Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
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Commissioner

AIR QUALITY OPERATING PERMIT

Administrative Amendment

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"]:
AR Metallizing Ltd..
24 National Drive (Forge Park)
Franklin, Massachusetts 02038

INFORMATION RELIED UPON:

Transmittal No. X224028
Transmittal No X252942

FACILITY LOCATION:

Vacumet Corp.
24 National Drive
Franklin, Mass. 02038

FACILITY IDENTIFYING NUMBERS:

AQ ID: 120-0137
FMF FAC NO. 407354
FMF RO NO. 408224

NATURE OF BUSINESS:
Converted Paper and Paperboard Products

STANDARD INDUSTRIAL CODE (SIC):
2679
NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS):
322222

RESPONSIBLE OFFICIAL:

Name: Mr. William Brengel
Title: Director, Operations & Supply Chain

FACILITY CONTACT PERSON:

Name: Mr. Mark Whittaker
Title: Plant Manager
Phone: (508) 541-7700 X7764

This operating permit shall expire on <u>February 1, 2015.</u>

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.

Section Chief, Bureau of Waste Prevention

October 9, 2012
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

Vacumet Corp. manufactures and distributes a variety of metalized and embossed paper products.

Two onsite boilers meet the thermal demands of the facility. Process operations involve the application of a coating onto the substrate, followed by the application of a thin layer of aluminum over the coating. Most products, although not all, also receive another coating over the aluminum layer. Some products go through an embossing operation that applies impressions to the substrate. Certain products pass through a water station and/or a steam re-moisturizer and are then transferred to the converting, packaging, and storage area for off-site shipment. Vacumet's products are sold primarily to the printing industry.

The exhaust gas from the boilers contains regulated air pollutants. VOC used as solvents in the coatings are emitted from the coating and embossing processes. The coaters and embossers are subject to CAM requirements for VOC. The facility is not a major source of 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. Section 5 "Special Terms and Conditions" lists requirements not mentioned in 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)
EU1-1	**Boiler No. 1** Superior, Model No. 6-5-1750 (to Stack No. 1-1)	14,700,000 Btu/hr	None
EU1-2	**Boiler No. 2** Superior, Model No. 6-5-1750 (to Stack No. 1-2)	14,700,000 Btu/hr	None
EU2-1	Coating Line No. 1 (Operating Scenario No. 1) Manufacturer: Black Clawson (custom design) (Includes Drying Ovens No. 1-1 and 1-2. Manufacturer: Maxon, Model No. 400 Ovenpak, with 3 burners and 4 burners, respectively. Each burner's heat input 1,500,000 Btu/hr) (to Stacks No. 2-1a, 2-1b, or 2-2)	14,100 ft^2/min product processed	Carbon Adsorption System Manufacturer: Barnebey Sutcliffe 98.7% removal efficiency **or** Uncontrolled(1)
	Coating Line No. 1 (Operating Scenario No. 2) Manufacturer: Black Clawson (custom design) (Includes Drying Ovens No. 1-1 and 1-2. Manufacturer: Maxon, Model No. 400 Ovenpak, with 3 burners and 4 burners, respectively. Each burner's heat input 1,500,000 Btu/hr) (to Stacks No. 2-1a, 2-1b, or 2-2)	14,100 ft^2/min product processed	Thermal Oxidizer Manufacturer: TEC Systems 99.0% removal efficiency **or** Uncontrolled(1)
EU2-2	**Coating Line No. 2 (Operating**	17,633 ft^2/min product	Thermal Oxidizer

Table 1			
Emission Unit (EU#)	**Description of Emission Unit**	**EU Design Capacity**	**Pollution Control Device (PCD)**
	Scenario No. 1) Manufacturer: Black Clawson (custom design) (Includes Drying Oven No. 2-1. Manufacturer: Maxon, Model No. 400 Ovenpak, with 3 burners. Two burners rated at 800,000 Btu/hr each, and one at 1,500,000 Btu/hr) (to Stacks No. 2-2 or 2-1a, 2-1b)	processed	Manufacturer: TEC Systems 99.0% removal efficiency **or** Uncontrolled(1)
	Coating Line No. 2 (Operating Scenario No. 2) Manufacturer: Black Clawson (custom design) (Includes Drying Oven No. 2-1. Manufacturer: Maxon, Model No. 400 Ovenpak, with 3 burners. Two burners rated at 800,000 Btu/hr each, and one at 1,500,000 Btu/hr) (to Stacks No. 2-2 or 2-1a, 2-1b)	17,633 ft^2/min product processed	Carbon Adsorption System Manufacturer: Barnebey Sutcliffe 98.7% removal efficiency **or** Uncontrolled(1)
EU2-3	**Embosser No. 1** Manufacturer: Lembo (custom design) (to Stacks No. 2-2 or 2-1a, 2-1b)	2,400 ft^2/min product processed	Carbon Adsorption System Manufacturer: Barnebey Sutcliffe 98.7% removal efficiency **or** Thermal Oxidizer Manufacturer: TEC Systems 99.0% removal efficiency
EU2-4	**Embosser No. 2** Manufacturer: B.F. Perkins (custom design) (Includes Drying Oven. Manufacturer: Glenro, Series 170, Model No. WG14101N, with 2 burners, each rated at 418,254 Btu/hr) (to Stacks No. 2-2 or 2-1a, 2-1b)	6,613 ft^2/min product processed	Carbon Adsorption System Manufacturer: Barnebey Sutcliffe 98.7% removal efficiency **or** Thermal Oxidizer Manufacturer: TEC Systems 99.0% removal efficiency **or** Uncontrolled
EU2-5	**Coating Mix Room**	N/A	Carbon Canisters

