MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

JUNE 23, 2005

PERMIT TO INSTALL
NO. 153-05

ISSUED TO
TEAM INDUSTRIAL SERVICES, INC.

LOCATED AT
12640 DELTA STREET
TAYLOR, MICHIGAN 48180

IN THE COUNTY OF
WAYNE

STATE REGISTRATION NUMBER
N7491

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: **6/8/2005**	
DATE PERMIT TO INSTALL APPROVED: **6/23/2005**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

Section **Page**

Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	Btu	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
EPA	Environmental Protection Agency	gr	Grains
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallon of Applied Coating Solids	H_2S	Hydrogen Sulfide
GC	General Condition	hp	Horsepower
HAP	Hazardous Air Pollutant	lb	Pound
HVLP	High Volume Low Pressure *	m	Meter
ID	Identification	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NOx	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM-10	Particulate Matter less than 10 microns diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	pph	Pound per hour
NSPS	New Source Performance Standards	ppm	Parts per million
NSR	New Source Review	ppmv	Parts per million by volume
PS	Performance Specification	ppmw	Parts per million by weight
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge
PTI	Permit to Install	scf	Standard cubic feet
RACT	Reasonable Available Control Technology	sec	Seconds
ROP	Renewable Operating Permit	SO_2	Sulfur Dioxide
SC	Special Condition Number	THC	Total Hydrocarbons
SCR	Selective Catalytic Reduction	tpy	Tons per year
SRN	State Registration Number	µg	Microgram
TAC	Toxic Air Contaminant	VOC	Volatile Organic Compounds
VE	Visible Emissions	yr	Year

* 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. **[R336.1201(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. **[R336.1201(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 R336.1210, 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. **[R336.1201(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. **[R336.1201(8), Section 5510 of Act 451, PA 1994]**

5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **[R336.1219]**

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. **[R336.1901]**

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). **[R336.1912]**

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.

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 R336.1301, 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 R336.1303. **[R336.1301]**

    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 R336.1370(2). **[R336.1370]**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. **[R336.2001]**

SPECIAL CONDITIONS

Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EUBURNOFF1	A batch type natural gas-fired burnoff oven with an afterburner, used to remove cured paints, oil or grease from metal parts by thermal decomposition in a primary chamber.	SV-1
EUBURNOFF2	A batch type natural gas-fired burnoff oven with an afterburner, used to remove cured paints, oil or grease from metal parts by thermal decomposition in a primary chamber.	SV-2
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 to R336.1290.		

The following conditions apply to: EUBURNOFF1

Emission Limits

1.1 There shall be no visible emissions from EUBURNOFF1. **[R336.1225, R336.1901, R336.1910]**

Material Usage Limits

1.2 The permittee shall burn only natural gas in EUBURNOFF1. **[R336.1901]**

1.3 The permittee shall not process any material in EUBURNOFF1 other than cured paints, oil or grease on metal parts, racks and/or hangers. **[R336.1224, R336.1225, R336.1901]**

Process/Operational Limits

1.4 The permittee shall not use EUBURNOFF1 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. **[R336.1224, R336.1225, R336.1901]**

1.5 The permittee shall not load any transformer cores, which may be contaminated with PCB-containing dielectric fluid; wire or parts coated with lead or rubber; or any waste materials such as paint sludge or waste powder coatings into EUBURNOFF1. **[R336.1224, R336.1225, R336.1901]**

Equipment

1.6 The permittee shall not operate EUBURNOFF1 unless the afterburner is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the afterburner includes maintaining a minimum temperature of 1400°F and a minimum retention time of 0.5 seconds. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

1.7 The permittee shall not operate EUBURNOFF1 unless an automatic temperature control system for the primary chamber and secondary chamber or afterburner is installed, maintained, and operated in a satisfactory manner. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

1.8 The permittee shall not operate EUBURNOFF1 unless an interlock system that shuts down the primary chamber burner when the afterburner is not operating properly, is installed, maintained and operated in a satisfactory manner. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

