



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Central Regional Office, 627 Main Street, Worcester, MA 01608

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Secretary

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FINAL

AIR QUALITY OPERATING PERMIT

Issued by the Massachusetts Department of Environmental Protection ("The Department") 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"]:

Saint-Gobain Abrasives, Inc. and
Saint-Gobain Ceramics & Plastics, Inc.

INFORMATION RELIED UPON:

Application No.
Transmittal No. 96091

FACILITY LOCATION:

One New Bond Street
Worcester, Massachusetts 01606

FACILITY IDENTIFYING NUMBERS:

SSEIS ID: 118-115
FMF FAC NO. 130510
FMF RO NO. 51040

NATURE OF BUSINESS:

Abrasives and Industrial Ceramics

STANDARD INDUSTRIAL CODE (SIC):

3291, 3297, 3299

RESPONSIBLE OFFICIAL:

Name: Stephen A. Stockman
Title: Vice president – Bonded Abrasives,
North America
and
Name: Daniel Wiechec
Title: General Manager – Abrasive Materials

FACILITY CONTACT PERSON:

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This operating permit shall expire on September 1, 2008.

For the Department of Environmental Protection, Bureau of Waste Prevention

Martin Suuberg,
Regional Director

Date

TABLE OF CONTENTS

Section	Special Conditions for Operating Permit	Page No. 3
1	Permitted Activities and Description of Facility and Operations	3
2	Emission Unit Identification – Table 1	4-9
3	Identification of Exempt Activities – Table 2	10
4	Applicable Requirements A. Emission Limits and Restrictions – Table 3 B. Compliance Demonstration - Monitoring/Testing Requirements – Table 4 - Record Keeping Requirements - Table 5 - Reporting Requirements – Table 6 C. General Applicable Requirements D. Requirements Not Currently Applicable -Table 7	10 10-16 16 16-17 17-19 19 20 20
5	Special Terms and Conditions – Table 8	20
6	Alternative Operating Scenarios	21
7	Emissions Trading	21
8	Compliance Schedule	21
Section	General Conditions for Operating Permit	Page No. .21
9	Fees	21
10	Compliance Certification	21-23
11	Noncompliance	23
12	Permit Shield	23
13	Enforcement	23-24
14	Permit Term	24
15	Permit Renewal	24
16	Reopening for Cause	24
17	Duty to Provide Information	24-25
18	Duty to Supplement	25
19	Transfer of Ownership or Operation	25
20	Property Rights	25
21	Inspection and Entry	25
22	Permit Availability	26
23	Severability Clause	26
24	Emergency Conditions	26
25	Permit Deviation	27
26	Operational Flexibility	27
27	Modifications	28
Section	Appeal Conditions for Operating Permit	29
28	Legend to Abbreviated Terms In Operating Permit	30

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

The name of the facility is Saint-Gobain **Abrasives, Inc and Saint-Gobain Ceramics & Plastics, Inc**. It is located at 1 New Bond Street in Worcester, Massachusetts. The manufacturing done here falls under SIC Code 3291 (Abrasive Products), **SIC 3297 (Non-clay Refractories)**, and SIC Code 3299 (Nonmetallic Mineral Products, Not Elsewhere Classified).

There are five operating businesses, a Research and Development Center, and other operations.

1. Bonded Abrasives—grinding wheel manufacturing (organic and vitrified type).
2. Super Abrasives—grinding wheel manufacturing using high strength (e.g., diamond) abrasives.
3. High Performance Refractories—manufacturer of specialty ceramic products.
4. Ceramic Materials—manufacturing and/or distribution of abrasive and other non-metallic grains.
5. Crystar Electronics—manufacturer of high purity ceramic products for the microelectronics industry.

Research and Development—R&D Labs and demonstration scale testing is performed for the Bonded Abrasives and Super Abrasives businesses.

Other—The facility also owns and operates a cogeneration Power Plant.

Each of these businesses operates out of several buildings. A map of the site is attached. The map lists the buildings by number. The map is also color-coded indicating which business operates from which building.

Emissions—The primary emission sources are the Power Plant and the many kilns and ovens operated throughout the facility. These emit various quantities of VOC, smoke and odor; smoke and odor are to a large degree controlled by exhaust incinerators. Dust or particulate matter emissions are also generated by many processes, but are controlled to a high degree by dust collectors.

Table 1 lists the equipment (emission units or EUs) subject to this Operating Permit. Table 2 describes the equipment that is 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.

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)
101-GVf	Misc. Cleaning-Blankrola/IPA	NA	None
108-13	CVD Furnacing	NA	Scrubber
108-17	CVD Furnacing	NA	Scrubber
108-26	Emergency Generator	3.36 MMBTU/hr	None
108-33	22 Space Heaters/AC Units	23.8 MMBTU/hr total	None
108-34	CVD Furnacing	NA	Scrubber
108-35	CVD Furnacing	NA	Scrubber
112-08B	Boiler	6.3 MMBTU/hr	None
114-01	Drum Cleaning	NA	Exhaust filter
114-02	Micropulverizer	NA	Exhaust filter
114-03	ACM Pulverizer	NA	Exhaust filter
114-04	Pneumatic Bulk Material Transfer System	NA	Exhaust filter
114-05	Bagger and Drum Filler	NA	Exhaust filter
114-06	Railway Unloading	NA	Exhaust filter
114-07	Silo #1	NA	Exhaust filter
114-08	Silo #2	NA	Exhaust filter
114-09	Silo #3	NA	Exhaust filter
114-10	Silo #4	NA	Exhaust filter
114-11	Silo #5	NA	Exhaust filter
114-12	Silo #6	NA	Exhaust filter
114-13	Silo #7	NA	Exhaust filter
114-14	Bulk Material Transfer System	NA	Exhaust filter
115-01	Various Finishing	NA	Dust collector
115-02	Various Mixing	NA	Dust collector
115-05	Fast Fire Bickley Kiln #234	6 MMBTU/hr	Incinerator
115-06	Fast Fire Bickley Kiln #235	6 MMBTU/hr	Incinerator
115-14	Swindell Dressler TK #14	5 MMBTU/hr	Incinerator
115-14I	Incinerator (TK #14)	5 MMBTU/hr	Incinerator itself
115-15	Standard Bickley Kiln #238	8 MMBTU/hr	Incinerator