Table 1			
Emission Unit (EU#)	**Description of Emission Unit**	**EU Design Capacity**	**Pollution Control Device (PCD)**
	(to general ventilation)		Various manufacturers 99.0% removal efficiency **or** Carbon Adsorption System Manufacturer: Barnebey Sutcliffe 98.7% removal efficiency **or** Thermal Oxidizer Manufacturer: TEC Systems 99.0% removal efficiency
EU2-14	**Storage Tank L** (to general ventilation)	12,100 gallons	
EU2-15	**Storage Tank M** (to general ventilation)	11,542 gallons	
EU2-16	**Storage Tank N** (to general ventilation)	11,539 gallons	

Table 1 Footnote:

Footnote 1: The Permittee is not required to direct emissions from either coater to the carbon adsorption system or the thermal oxidizer when utilizing low solvent coatings (see Section 5 Special Terms and Conditions, Proviso N).

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/Raw Material	Pollutant	Emissions Limit/Standard	Restrictions	Applicable Regulation and/or (Approval No.)
EU1-1 EU1-2	Natural Gas	NO_x	8.5848 tons/12-month rolling period (each) 1.96 lb/hr (each)	N/A	Approval #X223977
		SO_2	0.0368 tons/12-month rolling period (each) 0.0084 lb/hr (each)		
		CO	2.1462 tons/12-month rolling period (each) 0.49 lb/hr (each)		
		VOC	0.1707 tons/12-month rolling period (each) 0.039 lb/hr (each)		
		PM	0.8585 tons/12-month rolling period (each) 0.196 lb/hr (each)		
			0.10 lb/MMBtu (heat input, HHV)		310 CMR 7.02(8)

Table 3

EU #	Fuel/Raw Material	Pollutant	Emissions Limit/Standard	Restrictions	Applicable Regulation and/or (Approval No.)
EU2-1	Coatings	VOC	62.92 tons/12-month rolling period 23.0 lb/hr	Enclosure: 100% capture efficiency	Approval #X223977
	Natural Gas	NO_x	4.38 tons/12-month rolling period	N/A	
		SO_2	0.0263 tons/12-month rolling period		
		CO	0.9198 tons/12-month rolling period		
		VOC	0.254 tons/12-month rolling period		
		PM	0.5256 tons/12-month rolling period		
EU2-2	Coatings	VOC	9.6 tons/12-month rolling period 4.40 lb/hr	Enclosure: 100% capture efficiency	Approval #X223977
	Natural Gas	NO_x	1.2931 tons/12-month rolling period	N/A	
		SO_2	0.0078 tons/12-month rolling period		
		CO	0.2716 tons/12-month rolling period		
		VOC	0.075 tons/12-month rolling period		
		PM	0.1552 tons/12-month rolling period		
EU2-1 EU2-2	Cleaning Solvent	VOC	N/A	≤ 7,510 lb VOC/month (within enclosure – total of both Emission Units)	Approval #X223977
EU2-3	Coatings			Enclosure: 95% capture efficiency Loading to Inlet of Carbon Adsorption System or Thermal Oxidizer: 12.92 lb VOC/hr(1)	
EU2-4				Enclosure: 100% capture efficiency Loading to Inlet of Carbon Adsorption System or Thermal Oxidizer:5.3 lb VOC/hr(1)	
EU2-4	Natural Gas	NO_x	0.3504 tons/12-month rolling period	N/A	Approval #X223977

Table 3					
EU #	**Fuel/Raw Material**	**Pollutant**	**Emissions Limit/Standard**	**Restrictions**	**Applicable Regulation and/or (Approval No.)**
		SO_2	0.0021 tons/12-month rolling period		
		CO	0.0736 tons/12-month rolling period		
		VOC	0.0203 tons/12-month rolling period		
		PM	0.042 tons/12-month rolling period		
EU2-5	Coatings	VOC	10.1 tons/12-month rolling period		
EU2-14 EU2-15 EU2-16	Coatings/ Solvents	VOC	N/A		40 CFR 60, Subpart Kb
Facility-Wide	All	VOC	103.67 tons/12-month rolling period		Approval #X223977
		HAP	2.0 tons/12-month rolling period 2.0 tons/month		
		Smoke	Not to equal or exceed No. 1 of the Chart(3) for a period or aggregate period in excess of 6 minutes during any one hour, at no time during the 6 minutes ≥ No. 2 of the Chart		310 CMR 7.06(1)(a)
		Opacity	< 20%, except 20% to ≤ 40% for ≤ 2 minutes during any 1 hour		310 CMR 7.06(1)(b)

Table 3 Notes:

1. These inlet loadings may be less if measured by a continuous emission monitoring system (CEMS) in accordance with a MassDEP-approved monitoring plan.

