MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

February 10, 2003

PERMIT TO INSTALL

268-02

ISSUED TO Providence Hospital and Medical Centers

LOCATED AT 16001 West Nine Mile Road Southfield, Michigan

IN THE COUNTY OF Oakland

STATE REGISTRATION NUMBER M1967

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: January 10, 2003 | | | | |
|--|------------|--|--|--|
| DATE PERMIT TO INSTALL APPROVED: February 10, 2003 | SIGNATURE: | | | |
| DATE PERMIT VOIDED: | SIGNATURE: | | | |
| DATE PERMIT REVOKED: | SIGNATURE: | | | |

PERMIT TO INSTALL

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| | 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 | NOx | Oxides of Nitrogen |
| MAP | Malfunction Abatement Plan | PM | Particulate Matter |
| MDEQ | Michigan Department of Environmental Quality | PM-10 | Particulate Matter less than 10 microns diameter |
| MIOSHA | Michigan Occupational Safety & Health Administration | pph | Pound per hour |
| MSDS | Material Safety Data Sheet | ppm | Parts per million |
| NESHAP | National Emission Standard for Hazardous Air Pollutants | ppmv | Parts per million by volume |
| NSPS | New Source Performance Standards | ppmw | Parts per million by weight |
| NSR | New Source Review | psia | Pounds per square inch absolute |
| PS | Performance Specification | psig | Pounds per square inch gauge |
| PSD | Prevention of Significant Deterioration | scf | Standard cubic feet |
| PTE | Permanent Total Enclosure | sec | Seconds |
| PTI | Permit to Install | SO_2 | Sulfur Dioxide |
| RACT | Reasonable Available Control Technology | 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 |
| VE | Visible Emissions | | |
| | | | |
| | | | |
| | | | |

Common Abbreviations / Acronyms

* 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 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 Department within 10 days after the start-up or shutdown occurred, within 10 days after 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.
- 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 | | |
|--|---|----------------------|--|--|
| EU-Boiler1 | 32.4 MMBtu/hr natural gas or #2 fuel oil-fired boiler | N/A | | |
| | equipped with low NOx dual-fuel burner | | | |
| EU-Boiler2 | 32.4 MMBtu/hr natural gas or #2 fuel oil-fired boiler | N/A | | |
| 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-Boilers | EU-Boiler1 | SV-Boilers |
| | EU-Boiler2 | |

The following conditions apply to: EU-Boiler1

Process/Operational Limits

1.1 EU-Boiler1 is subject to all applicable requirements of the federal Standards of Performance for New Stationary Sources, 40 CFR 60 Subpart A and Subpart Dc. **[40 CFR 60 Subparts A and Dc]**

Recordkeeping/Reporting/Notification

1.2 Written notification of the dates of construction and operation of EU-Boiler1 is required to comply with the federal standards of Performance for New Stationary Sources, 40 CFR, Part 60.7. Notification of construction is due no later than 30 days after the commencement of construction. Notification of actual start up date is due within 15 days after such date. This notification shall be submitted to the District Supervisor, Air Quality Division and shall include the design heat input capacity of the boiler in MMBtu per hour and identification of the fuels to be combusted in the boiler. **[40 CFR 60.48c(a)]**

The following conditions apply to: FG-Boilers

Emission Limits

| | Pollutant | Equipment | Limit | Time Period | Testing/ Monitoring Method | Applicable Requirement |
|-----|-----------|------------|----------|----------------------------|----------------------------------|---------------------------|
| 2.1 | SO_2 | FG-Boilers | 39.0 tpy | 12-month rolling period as | GC 14, SC 2.4 & | R336.1205(1)(a) |
| | | | | | 2.5 | & (3) |
| | | | | each calendar month | | |

Material Usage Limits

2.2 The sulfur content of all fuel oil used in FG-Boilers shall not exceed 0.5 percent by weight. [R336.1205(1)(a) & (3), 40 CFR 60.42c(d)]

2.3 The fuel oil usage for FG-Boilers shall not exceed 1,098,594 gallons per 12-month rolling time period as determined at the end of each calendar month, based on a fuel oil sulfur content of 0.5 percent by weight and a heating value of 137,000 Btu per gallon. **[R336.1205(1)(a) & (3)]**

Recordkeeping/Reporting/Notification

- 2.4 The permittee shall keep monthly natural gas and fuel oil usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, and the amount of fuel oil used, in gallons, on a calendar month basis. The fuel oil records shall include usage rates calculated to a 12-month rolling time period. 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 60.48c(g)]**
- 2.5 The permittee shall maintain a complete copy of the sulfur content, as supplied by the fuel oil supplier, for each shipment of fuel oil. Records of certification must contain the name of the supplier and a statement from the supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c. 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 60.48c(f)(1)]

Stack/Vent Restrictions

| | Stack & Vent ID | Maximum Diameter (inches) | Minimum Height Above Ground Level (feet) | Applicable Requirement | | |
|-----|---|------------------------------|---|---------------------------|--|--|
| 2.6 | SV-Boilers | 84 | 150 | R336.1225 | | |
| | The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air. | | | | | |