Table 1			
Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)
115-16	Various Finishing (Line 3, Line 4)	NA	Dust Collector
115-18	Standard Bickley Kiln #237	8 MMBTU/hr	Incinerator
115-19	Standard Bickley Kiln #236	8 MMBTU/hr	Incinerator
115-24	Line 2 Cementing	NA	None
115-25	Kerabedorf Kiln #240	4 MMBTU/hr	Incinerator
115-26	Kerabedorf Kiln #239	4 MMBTU/hr	Incinerator
115-28	Kerabedorf Kiln #241	4 MMBTU/hr	Incinerator
115-29	Line 2 Finishing	NA	Dust Collector
115-30	L3 Paint Spray	NA	None
115-32	Finishing (Line 4, Line 5)	NA	Dust Collector
115-38	Line 2 Paint Hood	NA	Exhaust filter
115-41	Line 3 Cementing	NA	None
115-43	Line 3 Paint Spray	NA	Exhaust filter
115-45	Line 4 Finishing	NA	Dust Collector
115-46	Line 4 Paint Hood	NA	Exhaust filter
115-49	Gadia Hole Cementing Machine	NA	None
115-51	Various Grinding Machines	NA	Dust Collector
115-52	Bickley-Naber Kiln #233	NA	Incinerator
115-53	Various Grinding Machines	NA	Dust Collector
115-54	Naber-Therm Kiln	NA	Incinerator
115-55	Mitchell Kiln Eq#55280	NA	Incinerator
115-57	Various Finishing	NA	Dust Collector
115-58	Various Finishing	NA	Dust Collector
115-60	Various Speed Testing	NA	Dust Collector
115-63	Gadia/Paint Spray	NA	Exhaust Filter
115-64	Sealing	NA	Exhaust Filter
115-65	Stencil Hood	NA	Exhaust Filter
115-GVd	Fugitive Mold Release/Isopropanol	NA	Incinerator
115-GVg	Fugitive Balancing	NA	NA
120-01	Various Mixers	NA	Dust Collector
120-02	Various Mixers	NA	Dust Collector
120-03	Various Mixers	NA	Dust Collector
120-04	Various Mixers	NA	Dust Collector

Table 1			
Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)
120-05	Various Mixers	NA	Dust Collector
120-06	Various Mixers	NA	Dust Collector
120-07	2-Bowl Mixer @Sa Press	NA	Dust Collector
120-08	Various Mix Machines	NA	Dust Collector
120-09	Various Truing	NA	Dust Collector
120-10	Various Truing	NA	Dust Collector
120-11	Various Truing	NA	Dust Collector
120-12	Various Truing	NA	Dust Collector
120-13	Various Truing	NA	Dust Collector
120-14	Various Truing	NA	Dust Collector
120-15	Various Truing	NA	Dust Collector
120-16	Various Truing	NA	Dust Collector
120-20 through 120-28c, 120-29d, 120-30 through 120-33c, and 120-54a, b, c	35 Individual Gas Ovens	1.5 MMBTU/hr each	Gas Recirculation
120-29a, b and c	3 Gas Ovens with steam injection	1.5 MM BTU/hr each	Incinerator
120-37a	Spray Paint Booth	NA	N/A
120-37b	Spray Paint Booth	NA	N/A
120-37c	Spray Paint Booth	NA	N/A
120-37d	Spray Paint Hood	NA	N/A
120-38	Spray Paint Booth	NA	N/A
120-39	Spray Paint Booth	NA	N/A
120-41	Spray Paint Hood	NA	N/A
120-42	Spray Paint Booth	NA	N/A
120-45a	Cement Shop	NA	N/A
120-45b	Cement Shop	NA	N/A
120-49	Various Mixers	NA	Dust Collector
120-50	Fines Mixing	NA	Dust Collector
120-51	Various Mixing	NA	Dust Collector
120-53	Various Truing	NA	Dust Collector
120-57	Maternini/TMX Press	NA	Dust Collector
120-58	Glass Cloth/Maternini/TMX Press	NA	Dust Collector
120-GVc	Fugitive Stencil Cleaning	NA	None