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
EU1-1 EU1-2	In accordance with 310 CMR 7.04(4)(a), inspect and maintain each fuel utilization facility in accordance with the appropriate manufacturer's recommendations, and test for efficient operation at least once in each calendar year. The results of said inspection, maintenance and testing, and the date upon which it was performed shall be recorded and posted conspicuously on or near the permitted facility.
EU2-1 EU2-2 EU2-3 EU2-4 EU2-5	In accordance with Approval #X223977, continuously monitor and record the temperature immediately downstream of the thermal oxidizer combustion chamber at all times when the thermal oxidizer is in operation.
	In accordance with Approval #X223977, perform emission testing on the thermal oxidizer within 180 days of the Approval and once every five (5) years thereafter.
	In accordance with Approval #X223977, continuously monitor and record the VOC concentration in the carbon adsorption stacks (except during a period of approximately 10 minutes after the steam-regenerated bed is brought back on line, and when the carbon system is not in service). Monitoring with a flame ionization detector alternates from stack to stack to monitor the on-line carbon bed.
	In accordance with Approval #X223977, except when coating with approved low VOC coatings, bypass stacks where VOC-laden air could be discharged to ambient air shall be equipped with alarms and interlocks that shall cause coating operations to stop in the event of an uncontrolled release of VOC.
	In accordance with Approval No. Approval #X223977, conduct leak checks of all equipment in VOC service in accordance with the MassDEP-approved Facility Leak Check Protocol.
Facility-Wide	In accordance with 310 CMR 7.13(1), any person owning, leasing, operating, or controlling a facility for which the MassDEP has determined that stack testing is necessary to ascertain compliance with the MassDEP's regulations shall cause such stack testing: (a) to be conducted by a person knowledgeable in stack testing, (b) to be conducted in accordance with procedures contained in a test protocol which has been approved by the MassDEP, (c) to be in the presence of a representative of the MassDEP when such is deemed necessary, and (d) to be summarized and submitted to the MassDEP with analyses and report within such time as agreed to in the approved test protocol.
Facility-Wide	In accordance with Approval #X223977, the ability of the facility to maintain emission rates

Table 4	
EU#	**MONITORING/TESTING REQUIREMENTS**
	at or below levels stated in this Operating Permit shall be demonstrated to the MassDEP in the future if deemed necessary.
	In accordance with Approval #X223977, any future compliance tests that may be required at this facility shall be conducted in accordance with procedures set forth by the appropriate U.S. EPA Reference Test Methods and Massachusetts Air Pollution Control Regulations, 310 CMR 7.00, Section 7.13. A written pre-test protocol must be submitted to this office for written MassDEP approval at least thirty (30) days prior to the actual test. A test results report shall be submitted to this office within thirty (30) days after the completion of any required compliance testing.
	In accordance with Approval #X223977, the Permittee shall: Thermal Oxidizer - continuously monitor and record the temperature immediately downstream of the thermal oxidizer combustion chamber during operation of the thermal oxidizer. Carbon System - continuously monitor and record the concentration of VOC (except during a period of approximately 10 minutes after steam regenerated bed is brought back on line and when the carbon system is not in service due to process equipment not in service) in the carbon adsorption stacks. Monitoring, with a flame ionization detector, alternates from stack to stack in order to monitor the on-line carbon bed. Bypass stacks where VOC-laden air could be discharged to ambient air, bypassing the control equipment **(**2 for Coating Line No. 1 and 1 for Coating Line No. 2**)**, shall be equipped with alarms and interlocks that shall cause coating operations to stop in the event of an uncontrolled release of VOC that is not approved. (Note, low VOC coatings as defined in Section 5, Special Condition O may vent uncontrolled.)
	In accordance with Approval #X223977, on a monthly basis, monitor VOC emissions from the wastewater discharge from the carbon solvent recovery system. Emissions shall be determined through monthly wastewater analysis and wastewater discharge volume recordings. All VOC (ethyl acetate and ethyl acetate derivatives) contained in wastewater shall be considered air emissions unless otherwise documented by testing that is approved by the MassDEP.
	Monitor operations such that information may be compiled for the annual Source Registration required by 310 CMR 7.12.

