Inches Mercury At Sea Level
Lbs/MWh – Pounds per brake megawatt hour
MassDEP - Massachusetts Department of Environmental Protection
MMBTU/hr - Million British Thermal Units Per Hour
NH₃ - Ammonia
NO_x - Nitrogen Oxides
PB - Lead
PLT ID - Plant Identification
PM - Particulate Matter
PPM - Parts Per Million
PTE - Potential To Emit
SO₂ - Sulfur Dioxide
TPY - Tons Per Year
VOC - Volatile Organic Compound