Table 1			
Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)
120-GVf	Gas Oven Fugitive	NA	Dust Collector
120-GVg	Production Fugitive	NA	Dust Collector
120-GVk	Miscellaneous Mixer Cleaning	NA	Dust Collector
120-GVl	Miscellaneous Cleaning	NA	Dust Collector
120-GVm	Misc-Mold Release	NA	Dust Collector
202-03	Speed Test Machine	NA	Dust Collector
202-GVa	Fugitive Balancing	NA	N/A
205-03	Hole Cementing Eq #56158	NA	None
207-01	Bickley Kiln #128	2.5 MMBTU/hr	Incinerator
207-01, 04, 051	Incinerator (Kilns 123, 124 & 128)	12 MMBTU/hr	Incinerator itself
207-02	Dressler Kiln #126	4 MMBTU/hr	None
207-03	Dressler Kiln #125	4 MMBTU/hr	None
207-04	Bickley Kiln #124	4 MMBTU/hr	Incinerator
207-05	Bickley Kiln #123	4 MMBTU/hr	Incinerator
207-06	Bickley Kiln #122	4 MMBTU/hr	None
207-08	Bickley Kiln #127	4 MMBTU/hr	None
207-15	Tunnel Kiln 11	3 MMBTU/hr	Incinerator
207-15I	TK-11 Incinerator	0.8 MMBTU/hr	Incinerator itself
207-16	Segment Strip Gluing	NA	None
207-24	Various Mixing	NA	Dust Collector
207-25	Various Mixing	NA	Dust Collector
207-26	Various Mixing	NA	Dust Collector
207-27	Segment Strip Gluing	NA	None
207-28	Segment Strip Gluing	NA	None
207-GVa	Fugitive Balancing	NA	None
409-01	Swing Arm Grinding Wheel	NA	Dust Collector
410-01	Lathes-Dryflo	NA	Dust Collector
413-01	Grinding Stations	NA	Dust Collector
413-02	Grinding Machine Exhaust	NA	Dust Collector
413-05	Grinding & Machining Stations	NA	Dust Collector
416-01	Dust Collector	NA	Dust Collector
417-01	Line 5 Finishing	NA	Dust Collector
417-02	Resin Bond Prep	NA	Dust Collector

Table 1			
Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)
417-03	Stencil Painting Booth	NA	N/A
417-04	Stencil Painting Booth	NA	N/A
417-05	Metal Bond Prep	NA	Dust Collector
417-12	Preform Grinding	NA	Dust Collector
417-22	Mixing Resin Bond	NA	None
417-GVb	Misc. Wheel Cleaning	NA	None
419-08	Machining, Room 510	NA	Dust Collector
419-09	Lab Exhausts, Room 425	NA	Dust Collector
419-20	Various Machining Equipment, SA	NA	Dust Collector
420-06	Exhaust Fan	NA	Dust Collector
421-04	Crushing Mill	NA	Dust Collector
505-01	Milling/Drying	NA	Incinerator
505-02	Milling/Drying	NA	Incinerator
505-03	Milling/Drying	NA	Incinerator
505-04	Milling-Fugitive	NA	Incinerator
512-10	Mix, Screen, Classify	NA	Dust Collector
512-15	IPA Mixing/Drying	NA	None
513-05	Classifier	NA	Dust collector
519-01	Classifier/Sizer	NA	Dust Collector
519-04	Dry Pan, Sizing	NA	Dust Collector
519-05	Dry Pan, Sizing	NA	Dust Collector
523-01	Boiler #6	226 MMBTU/hr	Dust Collector
523-01b	Coal Ash Handling System	NA	Dust Collector
523-02a	Boiler #1	67 MMBTU/hr	None
523-02b	Boiler #2	67 MMBTU/hr	None
523-02c	Boiler #5	67 MMBTU/hr	None
526-02	Rotary Kiln	4.25MMBTU/hr	Dust Collector
526-03	Calcliner	5.5 MMBTU/hr	None
526-09	Conveying Tunnel	NA	Dust Collector
527-01	Conveying	NA	Dust Collector
527-02	Sizing	NA	Dust Collector
527-04	Crusher, Screen, Conveyors	NA	Dust Collector
527-07	Storage Silo	NA	Dust Collector

Table 1			
Emission Unit (EU#)	Description of Emission Unit	EU Design Capacity	Pollution Control Device (PCD)
527-09	Crushing, Sizing	NA	Dust Collector
527-10	Crushing, Sizing	NA	Dust Collector
527-13	Crush, Sizing, Conveying	NA	Dust Collector
527-14	Conveyor	NA	Dust Collector
528-01	Kiln & Incinerator (Big Bickley #134)	15 MMBTU/hr	Afterburner
528-02	Kiln (S-80 #137)	2 MMBTU/hr	None
528-03	Kiln (Small Bickley #135)	6 MMBTU/hr	Afterburner
528-04	Tunnel Kiln (#9)	4.5 MMBTU/hr	Dust Collector
528-05	Tunnel Kiln (#10)	4.5 MMBTU/hr	Dust Collector
528-07	Dry Room-Steam Heated	NA	None
528-08	Dry Room-Steam Heated	NA	None
528-09	Dry Room-Steam Heated	NA	None
528-10	Dry Room-Steam Heated	NA	None
528-19	Molding Equipment-Mold Release	NA	None
528-28	Mixing/Molding	NA	None
529-02	Mixers, Dryer-Silane Treat	NA	Dust Collector
530-01	Induction Firing Furnaces	NA	Dust collector
530-11	Water Cascade Booth	NA	Water Curtain dust collector
530-18	Cut-off Saw (FM)	NA	Dust Collector
530-19	Sandblasting	NA	Dust collector
531-01	Mixing, Sizing	NA	Dust Collector
546-01	Crush, Sizing	NA	Dust Collector
546-02	Crush, Sizing	NA	Dust Collector
546-03	Sizing	NA	Dust Collector
552-01	Calcining	18.2 MMBTU/hr	None
553-01	Sizing Storage Tank	NA	Dust Collector
563-01	Tanks	NA	Dust Collector