Table 5	
EU#	**RECORD KEEPING REQUIREMENTS**
	The Permittee shall, contemporaneously with making a change authorized by this Operating Permit from one alternative operating scenario to another, enter in a log at the facility a record of the scenario under which it is operating. The Permittee shall record changes from one scenario to another contemporaneously with the change, as provided in 310 CMR 7.00:Appendix C(10)(g).
EU1-1 EU1-2	The results of the annual inspection of the fuel utilization facility conducted in accordance with 310 CMR 7.04(4)(a) shall certify that the facility has been inspected and maintained in accordance with manufacturer's recommendations and tested for efficient operation at least once in each calendar year, and shall be posted conspicuously on or near the facility indicating the date on which the inspection was performed. In accordance with 40 CFR 60.48c(g), Subpart Dc, the owner or operator of each affected facility shall record and maintain records of the amounts of fuel combusted each day.
EU2-1 EU2-2 EU2-3 EU2-4 EU2-5	In accordance with Approval #X223977, process operations and recordkeeping requirements contained in this Operating Permit and the attached Tables shall be used to determine that the facility coating and embossing operations will not exceed the maximum allowable VOC and HAP control equipment inlet loadings.
	In accordance with Approval #X223977, a complete daily record of the coating usage at the coaters, the amount of VOC and HAP controlled, and the amount of VOC emissions from coating operations shall be maintained electronically or by hard copy. These records shall demonstrate that approved emission rates, as contained in this Operating Permit, are not exceeded. These records shall be made available to or submitted to, the MassDEP upon request.
	In accordance with Approval #X223977, for embossing VOC and HAP emissions, the Permittee shall track monthly VOC emissions based on embosser throughput using the following emission factors: Embosser No. 1: $[(ft^2)(9.4 \times 10^{-5}\ lb/ft^2)(1\text{-}0.95)] + [(ft^2)(9.4 \times 10^{-5}\ lb/ft^2)(0.95)(CE)]$ Embosser No. 2: $[(ft^2)(1.33 \times 10^{-5}\ lb/ft^2)(CE)]$ Control Efficiency (CE): Carbon System = (1-0.987) Thermal Oxidizer = (1-0.99) No Control = (1-0) (**Note:** No HAPs are emitted at the embossers. All HAPS are emitted and accounted for at the coaters.) The above emission factors shall be used unless embosser exhausts are specifically monitored in accordance with MassDEP-approved VOC monitoring procedures.
	In accordance with Approval #X223977, other plant records, such as purchase, hazardous waste, receiving, solvent tracking, and production records shall also be kept in a complete and accurate fashion (electronic or hard copy).
EU2-1	In accordance with Approval #X223977, maintenance records on plant operations shall

Table 5	
EU#	**RECORD KEEPING REQUIREMENTS**
EU2-2 EU2-3 EU2-4 EU2-5	include leak detection and leak repairs.
	In accordance with Approval #X223977, calibration results of monitoring and recording units shall be maintained.
EU2-14 EU2-15 EU2-16	In accordance with 40 CFR 60, Subpart Kb, keep readily accessible records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessels.
Facility-Wide	In accordance with Approval #X223977, on a monthly basis, maintain records of VOC emissions from the wastewater discharge from the carbon solvent recovery system. Emissions shall be determined through monthly wastewater analysis and wastewater discharge volume recordings. All VOC (ethyl acetate and ethyl acetate derivatives) contained in wastewater shall be considered air emissions unless otherwise documented by testing that is approved by the MassDEP.
	Maintain records to facilitate compilation of data for the annual Source Registration required by 310 CMR 7.12. These records must be maintained for a period of five (5) years from the date of the source registration submittal.

Table 6	
EU#	**REPORTING REQUIREMENTS**
Facility-Wide	In accordance with Approval #X223977, the Permittee shall compile data for each calendar month to verify compliance with the 12-month rolling period VOC (and HAP, as appropriate) emission limits.
	In accordance with 310 CMR 7.12, submit annually information pertinent to the nature and amounts of emissions on forms provided by the MassDEP, and in addition, ensure that the facility is available for inspection by MassDEP and/or EPA personnel at any reasonable time.
	In accordance with 310 CMR 7.00, Appendix C(10)(a), transmit any record relevant to the Operating Permit within 30 days of the request by the MassDEP or within a longer time period if approved in writing by the MassDEP. The record shall be transmitted on paper, on computer disk, or electronically at the discretion of the MassDEP.
	In accordance with 310 CMR 7.00, Appendix C(10)(c), report a summary of all monitoring data and related supporting information to the MassDEP every six months (January 30 and July 30) of each calendar year.
	In accordance with 310 CMR 7.13, the Permittee, if determined by the MassDEP that stack testing is necessary to ascertain compliance with the MassDEP's regulations shall cause such stack testing to be summarized and submitted to the MassDEP as prescribed in the agreed-to test protocol.
	All required reports must be certified by a responsible official of the Permittee as provided in 310 CMR 7.00: Appendix C(10)(h).