Monitoring

1.9 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to continuously monitor the temperature in the burnoff oven afterburner and record the temperature at least once every 15 minutes. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

1.10 The permittee shall calibrate the thermocouples associated with the primary and secondary chambers at least once per year. **[R336.1201(3), R336.1224, R336.1225, R336.1901]**

Recordkeeping/Reporting/Notification

1.11 The permittee shall keep, in a satisfactory manner, temperature data records for the burnoff oven afterburner. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

1.12 The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction of the control equipment, any maintenance performed and any testing results for EUBURNOFF1. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1910, R336.1912]**

1.13 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (cured coating, oil or grease) processed in EUBURNOFF1, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1224, R336.1225, R336.1901]**

1.14 The permittee shall maintain current information from the manufacturer that EUBURNOFF1 is equipped with an afterburner, an automatic temperature control system for the primary chamber and secondary chamber or afterburner, and an interlock system that shuts down the primary chamber burner when the secondary chamber or afterburner is not operating properly. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1224, R336.1225, R336.1901]**

Stack / Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
1.15	SV-1	16.0	39.0	R336.1225, R336.1901
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.			

The following conditions apply to: EUBURNOFF2

Emission Limits

2.1 There shall be no visible emissions from EUBURNOFF2. **[R336.1225, R336.1901, R336.1910]**

Material Usage Limits

2.2 The permittee shall burn only natural gas in EUBURNOFF2. **[R336.1901]**

2.3 The permittee shall not process any material in EUBURNOFF2 other than cured paints, oil or grease on metal parts, racks and/or hangers. **[R336.1224, R336.1225, R336.1901]**

Process/Operational Limits

2.4 The permittee shall not use EUBURNOFF2 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. **[R336.1224, R336.1225, R336.1901]**

2.5 The permittee shall not load any transformer cores, which may be contaminated with PCB-containing dielectric fluid; wire or parts coated with lead or rubber; or any waste materials such as paint sludge or waste powder coatings into EUBURNOFF2. **[R336.1224, R336.1225, R336.1901]**

Equipment

2.6 The permittee shall not operate EUBURNOFF2 unless the afterburner is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the afterburner includes maintaining a minimum temperature of 1400°F and a minimum retention time of 0.5 seconds. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

2.7 The permittee shall not operate EUBURNOFF2 unless an automatic temperature control system for the primary chamber and secondary chamber or afterburner is installed, maintained, and operated in a satisfactory manner. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

2.8 The permittee shall not operate EUBURNOFF2 unless an interlock system that shuts down the primary chamber burner when the afterburner is not operating properly, is installed, maintained and operated in a satisfactory manner. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

Monitoring

2.9 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to continuously monitor the temperature in the burnoff oven afterburner and record the temperature at least once every 15 minutes. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

2.10 The permittee shall calibrate the thermocouples associated with the primary and secondary chambers at least once per year. **[R336.1201(3), R336.1224, R336.1225, R336.1901]**

Recordkeeping/Reporting/Notification

2.11 The permittee shall keep, in a satisfactory manner, temperature data records for the burnoff oven afterburner. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1224, R336.1225, R336.1301, R336.1901, R336.1910]**

2.12 The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction of the control equipment, any maintenance performed and any testing results for EUBURNOFF2. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1910, R336.1912]**

2.13 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (cured coating, oil or grease) processed in EUBURNOFF2, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1224, R336.1225, R336.1901]**

2.14 The permittee shall maintain current information from the manufacturer that EUBURNOFF2 is equipped with an afterburner, an automatic temperature control system for the primary chamber and secondary chamber or afterburner, and an interlock system that shuts down the primary chamber burner when the secondary chamber or afterburner is not operating properly. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1224, R336.1225, R336.1901]**

Stack / Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
2.15	SV-2	16.0	39.0	R336.1225, R336.1901
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.			