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 Department's Regional Office.	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/Raw Materials	Pollutant	Restrictions	Emissions Limit/Standard	Applicable Regulation and/or (Approval No.)
EU's under Approval #138832 (Note 1)		PM		Total PM emissions not to exceed 9.06 TPY.	#138832 Dust Collector CPA3/8/00
Vitrified Products VOC EU's (Note 2)		VOC		Total VOC not to exceed 33.5 TPY (consecutive 12 month period)	#138827 VOC RACT Approval
Super Abrasives VOC EUs (Note 3)		VOC		Total VOC not to exceed 5.0 TPY (consecutive 12 month period)	#138827
Refractory VOC EUs (Note 4)		VOC		Total VOC not to exceed 4.0 TPY (consecutive 12 month period)	#138827
Other Facility VOC Sources (Note 5)		VOC		Total VOC not to exceed 5.0 TPY (consecutive 12 month period)	#138827
EU 115-02, 115-53, 207-24, 207-25, 207-26	Ethylene Glycol in Mix	VOC	≤ 8% by weight		#1388271

Table 3					
EU #	Fuel/Raw Materials	Pollutant	Restrictions	Emissions Limit/Standard	Applicable Regulation and/or (Approval No.)
EU 115-24, 115-41, 115-49, 205-03	Cement	VOC	12.8 lb/gal solids applied		#138827
EU 115-30, 115-38, 115-43, 115-46, 115-63, 115-65, 417-03, 417-04	Paint	VOC	3.5 lb/gal excluding water		#138827
EU 207-16, 207-27, 207-28	Adhesive	VOC	5.5 lb/gal		#138827
523-01	Natural Gas	NOx		0.2 lb/MMBTU	#138828 10/97 (NOx RACT) 310 CMR 7.19 CM-84-C-004
		CO		200 ppm @3% O2	
	Coal	NOx	Nitrogen content not to exceed 1.44 % by weight.	0.45 lb/MMBTU	
		CO		200 ppm @3% O2	
		PM		0.1 lb/MMBTU	
		SO2	Sulfur content not to exceed 0.715% by weight.	0.55 lb sulfur/MMBTU	
	#6 Oil	NOx		0.3 lb/MMBTU	
		CO		200 ppm @3% O2	
		SO2	Oil shall be emergency backup fuel only.	Sulfur content not to exceed 1% by weight.	
	523-02a, 523-02b, 523-02c	Natural Gas	NOx		
CO				200 ppm @3% O2	
#6 Oil		NOx	While burning oil steam load shall not exceed: 36,000 lb/hr (02a) 28,000 lb/hr (02b) 33,500 lb/hr (02c).	0.3 lb/MMBTU	
		CO		200 ppm @3% O2	
		SO2	Oil shall be emergency backup fuel only.	Sulfur content not to exceed 1% by weight.	
120-01		PM		0.0001 gr/dscf, 0.0375 TPY	#118968 (1998)
120-02		PM		0.0001 gr/dscf, 0.0225 TPY	
120-03		PM		0.008 gr/dscf, 2.61 TPY	
120-04		PM		0.008 gr/dscf, 1.58 TPY	

Table 3					
EU #	Fuel/Raw Materials	Pollutant	Restrictions	Emissions Limit/Standard	Applicable Regulation and/or (Approval No.)
120-05		PM		0.008 gr/dscf, 2.61 TPY	
120-06		PM		0.008 gr/dscf, 2.61 TPY	
120-07		PM		0.002 gr/dscf, 0.282 TPY	
120-08		PM		0.008 gr/dscf, 1.577 TPY	
120-09		PM		0.0001 gr/dscf, 0.225 TPY	
120-10		PM		0.0001 gr/dscf, 0.0188 TPY	
120-11		PM		0.002 gr/dscf, 1.877 TPY	
120-12		PM		0.002 gr/dscf, 2.253 TPY	
120-13		PM		0.002 gr/dscf, 1.022 TPY	
120-14		PM		0.002 gr/dscf, 1.134 TPY	
120-15		PM		0.002 gr/dscf, 0.638 TPY	
120-16		PM		0.002 gr/dscf, 0.781 TPY	
120-49		PM		0.0001 gr/dscf, 0.0282 TPY	
120-50		PM		0.0001 gr/dscf, 0.0282 TPY	
120-51		PM		0.0001 gr/dscf, 0.0131 TPY	
120-53		PM		0.0001 gr/dscf, 0.338 TPY	
120-57		PM		0.0001 gr/dscf, 0.0188 TPY	
120-58		PM		0.002 gr/dscf, 0.051 TPY	
Plant 8 Mix/Mold/Cure EU's (Note 3)				13.7 TPY Total	#118968 (1998)
Plant 8 Misc. VOC EU's (Note 4)		VOC		4.3 TPY Total	#118968 (1998)
Plant 8 Curing Ovens (Note 5)	Natural Gas	NOx		33.2 TPY Total	#118968 (1998)
		SO2		0.13 TPY Total	
		CO		4.36 TPY Total	
		PM		2.50 TPY Total	
		VOC		0.79 TPY Total	