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**
310 CMR 7.16	Reduction of Single Occupant Commuter Vehicle Use
42 USC 7401, §112(r)(7)	Accidental Release Prevention Requirements: Risk Management under the Clean Air Act §112(r)
42 USC 7401, §601	Stratospheric Ozone

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, in accordance with Approval #X223977:

A. **(State-Only Requirement)** Emission Unit No. 1-1 shall continue to emit through a single stack having the following parameters:

Stack No.	1-1
Stack Height	45 feet
Stack Exit Diameter	24 inches
Stack Material	Stainless Steel

B. **(State-Only Requirement)** Emission Unit No. 1-2 shall continue to emit through a single stack having the following parameters:

Stack No.	1-2
Stack Height	45 feet
Stack Exit Diameter	24 inches
Stack Material	Stainless Steel

C. The Permittee shall operate and maintain the facility in compliance with the MassDEP-approved Standard Operating Procedures and Standard Maintenance Procedures (refer to Table H, attached).

D. The Permittee shall limit VOC emissions from the wastewater discharge from the carbon solvent recovery system to 5.74 tons per 12-month rolling period. Emissions shall be determined through monthly wastewater analysis and wastewater discharge volume recordings. All VOC (ethyl acetate and ethyl acetate derivatives) contained in wastewater discharges shall be considered air emissions unless otherwise documented by testing that is approved by the MassDEP.

E. The Permittee shall limit VOC emissions from the "Wet End" building exhaust to 2.26 tons per 12-month rolling period. The "Wet End" building exhaust VOC concentration shall be less than 25 ppm based on a 1-hour average. The "Wet End" building exhaust flow rate shall be 1,500 SCFM. Emissions shall be monitored in accordance with the MassDEP-approved Leak Check Protocol.

F. A maximum of 113 pounds of VOC per month shall be emitted from solvent use from facility components where emissions are not captured or controlled. Uncontrolled emissions of VOC shall be limited as specified in Proviso M of this Section (Section 5) of Operating Permit.

G. Receiving, storage, and mixing area VOC emissions shall be minimized in accordance with the following requirements:

(1) Working losses from truck deliveries of VOC-containing materials shall be controlled by use of vapor return connections from storage tanks to delivery trucks, or through the use of the carbon adsorption system, the thermal oxidizer, or carbon canisters.

(2) Breathing losses from storage and mixing vessels containing recoverable VOC shall be controlled by either the carbon adsorption control system, the thermal oxidizer or carbon canisters.

(3) Breathing losses from vessels containing non-recoverable VOC coatings shall be controlled at all times with a minimum control efficiency of 99 percent by carbon canisters or through the use of the thermal oxidizer.

(4) Research coatings or other small volume specialty production coatings shall only be mixed in the mixing area or within the coating line coater enclosures in drums or totes fitted with special covers to minimize emissions during mixing operations.

(5) The mixing area general ventilation shall be exhausted to the ambient air in accordance with the stack and flow parameters indicated in the attached Table C.

(6) VOC emissions from the mixing area exhaust stack shall not exceed the emission limits contained in Proviso M of this Section (Section 5) of the Operating Permit.

H. Carbon Adsorption Solvent Recovery System: The Permittee shall restrict the maximum VOC inlet to the carbon system to the following mass per unit time values:

(a) 1,768 lb/hr
(b) 9,680,000 lb/12-month rolling period

The Permittee shall maintain a minimum control efficiency of 98.7% across the carbon bed. VOC emissions from the carbon system shall not exceed the emission limits contained in Proviso M of this Section (Section 5) of the Operating Permit. The following equipment may be ducted to the carbon adsorption solvent recovery system for VOC control:

(1) Coating Line No. 1.
(2) Coating Line No. 2.
(3) Embosser No. 1.
(4) Embosser No. 2.
(5) Fifteen (15) mix room tanks.
(6) Four (4) outside storage tanks.

(7) Solvent recovery distillation system.
(8) Two (2) outside solvent recovery feed tanks.
(9) Truck delivery.

The Permittee has implemented and shall maintain a recordkeeping system at the facility, and operate Coating Line No. 1, Coating Line No. 2, Embosser No. 1, Embosser No. 2, in accordance with the attached Table G to verify that the maximum allowable VOC inlet loading to the solvent recovery system (1,768 lb/hr) will not be exceeded. Table G also reflects uncontrolled emissions from Embosser No. 2, independent of the control strategy of the other units.

Whenever embosser(s) emissions are directed to the carbon system, the VOC inlet loading(s) shall be defined as the following:

(1) Embosser No. 1 = 12.92 lb/hr
(2) Embosser No. 2 = 19.60 lb/hr

(Note: These inlet loadings may be less if measured by a continuous emission monitoring system (CEMS) in accordance with a MassDEP-approved monitoring plan.)

I. Thermal Oxidizer Control System: The Permittee shall restrict the maximum VOC inlet loading to the thermal oxidizer to the following mass per unit time values:

(a) 440 lb/hr
(b) 1,920,000 lb/12-month rolling period

The Permittee shall maintain a minimum destruction efficiency of 99.0 percent across the thermaloxidizer. The thermal oxidizer shall be operated at a minimum combustion temperature of 1,400ºF and a minimum residence time of 0.627 seconds at 1,400ºF whenever VOC's are directed to the thermal oxidizer. When the thermal oxidizer is in VOC control service, compliance with this provision shall be documented by continuous recording of the combustion chamber temperature at the end of the effective chamber length. VOC emissions from the thermal oxidizer shall not exceed the emission limits in Proviso M of this Section (Section 5) of the Operating Permit.

