

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

December 8, 2008

PERMIT TO INSTALL

No. 111-08



The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

| | |
|--|------------|
| DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: 9/17/2008 | |
| DATE PERMIT TO INSTALL APPROVED: 12/8/2008 | SIGNATURE: |
| DATE PERMIT VOIDED: | SIGNATURE: |
| DATE PERMIT REVOKED: | SIGNATURE: |

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

| Common Acronyms | | Pollutant/Measurement Abbreviations | |
|------------------------|---|--|--|
| AQD | Air Quality Division | Btu | British Thermal Unit |
| ANSI | American National Standards Institute | °C | Degrees Celsius |
| BACT | Best Available Control Technology | CO | Carbon Monoxide |
| CAA | Clean Air Act | dscf | Dry standard cubic foot |
| CEM | Continuous Emission Monitoring | dscm | Dry standard cubic meter |
| CFR | Code of Federal Regulations | °F | Degrees Fahrenheit |
| COM | Continuous Opacity Monitoring | gr | Grains |
| EPA | Environmental Protection Agency | Hg | Mercury |
| EU | Emission Unit | hr | Hour |
| FG | Flexible Group | H ₂ S | Hydrogen Sulfide |
| GACS | Gallon of Applied Coating Solids | hp | Horsepower |
| GC | General Condition | lb | Pound |
| HAP | Hazardous Air Pollutant | m | Meter |
| HVLP | High Volume Low Pressure* | mg | Milligram |
| ID | Identification | mm | Millimeter |
| LAER | Lowest Achievable Emission Rate | MM | Million |
| MACT | Maximum Achievable Control Technology | MW | Megawatts |
| MAERS | Michigan Air Emissions Reporting System | ng | Nanogram |
| MAP | Malfunction Abatement Plan | NO _x | Oxides of Nitrogen |
| MDEQ | Michigan Department of Environmental Quality | PM | Particulate Matter |
| MIOSHA | Michigan Occupational Safety & Health Administration | PM-10 | Particulate Matter less than 10 microns diameter |
| MSDS | Material Safety Data Sheet | pph | Pound per hour |
| NESHAP | National Emission Standard for Hazardous Air Pollutants | ppm | Parts per million |
| NSPS | New Source Performance Standards | ppmv | Parts per million by volume |
| NSR | New Source Review | ppmw | Parts per million by weight |
| PS | Performance Specification | psia | Pounds per square inch absolute |
| PSD | Prevention of Significant Deterioration | psig | Pounds per square inch gauge |
| PTE | Permanent Total Enclosure | scf | Standard cubic feet |
| PTI | Permit to Install | sec | Seconds |
| RACT | Reasonably Available Control Technology | SO ₂ | Sulfur Dioxide |
| ROP | Renewable Operating Permit | THC | Total Hydrocarbons |
| SC | Special Condition | tpy | Tons per year |
| SCR | Selective Catalytic Reduction | µg | Microgram |
| SRN | State Registration Number | VOC | Volatile Organic Compounds |
| TAC | Toxic Air Contaminant | yr | Year |
| TEQ | Toxicity Equivalence Quotient | | |
| VE | Visible Emissions | | |

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The AQD District Supervisor shall be notified, in writing, of a change in ownership or operational control of the stationary source or emission unit(s) authorized by this Permit to Install pursuant to R 336.1219. The notification shall include all of the information required by R 336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R 336.1219(1)(c), agreeing to and accepting the terms and conditions of this Permit to Install, and shall notify the AQD District Supervisor of any change in the contact person for this Permit to Install. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law nor does it affect any liability for past violations under the Natural Resources and Environmental Protection Act, 1994 PA 451.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.
11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

SPECIAL CONDITIONS

Emission Unit Identification

| Emission Unit ID | Emission Unit Description | Stack Identification |
|--|--|----------------------|
| EUBURNOFF | A Pollution Control Products Company Model ATR-88 Controlled Pyrolysis Cleaning Furnace equipped with an afterburner emission control system and a thermally insulated exhaust system. | SV BURNOFF |
| Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290. | | |

The following conditions apply to: EUBURNOFF

Emission Limits

- 1.1 There shall be no visible emissions from EUBURNOFF. ((R 336.1224, R 336.1225, R 336.1901, R 336.1910)