Table 3					
EU #	Fuel/Raw Materials	Pollutant	Restrictions	Emissions Limit/Standard	Applicable Regulation and/or (Approval No.)
EU115-15, 115-18, 115-19 Standard Bickley		NOx		2.48 TPY per kiln	#68395 (1994) & #W009620 (2000)
		SO ₂		0.04 TPY	
		PM		0.26 TPY	
		CO		15.24 TPY per kiln	
		VOC	Afterburner temperature ≥ 1400° F until kiln reaches 600° C	2.09 TPY per kiln	
115-05, 115-06 Fast Fire Bickley		NOx		2.06 TPY per kiln	
		SO ₂		0.04 TPY	
		PM		0.26 TPY	
		CO		21.42 TPY per kiln	
		VOC	Afterburner temperature ≥ 1400° F until kiln reaches 600° C	2.92 TPY per kiln	
115-25, 115-26, 115-28 Kerabedorf		NOx		2.42 TPY per kiln	
		SO ₂		0.04 TPY	
		PM		0.26 TPY	
		CO		2.23 TPY per kiln	
		VOC	Afterburner temperature ≥ 1400° F until kiln reaches 600° C	0.79 TPY per kiln	
115-14 and 14I		Visible Emissions		≤10%	CM-80-IF-034
		VOC	Afterburner temperature ≥ 1400° F	0.5 lb/hr, 0.95 TPY	
Plant 2 Kilns EU 207-01, 207-04, 207-05			Vent to Incinerator when firing walnut shells and until 600° C		#96096 Feb. 1996
207-01,04,05I Incinerator for three kilns			Incinerator temperature ≥1500° F		#96096 Feb. 1996
		NOx		4.60 TPY	

Table 3					
EU #	Fuel/Raw Materials	Pollutant	Restrictions	Emissions Limit/Standard	Applicable Regulation and/or (Approval No.)
207-15, 207-15I.			Incinerator temperature $\geq 1575^{\circ}$ F Air Flow ≤ 5000 SCFM		#100261 9/97
		VOC		0.26 lb/hr, 1.14 TPY	
		PM		0.06 lb/hr, 0.26 TPY	
505-01 thru 04 Glass Milling & Drying	Methanol	VOC	Incinerators	1.6 TPY	CM-87-IF-056
512-15	Isopropyl Alcohol	VOC		50 lb/day, 0.95 TPY	#W016326, 8/10/01
526-02 Rotary Kiln			Fabric filter		CM-81-IF-024
528-01, 528-03 Two Bickley Kilns		Visible Emissions	Vent to afterburner until kiln reaches 600° C; afterburner temperature $\geq 1300^{\circ}$ F	$\leq 20\%$ opacity	#P24962
528-02 Bickley Kiln uncontrolled		Visible Emissions	No oil and grease based binder materials at levels, which are known to cause visible emissions.	$\leq 20\%$ opacity	#P24962
528-04, 528-05 Tunnel Kilns 9 & 10 to Particulate Control Device		Visible Emissions	No Carbowax without written authorization.	$\leq 10\%$ opacity	#W031583 8/27/03
528 Mixing/Molding		VOC	26 tons per year Chemtran	2 TPY	#W004911 4/9/99
529-02 Silane Treating		Silane		1100 lb/yr	C-P-89-047 5/23/90
		PM		1560 lb/yr	
530-01 Induction Furnaces		Visible Emissions		$\leq 10\%$	#135259 11/98
CVD Furnaces 108-13, 17, 34, 35		HCl		0.55 tpy	#P24960 9/98
114-02		PM		0.99 lb/hr	CM-78-IF-001 9/78
114-03		PM		1.2 lb/hr	CM-78-IF-001/001A 9/78
114-04		PM		0.013 lb/hr	CM-78-IF-001/001A 9/78

Table 3					
EU #	Fuel/Raw Materials	Pollutant	Restrictions	Emissions Limit/Standard	Applicable Regulation and/or (Approval No.)
114-07 thru –13		PM		0.001 lb/hr each	CM-78-IF-001/001B 9/78
115-29		PM		4.45 TPY	CM-82-IF-017 2/83
115-57, 115-58		PM		0.3 TPY	W0228822
523-01 Coal Ash Handling		Noise	Coal unloading only between 6AM and 3PM Monday –Friday.		CM-84-C-004 11/30/84
546-01, 546-02		PM		8.5 TPY total	CM-80-IF-029
Facility Wide	All	Smoke		Note 6	310 CMR 7.06(1)(a)
		Contaminant(s) exclusive of uncombined water or smoke subject to 310 CMR 7.06(1)(a)		Note 7	310 CMR 7.06(1)(b)

Note 1: #138832 Emission Units are the following: [114-01, 05, 14], [115-02, 16, 29, 32, 45, 51, 53, 60], 409-01, 410-01, [413-01, 02, 05], 416-01, [417-01, 02, 05, 12], [419-08, 09, 20], 420-06, 513-05, 519-01, 519-04, [530-11, 18, 19], 531-01, 546-03, 553-01, 563-01

Note 2: Vitrified Products VOC EU's are the following: [115-02, 24, 30, 38, 41, 43, 46, 49, 63, 64, 65, GVg], 205-03, [207-16, 24, 25, 26, 27, 28, GVa]

Note 3: Super Abrasives VOC EU's are the following: [417-03, 04, 22, GVb] plus miscellaneous sources (<1 TPY).

Note 4: Refractory VOC EU's are the following: EU528-19 plus miscellaneous sources (<1 TPY).

Note 5: Other Facility VOC Sources are the following: EU101-GVf plus all other miscellaneous sources (<1 TPY) not included in the other named VOC process categories.