The following equipment may be ducted to the thermal oxidizer control system for VOC control:

(1) Coating Line No. 1.
(2) Coating Line No. 2.
(3) Embosser No. 1.
(4) Embosser No. 2.
(5) Non-recoverable solvent storage tanks.

The Permittee has implemented and shall maintain a recordkeeping system at the facility, and operate Coating Line No. 1, Coating Line No. 2, Embosser No. 1, and Embosser No. 2 in accordance with the attached Table G to verify that the maximum allowable VOC inlet loading to the thermal oxidizer (440 lb/hr) will not be exceeded. Table G also reflects uncontrolled emissions from Embosser No. 2, independent of the control strategy of the other units.

Whenever embosser(s) emissions are directed to the thermal oxidizer, the VOC inlet loading(s) shall be defined as follows:

(1) Embosser No. 1 = 12.92 lb/hr
(2) Embosser No. 2 = 19.60 lb/hr

(Note: These inlet loadings may be less if measured by a continuous emission monitoring system (CEMS) in accordance with a MassDEP-approved monitoring plan.)

J. The Permittee shall limit VOC emissions from the eight (8) metallizer vacuum pumps as defined in Proviso M of this Section (Section 5) of the Operating Permit.

K. Ozone (O_3) emissions from the two (2) corona treaters shall be calculated using an emission factor of 0.071 pounds per kW-hour. Ozone emissions shall not exceed 4.26 pounds of ozone per hour or 18.7 tons per 12-month rolling period.

L. VOC emissions based on solvent use in the degreaser shall be limited to a maximum of 83 pounds per month and 0.5 tons per 12-month rolling period.

M. Based on the limitations contained in this Operating Permit, VOC emissions from each unit operation (specified below) shall not exceed:

	VOC (lb/hr, after control)	VOC (tons/12-month rolling period)
Carbon Control System	23.0	62.92
Thermal Oxidizer	4.4	9.6
Embosser No. 1 (controlled)	0.17	0.74
Embosser No. 1 (fugitive)	0.68	2.98
Embosser No. 2	5.3	6.4
Mix Room Area	2.3	10.1
Wastewater	N/A	5.74
Wet End Building	N/A	2.26
Solvent Cleaning		
- Inside Enclosures	N/A	0.59
- Outside Enclosures	N/A	0.68
Metallizers	N/A	0.014
Degreaser	N/A	0.5
Emergency Generator No. 1 (nat. gas)	0.12	0.0186
Emergency Generator No. 2 (diesel)	0.10	0.015
Boiler No. 1	0.039	0.1707(1)
Boiler No. 2	0.039	0.1707(1)
Space Heaters	N/A	0.3105(1)
Drying Ovens		
- Coating Line No. 1	0.058	0.254(1)
- Coating Line No. 2	0.0171	0.075(1)
Thermal Oxidizer		
- Natural Gas	0.0249	0.1089(1)
Flame Treater	0.011	0.05(1)
	Facility-Wide Total:	103.67

(**Note 1**: Based upon 8,760 hours per year; natural gas monitoring is acceptable for one gas meter for all.)

Total VOC emissions must not exceed 14 tons per month from the following areas:

- Carbon Control System,
- Thermal Oxidizer Control,
- Embosser No. 1 (Controlled)
- Embosser No. 1 (Fugitive)

- Embosser No. 2
- Mix Room

N. Low Solvent Coatings: The Permittee is not required to direct emissions from a Coater to the thermal oxidizer or carbon adsorption control system when the Coater is utilizing low solvent coatings. A coating qualifies as a "low solvent coating" if it meets the following criteria:

(1) VOC: solids ratio less than or equal to 2.0 pounds of VOC per gallon of solids applied; and,

(2) VOC content of less than 2.0 percent by weight, as applied.

For low solvent coatings as described above, the overall VOC control efficiency requirements of the carbon adsorption solvent recovery system and thermal oxidizer shall not pertain in the event that the Permittee chooses to operate these controls for other reasons, such as odor control.

O. The Permittee shall limit facility-wide hazardous air pollutant (HAP) emissions in accordance with the following potential emission limitations:

(1) HAP emissions shall not exceed 2.0 tons per month.

(2) HAP emissions shall not exceed 2.0 tons per 12-month rolling period.

(3) During periods when gases containing HAPs are directed to the thermal oxidizer, the thermal oxidizer shall maintain a minimum destruction efficiency of 99.0 percent. The thermal oxidizer shall be operated at a minimum combustion temperature of 1,400ºF and a minimum residence time of 0.627 seconds at 1,400ºF.

HAP material usage shall not exceed 2.0 tons per month and 2.0 tons per 12-month rolling period. Any increase in HAP material usage will be allowed by the MassDEP only to the extent that the conditions embodied in Provisos O(1), O(2), and O(3) of this Section (Section 5) of the Operating Permit are observed. (HAPS are identified as those listed by U.S. EPA, pursuant to 42 USC 7401, §112).

