

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

April 24, 2003



STATE REGISTRATION NUMBER
A6237

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: 4/30/2001	
DATE PERMIT TO INSTALL APPROVED: 4/24/2003	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

NEW SOURCE REVIEW PERMIT TO INSTALL

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COMMON ABBREVIATIONS / ACRONYMS USED in this PERMIT to INSTALL

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	°C	Degrees Celsius
ANSI	American National Standards Institute	CO	Carbon Monoxide
BACT	Best Available Control Technology	°F	Degrees Fahrenheit
CAA	Clean Air Act	BTU	British Thermal Unit
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	gr	Grains
EU	Emission Unit	Hg	Mercury
GACS	Gallon of Applied Coating Solids	hr	Hour
GC	General Condition	H ₂ S	Hydrogen Sulfide
HAP	Hazardous Air Pollutant	HP	Horsepower
HVLP	High Volume Low Pressure *	lb	Pound
ID	Identification	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NO _x	Oxides of Nitrogen
MIOSHA	Michigan Occupational Safety & Health Administration	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
SC	Special Condition	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
VE	Visible Emissions	VOC	Volatile Organic Compounds
		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, altered, 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, reconstruction, relocation, or alteration 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 person to whom this permit was issued, or the designated authorized agent, shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, PO Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or alteration 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 owner or operator of a source, process, or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant in excess of standards for more than one hour, or of any air contaminant in excess of standards for more than two hours, as required in this rule, to the District Supervisor, Air Quality Division. The notice shall be provided no 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 District Supervisor within ten days, with the information required in this rule. **[R336.1912]**
8. Approval of this permit does not exempt the person to whom this permit was issued from complying with any future applicable requirements which may be promulgated under Part 55 of Act 451, PA 1994 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 Act 451, PA 1994, 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, a person 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. Except as allowed by Rule 285 (a), (b), and (c), permittee shall not substitute any fuels, coatings, nor raw materials for those described in the application and allowed by this permit, nor make changes to the process or process equipment described in the application, without prior notification to and approval by the Air Quality Division. **[R336.1201(1)]**
14. 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
EUVACUUM	vacuum loading system	SVVACUUM
EUMANSOLV	manual loading – solvent building	SVMANSOLV
EUMANRECV	manual loading – receiving department	SVMANRECV
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: EUVACUUM

Material Usage Limits

- 1.1 The permittee shall not vacuum load more than 1,000,000 pounds of nickel powder per year. Pounds per year shall be based upon a 12-month rolling time period as determined at the end of each calendar month. [R336.1225]

Equipment

- 1.2 The permittee shall not operate EUVACUUM unless the following control devices are installed, maintained, and operated in a satisfactory manner: [R336.1224]
- Settling chamber with canvas bag filter.
 - Pleated fabric filter.
- 1.3 Satisfactory operation of the settling chamber with canvas bag filter includes a visual inspection of the integrity of the device prior to the start of EUVACUUM operation. [R336.1224]
- 1.4 Satisfactory operation of the pleated fabric filter includes a gauge, which measures the pressure drop across the device. If during EUVACUUM operation the pressure drop deviates from the normal operating range specified in the table, corrective measures shall be taken to return the pressure drop to within the normal operating range. [R336.1224]

NORMAL OPERATING RANGE, PRESSURE DROP (inches of water)		
	Low	High
Pleated fabric filter	0.5	8.5

Recordkeeping/Reporting/Notification

1.5 The permittee shall keep a written record of the amount of nickel powder vacuum loaded in EUVACUUM. The records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225]

1.6 The permittee shall keep a written record of the following:

- The measured pressure drop across the pleated fabric filter at start-up and midway through EUVACUUM operation.
- If a deviation occurs, corrective measures taken to return the pressure drop across the pleated fabric filter to the normal operating range.

The records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225]

1.7 The permittee shall keep, in a satisfactory manner, a written log of the visual inspections for the settling chamber with canvas bag filter. The following information shall be written in the log:

- Date and time when the settling chamber with canvas bag filter is opened up.
- Condition of the canvas bag filter.
- Date and time when the canvas bag filter is replaced.

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]

Stack/Vent Restrictions

Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
1.8 SVVACUUM	4	28.5	R336.1225
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.			

The following conditions apply to: EUMANSOLV

Material Usage Limits

- 2.1 The permittee shall not manual load more powder per year than that listed. Pounds per year shall be based upon a 12-month rolling time period as determined at the end of each calendar month. [R336.1225]
- 10,000 pounds/yr nickel
 - 15,000 pounds/yr chromium

Equipment

- 2.2 The permittee shall not operate EUMANSOLV unless the following control devices are installed, maintained, and operated in a satisfactory manner: [R336.1224]
- fabric filter
 - secondary filter
- 2.3 Satisfactory operation of the fabric filter plus secondary filter includes a gauge, which measures the pressure drop across the device. The measured pressure drop across the fabric filter plus secondary filter shall be recorded at start-up and midway through EUMANSOLV operation. If the measured pressure drop deviates from the normal operating range specified in the table, corrective measures shall be taken to return the pressure drop to the normal operating range. [R336.1224]

NORMAL OPERATING RANGE, PRESSURE DROP (inches of water)		
	Low	High
Fabric filter plus secondary filter	0.5	8.5

Recordkeeping/Reporting/Notification

- 2.4 The permittee shall keep a written record of the amount and type of powder manually loaded in EUMANSOLV. The records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225]
- 2.5 The permittee shall keep a written record of the corrective measures taken to return the pressure drop across the fabric filter plus secondary filter to the normal operating range. The records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225]

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
2.6	SVMANSOLV	16	30	R336.1225
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

The following conditions apply to: EUMANRECV

Material Usage Limits

- 3.1 The permittee shall not manual load more powder per year than that listed. Pounds per year shall be based upon a 12-month rolling time period as determined at the end of each calendar month. [R336.1225]
- 10,000 pounds/yr nickel
 - 15,000 pounds/yr chromium

Equipment

- 3.2 The permittee shall not operate EUMANRECV unless the following control devices are installed, maintained, and operated in a satisfactory manner: [R336.1224]
- fabric filter
 - secondary filter
- 3.3 Satisfactory operation of the fabric filter plus secondary filter includes a gauge, which measures the pressure drop across the device. The measured pressure drop across the fabric filter plus secondary filter shall be recorded at start-up and midway through EUMANSOLV operation. If the measured pressure drop deviates from the normal operating range specified in the table, corrective measures shall be taken to return the pressure drop to the normal operating range. [R336.1224]

NORMAL OPERATING RANGE, PRESSURE DROP (inches of water)		
	Low	High
Fabric filter plus secondary filter	0.5	8.5

Recordkeeping/Reporting/Notification

- 3.4 The permittee shall keep a written record of the amount and type of powder manually loaded in EUMANRECV. The records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225]
- 3.5 The permittee shall keep a written record of the corrective measures taken to return the pressure drop across the fabric filter plus secondary filter to the normal operating range. The records shall be kept on file for a period of at least five years and made available to the Department upon request. [R336.1225]

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
3.6	SVMANRECV	12	30	R336.1225
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				