Note 6: Plant 8 Mix/Mold/Cure EUs are the following: EU120-01 thru 120-16; 120-20 thru 120-33c; 120-49 thru 51; 120-54a, b, and c, and 120-GVf and GVg.

Note 7: Plant 8 Miscellaneous VOC EUs are the following: EU 120-37a thru 120-42; 120-45a and b; 120-GVc, k, l, &m.

Note 8: Plant 8 Curing Ovens are the following: EU 120-20 thru 120-33c; 120-54a, b, and c.

Note 9: 310 CMR 7.06(1)(a) states: "No person shall cause, suffer, allow, or permit the emission of smoke which has a shade, density, or appearance equal to or greater than 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 or greater than No. 2 of the Chart.”

Note 10: 310 CMR 7.06(1)(b) states: “No person shall cause, suffer, allow or permit the operation of a facility so as to emit contaminant(s), exclusive of uncombined water or smoke subject to 310 CMR 7.06(1)(a) of such opacity which, in the opinion of the Department, could be reasonably controlled through the application of modern technology of control and a good Standard Operating Procedure, and in no case, shall 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%.”

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
Dust Collector EU’s (Note 1)	<p>Generic facility-wide dust collector monitoring plan</p> <p>Once per calendar quarter, the Permittee shall:</p> <ul style="list-style-type: none"> -Check exhaust for any immediately apparent problem; -Verify the unit is operating within the proper pressure drop range; -Verify that the collector draw off mechanism for each baghouse is not clogged; -Verify proper operation of the shakeout/pulse jet bag cleaning mechanism. -Visually inspect condition of the bags for tears. (Plant 8 dust collectors only)
Power Plant Boilers 523-01; 523-02a, b, c	<p>1) Pursuant to 310 CMR 7.00: Appendix C(9)(b)2., the Permittee shall monitor the sulfur content of each new shipment of fuel received. Compliance with 310 CMR 7.05(1)(a) for sulfur content of the fuel can be demonstrated through fuel analysis. The analysis of sulfur content of the fuel 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 United States Environmental Protection Agency (EPA). Fuel sulfur information may be provided by fuel suppliers on the shipping receipt.</p> <p>2) 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 in accordance with 310 CMR 7.00 Appendix C(9)(b).</p> <p>3) The Permittee shall inspect and maintain the emission units in accordance with the manufacturers recommendations and test them for efficient operation at least once each calendar year in accordance with 310 CMR 7.04(4)(a).</p> <p>4) In accordance with 310 CMR 7.04(2), the Permittee shall continuously operate the smoke density sensing instrument and recorder and maintain them in an accurate operating condition and ensure that there is a functioning audible alarm to signal the need for combustion equipment adjustment or repair when the smoke density is equal to or greater than No. 1 of the Chart. The Permittee shall make the smoke density equipment available for inspection at reasonable times by a representative of the Department. Such inspection may include the review of recording charts. The smoke density sensing equipment shall be maintained using good engineering practices according to the manufacturers recommendations or other procedures acceptable to the Department and the U.S. EPA.</p>
523-01	In accordance with 310 CMR 7.19(13), compliance with the NOx and CO emission standards shall be demonstrated by performing an annual stack test as specified in 310 7.19(13)(c).

Table 4	
EU#	MONITORING/TESTING REQUIREMENTS
Plant 7, Plant 2, and Refractory 6 Kiln EU's (Note 2)	In accordance with Approvals #W009620, #CM-80-IF-034, #96096, #100261, and #P24962, the Permittee shall continuously monitor the afterburner temperatures.
108-13, 17, 34, 35	The Permittee shall continuously monitor the pH of the scrubber liquid with an alarm if the pH falls below the set point range, in accordance with Approval #P24960.
Facility Wide	The Permittee shall 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.
	The Permittee shall conduct Emissions Compliance Testing (stack testing) in accordance with 310 CMR 7.13 and 40 CFR Part 60, Appendix A when the Department has determined that such stack testing is necessary to ascertain compliance with the Department's regulations or design approval provisos. Such stack testing shall be: (a) conducted by a person knowledgeable in stack testing, and (b) conducted in accordance with procedures contained in a test protocol which has been approved by the Department, and (c) conducted in the presence of a representative of the Department when such is deemed necessary.

Note 1: Dust Collector EU's are the following: [114-01 thru -14], [115-02, 16, 29, 32, 45, 51, 53, 57, 58, 60], [120-01 thru 16, 49, 50, 51, 53, 57, 58], [207-24, 25, 26], 409-01, 410-01, [413-01, 02, 05], 416-01, [417-01, 02, 05, 12], [419-08, 09, 20], 420-06, 421-04, 512-10, 513-05, [519-01, 04, 05], 523-01, 526-02, 526-09, 527-09, 527-10, 528-04, 528-05, 529-02, [530-01, 11, 18, 19], 531-01, [546-01, 02, 03], 553-01, 563-01

Note 2: Plant 7 Kilns under #W009620 are: EU 115-05, 06, 15, 18, 19, 25, 26, and 28. Plant 7 kiln under #CM-80-IF-034 are EU 115-14 and 14I. Plant 2 Kilns under #96096 are: EU 207-01, 04, 05. Plant 2 Kilns under #100261 are: EU 207-15, 15I. Refractory 6 Kilns under #P24962 are: EU 528-01, 528-03.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
All	The Permittee shall 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):
Dust Collector EU's (Note 1)	Generic facility-wide dust collector recordkeeping records of annual training and quarterly inspections/maintenance for a minimum of five years. records of all malfunctions and the corrective actions taken for a minimum of five years.
Power Plant Boilers 523-01, 523-02a, b, c	1) Fuel Burning Equipment: a) Fuel purchase receipts in order to demonstrate compliance with sulfur requirements as provided in 310 CMR 7.05(1); b) All fuel-oil and coal analyses completed on behalf of the Permittee; c) Records of emissions testing and Method 9 opacity determinations conducted to demonstrate compliance with the applicable requirements in Table 3 in accordance with 310 CMR 7.13(1)(d); d) The recording charts from the smoke density sensing equipment. e) Records of all repairs and maintenance conducted on the smoke sensing instruments and recorders.