P. Coating Lines No. 1 and 2 are equipped with enclosures and shall maintain 100 percent capture efficiency in accordance with 40 CFR 51, Method 204.

Q. Solvent Cleaning Inside Coating Line Enclosures – A maximum of 7,510 pounds of VOC per month in cleaning solvent shall be used within the Coating Line enclosures. All cleaning solvent volatilized within the coating line enclosures shall be ducted to the appropriate pollution control device for the line being cleaned. A minimum control efficiency of 98.7 percent has been used to calculate potential VOC emissions for this process. VOC emissions shall be limited as specified in Proviso M of this Section (Section5) of the Operating Permit.

R. Embossing Operations - Embosser No. 1 is equipped with a close-fitting exhaust hood designed to capture 95 percent of all VOC emitted during Embosser No. 1 operations. Embosser No. 2 is equipped with exhaust hoods designed to achieve 100 percent capture efficiency of all VOC emitted during Embosser No. 2 operations, in accordance with 40 CFR 51, Method 204. Embosser No. 1 and Embosser No. 2 exhausts are ducted to the carbon solvent recovery system and to the thermal oxidizer so that either control can be used for embosser VOC emissions depending upon the scheduled use of VOC controls for coating operations. Vacumet shall limit VOC emissions from the embossers as defined in Proviso M of this Section (Section 5) of the Operating Permit. As previously approved (Plan Approval #X223977), emissions from

Embosser No. 2 may vent uncontrolled.

S. Trial Coatings - **(State-Only Requirement)** Vacumet may develop research coatings to conduct trials on either Coating Line No. 1 or Coating Line No. 2. When a research coating is ready for application, the emission parameters will be calculated to assure that the control systems are not overloaded as required in Provisos H and I of this Section (Section 5) of the Operating Permit.

T. Special Notification - Vacumet shall notify the MassDEP, in accordance with the 310 CMR 40.0000 Massachusetts Contingency Plan (MCP). Exemptions to this provision are contained in Table H (attached).

U. The Permittee must, upon request, provide MassDEP and/or EPA representatives with immediate, escorted access to any area within the plant for purposes of checking records or otherwise determining compliance.

V. The Permittee shall implement whatever measures are necessary to abate a condition of air pollution (i.e., smoke, dust, noise, odor, etc.) if such a condition does occur.

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 Permittee 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 based[1] emission limitations specified in this permit as a result of an emergency[2]. 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.

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

[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.

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 MassDEP of Environmental Protection 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
10^6 BTU/hr - 1,000,000 BTU Per Hour
AOS – Alternative Operating Scenario
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
FT^3/day - Cubic Feet Per Day
HAP – Hazardous Air Pollutant
HHV - Higher Heating Value
ISO – Represent 59ºF, 60% Relative Humidity, 29.92 Inches Mercury At Sea Level
MassDEP - Massachusetts Department of Environmental Protection
MMBTU/hr - Million British Thermal Units Per Hour
NH_3 - Ammonia
NO_x - Nitrogen Oxides
PB - Lead
PLT ID - Plant Identification
PM - Particulate Matter
PPM - Parts Per Million
PTE - Potential To Emit
SO_2 - Sulfur Dioxide
TPY - Tons Per Year
VOC - Volatile Organic Compound

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TABLE C

Stack Summary

Vacumet Corp.
Approval #X223977

Stack Designation	Unit ID #	Height Above Ground (feet)	Height Above Roof (feet)	Exit Diam. (inches)	Exhaust Flow Rate (ACFM)	Maximum Exhaust Temperature (°F)
No. 1 Carbon Adsorber	49	35	4	32	24,000	115
No. 2 Carbon Adsorber	50	35	4	32	24,000	115
Thermal Oxidizer	40	45	20	12 x *55*	27,600	750-1,000
Embosser No. 2(1)	89	45	10	16	2,800	150
Mix Room	55	35	8	48 x 34	20,000(2)	Ambient
West End Building	53	33	2	16 x 16	1,500	Ambient
Metallizer 1 (vac. pump)	87	31	6	6	250	Ambient
Metallizer 1 (vacuum cleanout)	48	31	6	6	250	Ambient
Metallizer 1 (baghouse)	47	31	6	6	250	Ambient
Metallizer 2 (vac. pump)	96	20	N/A	8	110	Ambient
Metallizer 2 (vacuum cleanout)	99	4	N/A	8	110	Ambient
Metallizer 2 (baghouse)	100	7	N/A	6	110	Ambient
Corona Treater No. 1	26	35	10	14	8,400	Ambient
Corona Treater No. 2	27	35	10	14	8,400	Ambient
Flame Treater	27	35	10	13	4,800	120
Boiler No. 1	30	45	20	24	6,560 (max.)(3)	529
Boiler No. 2	31	45	20	24	6,560 (max.)(3)	529
Slitter Cyclone Exhaust	12	30	- 4 (34-ft. roof)	30	9,000	Ambient
Emergency Generator 1	88	4	-21 (25-ft. roof)	3	200	400
Emergency Generator 2	103	37	5	6	2,150	120
Caustic Wash Station	42	45	13 (32-ft. roof)	12	4,000	Ambient
Steam Moisturizer	21	40	6 (34-ft. roof)	12	4,000	120