Material Usage Limits

- 1.2 The permittee shall burn only natural gas in EUBURNOFF. (R 336.1901)
- 1.3 The permittee shall not process any material in EUBURNOFF other than cured paints on metal parts, racks and/or hangers. (R 336.1224, R 336.1225, R 336.1901)

Process/Operational Limits

- 1.4 The permittee shall not use EUBURNOFF for the thermal destruction or removal of rubber, plastics, uncured paints, or any other materials containing sulfur or halogens (chlorine, fluorine, bromine, etc.) such as plastisol, polyvinyl chloride (PVC), or Teflon with the exception of cured coatings containing not more than 0.1 percent by weight chlorine content. (R 336.1224, R 336.1225, R 336.1901)
- 1.5 The permittee shall provide, and maintain onsite, certifications that any coating materials removed from parts in EUBURNOFF contain no halogenated or sulfur-containing compounds with the exception of cured coatings containing not more than 0.1 percent by weight chlorine content. Such certifications shall also be obtained and maintained onsite for coating materials removed from parts processed for outside customers. In addition the permittee shall maintain a current listing of the chemical composition of each coating material removed from parts processed in EUBURNOFF. The data may consist of Material Safety Data Sheets (MSDS), manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all certifications and chemical composition data on file at the facility for a period of at least five years and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1901)
- 1.6 The permittee shall not operate EUBURNOFF for more than 1536 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1225)

Equipment

- 1.7 Beginning within 30 days of permit approval, satisfactory operation of the EUBURNOFF secondary chamber or afterburner includes maintaining a minimum temperature of 1400 F and a minimum retention time of 0.5 seconds whenever the primary chamber burner is on. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1901, R 336.1910)**
- 1.8 Beginning within 30 days of permit approval, the permittee shall not operate EUBURNOFF unless a preheat interlock system which prevents primary chamber burner operation until the secondary chamber or afterburner is preheated to 1400 F, is installed, maintained and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1901, R 336.1910)**
- 1.9 The permittee shall not operate EUBURNOFF unless an automatic temperature control system for the primary chamber and secondary chamber or afterburner is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1901, R 336.1910)**
- 1.10 The permittee shall not operate EUBURNOFF unless an interlock system is installed, maintained and operated in a satisfactory manner that shuts down the primary chamber burner when the secondary chamber or afterburner is not operating properly including malfunctions such as detection of a loss of afterburner flame or low natural gas supply pressure to the afterburner. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1901, R 336.1910)**
- 1.11 The permittee shall equip and maintain the EUBURNOFF exhaust system with the manufacturer's recommended thermal insulation from the afterburner to the exhaust stack exit point. **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**

Monitoring

- 1.12 The permittee shall calibrate the thermocouples and the temperature monitoring and recording system associated with the primary and secondary chambers of EUBURNOFF at least once per calendar year. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1901, R 336.1910)**
- 1.13 Beginning within 30 days of permit approval, the permittee shall install, calibrate, maintain and operate in a satisfactory manner devices on EUBURNOFF to continuously measure the temperature in the burnoff oven primary chamber and to continuously monitor and record the afterburner temperature. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1901, R 336.1910)**

Recordkeeping/Reporting/Notification

- 1.14 Beginning within 30 days of permit approval, the permittee shall keep, in a satisfactory manner, temperature data records for the EUBURNOFF secondary chamber or afterburner. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1901, R 336.1910)**
- 1.15 Beginning within 30 days of permit approval, the permittee shall clearly mark the start and stop times for each batch and label each start and stop time with the correct clock time, date and initials on the afterburner temperature chart recording for the EUBURNOFF secondary chamber or afterburner. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1301, R 336.1702(a), R 336.1901, R 336.1910)**

1.16 The permittee shall keep, in a satisfactory manner, a log of the hours of operation of EUBURNOFF per calendar day and per 12-month rolling time period as determined at the end of each calendar month. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225)**

Stack/Vent Restrictions

| Stack & Vent ID | Maximum Diameter (inches) | Minimum Height Above Ground Level (feet) | Applicable Requirement |
|---|----------------------------------|---|---|
| 1.17 SV BURNOFF | 13 | 33 | R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d) |
| The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air. | | | |