# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

July 3, 2007

## PERMIT TO INSTALL 140-07

ISSUED TO
The Good Neighbors' Mission of Saginaw

LOCATED AT
1318 Cherry Street
Saginaw, Michigan

IN THE COUNTY OF
Saginaw

## STATE REGISTRATION NUMBER N7797

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:				
May 24, 2007				
DATE PERMIT TO INSTALL APPROVED:	SIGNATURE:			
July 3, 2007				
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 Number	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				

<sup>\*</sup> 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 condition 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-FURNACE	Ja-Ran Enterprise furnace capable of burning virgin	SV-FURNACE			
	wood pellets and/or cleaned shelled corn with a				
	maximum heat input of 200,000 BTU/hour.				
EU-GRAINSTORAGE	One (1) grain storage bin using two (2) augers for	NA			
	feeding fuel to the two (2) separate burn pots of the				
	furnace.				
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: EU-FURNACE

#### **Emission Limits**

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement
1.1	PM	EU-FURNACE	0.50 lb/1,000 of exhaust gas @ 50%	Test Protocol	GC 13	R336.1331(1)(a)(6)
			excess air			

#### **Process/Operational Limits**

- 1.2 The permittee shall burn only cleaned shelled corn or virgin wood pellets in EU-FURNACE. The permittee shall not burn any type of agricultural product which has been treated with fungicides, pesticides, or any other chemical agents. The permittee shall not burn any wood pellets which have been produced from painted or preservative-treated wood. [R336.1201(3), R336.1224, R336.1225, R336.1901]
- 1.3 The permittee shall not use any shelled corn in EU-FURNACE which has not been processed through a grain cleaner. [40 CFR 52.21 (c) & (d), R336.1301, R336.1331]
- 1.4 The permittee shall not use any received cleaned shelled corn in EU-FURNACE which has moisture content in excess of 12% by weight. [R336.1301, R336.1331, R336.1901]
- 1.5 The permittee shall not use any received virgin wood pellets in EU-FURNACE which has moisture content in excess of 12% by weight. [R336.1301, R336.1331, R336.1901]
- 1.6 The permittee shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices on the proper startup and operation of the EU-FURNACE. The permittee shall display these procedures next to the EU-FURNACE at the facility. [R336.1301, R336.1331, R336.1702, R336.1901, R336.1911]

## Recording/Reporting

1.7 The permittee shall keep a separate record of the moisture content for each shipment of cleaned shelled corn or virgin wood pellets received. 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 336.1301, R336.1331, R3361901]

#### **Stack/Vent Restrictions**

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement		
1.8	SV-FURNACE	6	21	R336.1201(3)		
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.					

#### The following conditions apply to: EU-GRAINSTORAGE

#### **Process/Operational Limits**

- 2.1 The cleaned shelled corn or virgin wood pellets shall be stored to prevent absorbance of additional moisture. [R336.1301, R336.1331, R336.1901]
- 2.2 The permittee shall capture bottom ash and clinkers and shall store them in closed containers. The permittee shall dispose of bottom ash and clinkers in an acceptable manner in compliance with all applicable state rules and federal regulations. [R 336.1205, R 336.1225, R 336.1370, R 336.1224, R 336.1901]