MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

October 19, 2006

PERMIT TO INSTALL
No. 103-98B

ISSUED TO
Monarch Electric Apparatus Service, LLC

LOCATED AT
18800 Maginnity Avenue
Melvindale, Michigan 48122

IN THE COUNTY OF
Wayne

STATE REGISTRATION NUMBER
N7641

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: **8/23/2006**	
DATE PERMIT TO INSTALL APPROVED: **10/19/2006**	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_2S	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	NOx	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. **[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 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 R336.1219. The notification shall include all of the information required by R336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R336.1219(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 Pemit to Install. **[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 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 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
EU-BURNOFFBAYS	Bayco Model BB56 burn-off oven consisting of a 350,000 btu/hr gas fired pyrolysis furnace and a direct flame afterburner used to remove epoxy and varnish coatings from electric motor windings. The oven is vented thru an exhaust stack that discharges unobstructed vertically upward to the outdoor air at a minimum height of 36 feet.	SV-BURNOFFBAYS
EU-BURNOFFSTL	Steelman burn-off oven equipped with natural gas-fired primary (oven) burner and afterburner and primary and secondary water spray temperature control system in oven used to remove epoxy and varnish coatings from electric motor windings. The oven is vented thru an exhaust stack that discharges unobstructed vertically upward to the outdoor air at a minimum height of 36 feet.	SV-BURNOFFSTL
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.		

Flexible Group Identification

Flexible Group ID	Emission Units Included in Flexible Group	Stack Identification
FG-2CHAMBER	EU-BURNOFFBAYS and EU-BURNOFFSTL	NA

The following conditions apply to: FG-2CHAMBER

Emission Limits

1.1 There shall be no visible emissions from either FG-2CHAMBER oven. **[R336.1225, R336.1901, R336.1910]**

Material Usage Limits

1.2 The permittee shall burn only natural gas in either FG-2CHAMBER oven. **[R336.1901]**

1.3 The permittee shall not process any material in either FG-2CHAMBER oven other than coatings on electric motor parts and windings. **[R336.1224, R336.1225, R336.1901]**

Process/Operational Limits

1.4 The permittee shall not use either FG-2CHAMBER oven 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 either FG-2CHAMBER oven. **[R336.1224, R336.1225, R336.1901]**

1.6 The permittee shall not operate either FG-2CHAMBER oven for more than 12 hours per day, nor 2500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. **[R 336.1224, R 336.1225, R 336.1901]**

Equipment

1.7 The permittee shall not operate either FG-2CHAMBER oven unless a secondary chamber or afterburner is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the secondary chamber or afterburner includes maintaining a minimum temperature of 1400°F and a minimum retention time of 0.5 seconds. **[R336.1224, R336.1225, R336.1301, R336.1702(a), R336.1901, R336.1910]**

1.8 The permittee shall not operate either FG-2CHAMBER oven 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, R336.1702(a), R336.1901, R336.1910]**

1.9 The permittee shall not operate either FG-2CHAMBER oven unless an interlock system that shuts down the primary chamber burner when the secondary chamber or afterburner is not operating properly, is installed, maintained and operated in a satisfactory manner. **[R336.1224, R336.1225, R336.1301, R336.1702(a), R336.1901, R336.1910]**

Monitoring

1.10 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to continuously monitor the temperature in each FG-2CHAMBER oven secondary chamber or afterburner and record the temperature at least once every 15 minutes. **[R336.1224, R336.1225, R336.1301, R336.1702(a), R336.1901, R336.1910]**

1.11 The permittee shall calibrate the thermocouples associated with the primary and secondary chambers for each FG-2CHAMBER oven at least once per year. **[R336.1201(3), R336.1224, R336.1225,R336.1301, R336.1702(a), R336.1901, R336.1910]**

Recordkeeping/Reporting/Notification

1.12 The permittee shall keep, in a satisfactory manner, temperature data records for each FG-2CHAMBER oven 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. **[R336.1224, R336.1225, R336.1301, R336.1702(a), R336.1901, R336.1910]**

1.13 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 each FG-2CHAMBER oven. 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]**

1.14 The permittee shall keep a record of the operation of each FG-2CHAMBER oven on a calendar month basis including the following:

a) Date of burn off oven operation.
b) Duration of burn off oven operation.
c) Identification of the type of part processed in the oven and the materials removed from the part.
d) A compilation of the calendar day, calendar month, and rolling 12-month calendar year totals of hours of operation for the oven.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, for a period of at least five years and make them available to the Department upon request. **[R336.1224, R336.1225, R336.1702, R336.1901]**

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
1.15a	SV-BURNOFFBAYS	NA	36	R336.1225, R336.1901, 40 CFR 52.21 (c) & (d)
1.15b	SV-BURNOFFSTL	NA	36	R336.1225, R336.1901, 40 CFR 52.21 (c) & (d)
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.			