Table 5

EU#	RECORD KEEPING REQUIREMENTS
	<p>f) type of fuel burned, heat content of fuel, and total heating value of fuel consumed each day;</p> <p>g) Name of supplier and nitrogen content of each fuel oil shipment;</p> <p>h) Maintenance records for the baghouse inspection (Boiler #6).</p>
EU 115-02, 115-53, 207-24, 207-25, 207-26	Records of ethylene glycol used and emitted tracked on a monthly basis.
EU 115-24, 115-41, 115-49, 205-03	Records of cement used and VOC emitted tracked on a monthly basis; current cement MSDS on file.
EU 115-30, 115-38, 115-43, 115-46, 115-63, 115-65, 417-03, 417-04	Records of paint and coatings used and VOC emitted tracked on a monthly basis. Current paint/coatings MSDS on file.
EU 207-16, 207-27, 207-28	Records of adhesive and glue used and VOC emitted tracked on a monthly basis. Current adhesive/glue MSDS on file.
Plant 8 Mix/Mold/Cure EU's (Note 2) Plant 8 Misc. VOC EU's (Note 3)	<p>a. The Permittee shall track the monthly raw material consumption for Plant 8, including free monomers, wetting agents, paints, and cleaning materials.</p> <p>b. The Permittee shall develop and maintain material balance flow charts, which identify the percentages of each VOC, which are retained in the product, consumed by the production process, and controlled by emissions devices.</p> <p>c. The Permittee shall maintain records of paint VOC contents in the form of MSD sheets or manufacturer's specification data.</p> <p>d. For those VOCs emitted from Plant 8 in quantities less than 1 ton per year, the Permittee may track actual emissions using the current DEP approved surrogate or index based on the pounds of wheels produced.</p> <p>e. The current MSDS for VOC-containing materials (paint, cement, etc) shall be kept on file.</p>
Plant 7 Kilns EU 115-15, 18, 19, 05, 06, 25, 26, 28	The temperature of the incinerator chamber during each run; documentation of the date and time and corrective action taken for any malfunction of the incinerator or related equipment including the temperature monitor; a record of routine maintenance activities; a running six month inventory of all compounds used.
Plant 7 Kiln EU 115-14, 115-14I	The exhaust thermocouple temperature; records of maintenance, modifications and repairs to TK14 and the thermal afterburner.
Plant 2 Kilns EU 207-01, 04, 05, 05I	A record of all malfunctions including the date, time and description of the malfunction, and the date and time corrective action was taken and completed.
Plant 2 Kiln EU 207-15, 15I	A record of maintenance, modifications and repairs to TK-11 and the RTO, documenting at a minimum the nature of the work performed, the time, date, and duration of equipment downtime.
Ref 6 Kilns EU 528-01, 03	Annual training records; thermocouple calibration records; maintenance and malfunction records. Fuel usage logs (#134 only).
528-02	Annual training records; temperature control system maintenance records; maintenance and malfunction records.
528-04, 05	Maintenance records of particulate control device, kiln and detector
528-28	Records of Chemtran usage; MSDS
529-02	Purchasing records for silane; records of annual training and quarterly inspections/maintenance; records of all malfunctions and the corrective action taken.

Table 5	
EU#	RECORD KEEPING REQUIREMENTS
CVD Furnaces EU 108-13, 17, 34, 35	Log of pH of scrubber liquid.
Facility Wide	Maintain records for the annual preparation of a Source Registration/Emission Statement Form as required by 310 CMR 7.12. In accordance with 310 CMR 7.00: Appendix C(10)(b), maintain records of all monitoring data and supporting information required by this operating permit on site for five (5) years from the date of the monitoring sample, measurement, report or initial operating permit application.

Note 1: Dust Collector EU's are the following: [114-01 thru -14], [115-02, 16, 29, 32, 45, 51, 53, 57, 58, 60], [120-01 thru 16, 49, 50, 51, 53, 57, 58], [207-24, 25, 26], 409-01, 410-01, [413-01, 02, 05], 416-01, [417-01, 02, 05, 12], [419-08, 09, 20], 420-06, 421-04, 512-10, 513-05, [519-01, 04, 05], 523-01, 526-02, 526-09, 527-09, 527-10, 528-04, 528-05, 529-02, [530-01, 11, 18, 19], 531-01, [546-01, 02, 03], 553-01, 563-01

Note 2: Plant 8 Mix/Mold/Cure EUs are the following: EU120-01 thru 120-16; 120-20 thru 120-33c; 120-49 thru 51; 120-54a, b, and c, and 120 GVf and GVg.

Note 3: Plant 8 Miscellaneous VOC EUs are the following: EU 120-37a thru 120-42; 120-45a and b; 120-GVc, k, l, &m.

