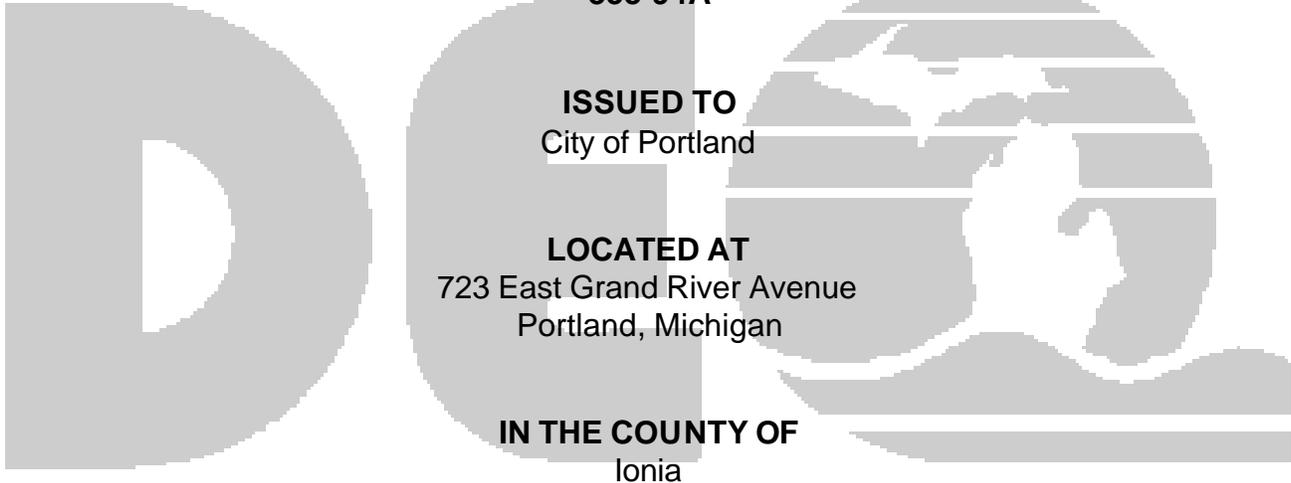


**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

November 8, 2002

**NEW SOURCE REVIEW PERMIT TO INSTALL
353-94A**



ISSUED TO
City of Portland

LOCATED AT
723 East Grand River Avenue
Portland, Michigan

IN THE COUNTY OF
Ionia

STATE REGISTRATION NUMBER
SRN: N5352

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 Part 5505(1) of Article II, Chapter I, Part 55 (Air Pollution Control) of P.A. 451 of 1994. 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: August 22, 2002	
DATE PERMIT TO INSTALL APPROVED: November 8, 2002	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

NEW SOURCE REVIEW PERMIT TO INSTALL

Table of Contents

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	2
General Conditions	3
Emission Unit Identification.....	5
Flexible Group Identification	5
Flexible Group Special Conditions	5
Appendices.....	7

Common Abbreviations / Acronyms Used in this Permit to Install

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 ₂ S	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	NO _x	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
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, 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, PO 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 Act 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. Except as allowed by Rule 285 (a), (b), and (c), the 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
EUENGINE3	Nordberg model FSG-126-HSC 1000 kW dual fuel generator	SVENGINE3
EUENGINE4	Cooper Bessemer model JS81 820 kW diesel engine generator	SVENGINE4
EUENGINE5	Fairbanks Morse model 31 AD 18-8 2000 kW dual fuel generator	SVENGINE5
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 through R336.1290.		

Flexible Group Identification

Flexible Group ID	Emission Units Included in Flexible Group	Stack Identification
FGENGINES	EUENGINE3 EUENGINE4 EUENGINE5	N/A

The following conditions apply to: FGENGINES

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement(s)
1.1.a.	NO _x	FGENGINES	80 tpy*	12-month rolling time period as determined at the end of each calendar month	SC 1.4, 1.5, 1.6 & 1.8	R336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d)
*This limit is based on an emission factor of 0.0017 pound NO _x per cubic foot of natural gas when applied to EUENGINE5, an emission factor of the higher of 0.0017 pound NO _x per cubic foot of natural gas, or other factor as determined from testing pursuant to SC 1.5 when applied to EUENGINE3, an emission factor of 0.5 pound NO _x per gallon of diesel when applied to EUENGINE4 and EUENGINE5, and an emission factor of the higher of 0.5 pound NO _x per gallon of diesel, or other factor as determined from testing pursuant to SC 1.5 when applied to EUENGINE3.						

Material Usage Limits

- 1.2 The sulfur content of all diesel used in FGENGINES shall not exceed 0.5 percent by weight. **[R336.1205(1)(a) & (3)]**
- 1.3 The diesel use for FGENGINES shall not exceed 159,380 gallons per 12-month rolling time period as determined at the end of each calendar month. **[R336.1205(1)(a) & (3), R336.1225, R336.1702 (a), 40 CFR 52.21 (c) & (d)]**

- 1.4 The natural gas use for FGENGINES shall not exceed 47.085 MMscf per 12-month rolling time period as determined at the end of each calendar month. **[R336.1205(1)(a) & (3), R336.1225, R336.1702 (a), 40 CFR 52.21 (c) & (d)]**

Testing

- 1.5 Within 180 days after commencement of trial operation, verification of NO_x emission rates from EUENGINE3, by testing at owner’s expense, in accordance with Department requirements, will be required. No less than 60 days prior to testing, a complete stack-testing plan must be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **[R336.2001, R336.2003, R336.2004]**

Recordkeeping/Reporting/Notification

- 1.6 The permittee shall keep, in a satisfactory manner, monthly diesel and natural gas usage for FGENGINES. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1205(1)(a) & (3), R336.1225, R336.1702 (a), 40 CFR 52.21(c) and (d)]**
- 1.7 The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NO_x emission calculation records for FGENGINES. The permittee shall calculate the NO_x emission rates from FGENGINES using the method in Appendix A. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1205(1)(a) & (3), 40 CFR 52.21 (c) & (d)]**
- 1.8 The permittee shall keep records of the diesel sulfur content, for each new shipment of diesel, on file for a period of five years. **[R336.1205(1)(a) & (3)]**

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement(s)
1.9a	SVENGINE3	12	40	R336.1225, 40 CFR 52.21 (c) & (d)
1.9b	SVENGINE4	12	45	R336.1225, 40 CFR 52.21 (c) & (d)
1.9c	SVENGINE5	24	50	R336.1225, 40 CFR 52.21 (c) & (d)
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

APPENDIX A

Applicant shall calculate the NO_x emissions from FGENGINES using the following equation:

$$ENOX_{monthly} = (F_{gasflow} * EF_{gas}) + (F_{diesel} * EF_{diesel})$$

Where:

“ENOX_{monthly}” is the emission rate, in pounds, of NO_x on a monthly basis and shall be recorded for each calendar month;

“F_{gasflow}” is the natural gas flow rate in cubic feet as recorded for Special Condition No. 1.6;

“F_{diesel}” is the diesel flow rate, in gallon(s), as recorded for Special Condition No. 1.6;

“EF_{gas}” is an emission factor for NO_x, from natural gas combustion, as identified in Special Condition 1.1a;

“EF_{oil}” is an emission factor for NO_x, from fuel oil combustion, as identified in Special Condition 1.1a.

ENOX_{annual}, in tons, is the sum of all ENOX_{monthly} for the previous 12 consecutive calendar months / 2000.

ENOX_{annual} shall be recorded each calendar month.