Notes:

1. Embosser No. 2 will vent uncontrolled in accordance with terms and conditions of Approval #X223977.
   Embosser No. 1 exhaust will be directed to the thermal oxidizer or carbon adsorption system.
   Embosser No. 2 exhaust may be directed to the thermal oxidizer or carbon adsorption system.
2. Low flow rate (assumes 6 air changes per hour vs. 15 air changes per hour).
3. Assumes 20 percent excess air maximum at 100 percent rating.

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TABLE G. Exhaust/Emission Control Decision Logic

Vacumet Corp.
Approval #X223977

Coater No. 1 to Thermal Oxidizer	Coater No. 2 to Solvent Recovery, **AND** Embosser No. 2 uncontrolled
Coater No. 1 to Solvent Recovery	Coater No. 2 to Oxidizer and Embosser No. 1 to Oxidizer, **AND** Embosser No. 2 uncontrolled; **OR,** Both Embossers to Oxidizer, **AND** Coater No. 2 – Down; **OR**, Embosser No. 1 to Oxidizer, Embosser No. 2 uncontrolled, **AND** Coater No. 2 – Down
Coater No. 1 – Coating Head No. 1 to Solvent Recovery	Coater No. 1, Coating Head No. 2 uncontrolled (water-based coating), and Coater No. 2 to Solvent Recovery, **AND** both Embossers to Oxidizer; **OR,** Embosser No. 1 to Oxidizer, Embosser No. 2 uncontrolled
Coater No. 1 – Coating Head No. 2 to Solvent Recovery	Coater No. 1, Coating Head No. 1 uncontrolled (water-based coating) and Coater No. 2 to Solvent Recovery **AND** both Embossers to Oxidizer; **OR**, Embosser No. 1 to Oxidizer, Embosser No. 2 uncontrolled
Coater No. 2 to Solvent Recovery	Coater No. 1, Coating Head No. 1 to Solvent Recovery, Coater No. 1, Coating Head No. 2 uncontrolled (water-based coating); **OR**, Coater No. 1, Coating Head No. 2 uncontrolled (water-based coating), Coater No. 1, Coating Head No. 1 to Solvent Recovery; **OR**, Coater No. 1 to Oxidizer, **AND** Embosser No. 2 uncontrolled; **OR,** Both Embossers to Oxidizer, **AND** Coater No. 1 – Down; **OR,** Embosser No. 1 to Oxidizer, Embosser No. 2 uncontrolled, **AND** Coater No. 1 – Down
Coater No. 2 to Thermal Oxidizer	Coater No. 1 **AND** Embosser No. 1 to Solvent Recovery, **AND** One Embosser No. 2 uncontrolled; **OR,** Both Embossers to Solvent Recovery, **AND** Coater No. 1 – Down; **OR,** Embosser No. 1 to Oxidizer, Embosser No. 2 uncontrolled, **AND** Coater No. 1 – Down

Note: Embosser No. 2 uncontrolled exhaust is independent of other operations.

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TABLE H

SOP and Routine Maintenance - VOC Emissions

Vacumet Corp.
Approval #X223977

The following is a list of maintenance activities that could result in minor VOC emissions during normal routine maintenance.

(A) Storage Tanks: (1) Cleaning (2) Repairs (3) Inspections	Whenever possible, tanks will be emptied of contents and vented back to Solvent Recovery to minimize VOC emissions
(B) Pipes, Flanges, Valves, and Pumps: (1) Cleaning (2) Repairs (3) Inspections	Whenever possible, shut offs and/or blank flanges will be used to minimize VOC emissions.
(C) Meters: (1) Repairs (2) Replacement (3) Calibrations (4) Inspections	Whenever possible, shut offs and/or blank flanges will be used to minimize VOC emissions.
(D) SLA Fan and D.C. Fan Coolers: (1) Cleaning (2) Repairs (3) Inspections	The system will be purged and shut down prior to maintenance work being performed in order to minimize VOC emissions.
(E) Solvent Recovery Filters: (1) Inspection (2) Replacement	The system will be purged and shut down prior to maintenance work being performed in order to minimize VOC emissions.
(F) Solvent Recovery Carbon: (1) Inspection (2) Replacement	Whenever possible, inspection will be done on clean beds to minimize VOC emissions when the covers are opened. When replacing carbon, the beds will be cleaned for a longer period of time in order to recover as much solvent as possible to reduce VOC emissions.
(G) IPA Carbon Drums: (1) Replacement	Valves will be closed when changing drums to minimize VOC emissions.
(H) Ducts and Dampers: (1) Inspection (2) Repairs	The system will be purged and shut down prior to maintenance work being performed in order to minimize VOC emissions.