Table 6	
EU#	REPORTING REQUIREMENTS
523-01	The annual emission test report shall be submitted in accordance with 310 CMR 7.19(13)(d).
VOC RACT EUs (Note 1)	Ethylene glycol, paint, coating, cement, glue, TCE, and adhesive usage and monthly VOC emissions shall be reported twice per year.
Plant 8 Mix/Mold/Cure EU's (Note 2) Plant 8 Misc. VOC EU's (Note 3)	VOC material usage and VOC emissions shall be reported twice per year.
Facility Wide	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. The Permittee shall submit a Source Registration/Emission Statement form to the Department on an annual basis as required by 310 CMR 7.12(2). The Permittee shall submit to the Department by January 30 and July 30 for the previous six months respectively, a summary of all monitoring data and related supporting information in a format specified by the Department as required by 310 CMR 7.00: Appendix C(10)(c). All required reports must be certified by a responsible official of the Permittee as provided in 310 CMR 7.00: Appendix C(10)(h).

Note 1: VOC RACT EUs are the following: [115-02, 24, 30, 38, 41, 43, 46, 53, 63, 64, 65, GVg], 205-03, [207-02, 16, 24, 25, 26, 27, 28], [417-03, 04, GVb].

Note 2: Plant 8 Mix/Mold/Cure EUs are the following: EU120-01 thru 120-16; 120-20 thru 120-33c; 120-49 thru 51; 120-54a, b, and c and 120-GVf and GVg.

Note 3: Plant 8 Miscellaneous VOC EUs are the following: EU 120-37a thru 120-42; 120-45a and b; 120-GVc, k, l, &m.

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
Prevention of Accidental Release 42 USC 7401, s. 112(r)	Storage, usage and processing of listed chemicals under the applicable thresholds.

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:

Table 8	
SPECIAL TERMS AND CONDITIONS	
Whole Facility VOC Sources	<p>Pursuant to the VOC RACT Plan, Approval #138827, the Permittee shall implement good housekeeping measures and work practice procedures to minimize all volatile organic compound, hydrocarbon and halogenated organic compound emissions by:</p> <ol style="list-style-type: none"> 1. Storing all organic compound formulations in covered containers; 2. HVLP spray gun application shall be used at all paint spray stations and shall be maintained and operated in accordance with the recommendations of the manufacturer. Waterbase spray gun cleaning shall be performed in a manner, which minimizes VOC emissions to the atmosphere. 3. Handling products containing VOCs in such a manner so as to prevent spillage and loss. Any spilled materials shall be promptly cleaned up and stored in covered containers; 4. Keeping waste solvent and saturated rags in covered containers and minimizing solvent use. Clean up solutions shall be recirculated, stored and disposed of in a manner, which shall minimize evaporation to the atmosphere.
Refractory Products	Pursuant to 40 CFR Part 63, Subpart SSSSS, the affected sources must comply with this subpart according to the schedule in 40 CFR 63.9786.

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.

Pursuant to 310 CMR 7.00: Appendix C(7)(b), emission trades, provided for in this permit, may be implemented provided the Permittee notifies The United States Environmental Protection Agency (EPA) and the Department at least fifteen (15) days in advance of the proposed changes and the Permittee provides the information required in 310 CMR 7.00: Appendix C(7)(b)3.

Any intra-facility change that does not qualify pursuant to 310 CMR 7.00: Appendix C(7)(b)2 is required to be submitted to the Department pursuant to 310 CMR 7.00: Appendix B.

(b) Inter-facility emission trading

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

All increases in emissions due to emission trading, must be authorized under the applicable requirements of 310 CMR 7.00: Appendix B (the "Emissions Trading Program") and the 42 U.S.C. §7401 et seq. (the "Act"), and provided for in this permit.

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. FEEES

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 Department 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 Department will submit an "Operating Permit Reporting Kit" to the Permittee which contains instructions and the Annual Compliance Report and Certification and the Semi-Annual Monitoring Summary Report and Certification.

(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 Department 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 Department 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 Department. 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 Department 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 Department 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 Department 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, 7.02(8)(i), 7.04(9), 7.05(8), 7.09 (odor), 7.10 (noise), 7.18(1)(b), 7.21, 7.22 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 Department, 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 Department's receipt of a complete and timely application for renewal, this facility may continue to operate subject to final action by the Department on the renewal application.

In the event the Department 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 Department 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 Department and/or EPA. The responsible official of the facility may request that the Department terminate the facility's operating permit for cause. The Department 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 Department'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 Department 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 Department a material error or omission in any records, reports, plans, or other documents previously provided to the Department.

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 Department.

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 Department, 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 Department 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 Department 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 Division of Hazardous Waste/Emergency Response and the Emergency Response Planning Council, 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 Department'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 Massachusetts Department of Environmental Protection Bureau of Waste Prevention Air Operating Permit Reporting Kit, which is included with the Operating Permit. 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 Department written notice fifteen days prior to said change; notification is not required for exempt activities listed at 310 CMR 7.00: Appendix C(5)(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 Department. 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 Department'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 Department 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

AQCR - Air Quality Control Region

CEM - Continuous Emission Monitor

CO - Carbon Monoxide

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

HHV - Higher Heating Value

ISO - Represent 59°F, 60% Relative Humidity, 29.92 Inches Mercury At Sea Level

MADEP - 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

SSEIS - Stationary Source Emission Inventory System

TCE - Trichloroethylene

TPY - Tons Per Year calculated on the basis of a twelve month rolling total

VOC - Volatile Organic Compound