MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

May 12, 2008

PERMIT TO INSTALL
60-07

STATE REGISTRATION NUMBER
M3792

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 8, 2007**	
DATE PERMIT TO INSTALL APPROVED: **May 12, 2008**	SIGNATURE: **G. Vinson Hellwig**
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms and Abbreviations		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	NO_x	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 aerodynamic 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. **(R 336.1201(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. **(R 336.1201(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 R 336.1210, 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. **(R 336.1201(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. **(R 336.1201(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 R 336.1219. The notification shall include all of the information required by R 336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R 336.1219(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 Permit to Install. **(R 336.1219)**

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. **(R 336.1901)**

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). **(R 336.1912)**

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 R 336.1301, 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 R 336.1303. **(R 336.1301)**

    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 R 336.1370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

SPECIAL CONDITIONS

Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EU-CFB-BOILER	Circulating fluidized bed (CFB) boiler with a maximum heat input capacity rating of 185 MMBtu/hr for 100 percent coal firing and 205 MMBtu/hr for 100 percent wood firing. Natural gas will be used for startup and as a back-up fuel source. Other system capabilities include a boiler output of 120,000 lbs steam per hour and nominal 10 MW output from the generator. The CFB boiler is equipped with limestone injection. Control equipment includes cyclone, economizer, selective non-catalytic reduction system, and fabric filter.	SV-CFB-BOILER
EU-OLDBOILER	Natural gas/fuel oil-fired boiler; maximum steam production of 70,000 lb/hr; 70MMBtu/hr for gas, 85MMBtu/hr for oil	SV-BOILER
EU-BOILER4	Natural gas/fuel oil-fired boiler with a low-NOx burner and flue gas recirculation; maximum steam production of 70,000 lb/hr; 70MMBtu/hr for gas, 85MMBtu/hr for oil	SV-BOILER
EU-BOILER5	Natural gas/fuel oil-fired boiler with a low-NOx burner and flue gas recirculation; maximum steam production of 70,000 lb/hr; 70MMBtu/hr for gas, 85MMBtu/hr for oil	SV-BOILER
EU-UNLOAD	Coal, wood dust from truck unloading and storage areas	fugitive dust
EU-FUELSILOS	coal and wood storage silos	vent filters
EU-STONESILO	limestone handling transfers and storage	vent filter
EU-ASHSILO	ash handling transfers and storage	vent filter
EU-TRANSFER	transfer of solid fuel to EU-FUELSILOS and from the silos to EU-CFB-BOILER	fabric filter control at transfer points
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.		

Flexible Group Identification

Flexible Group ID	Emission Units Included in Flexible Group	Stack Identification
FG-3BOILERS	EU-OLDBOILER, EU-BOILER4, EU-BOILER5	SV-BOILER
FGFACILITY	All process equipment at the facility including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

The following conditions apply to: EU-CFB-BOILER

Emission Limits

	Pollutant	Limit	Time Period	Equipment	Testing/ Monitoring Method	Applicable Requirement
1.1a	PM	0.025 lb/MMBtu[1]	Test Protocol	EU-CFB-BOILER	SC 1.9, 1.10, 1.13, and 1.14	40CFR60.43b R 336.1331
1.1b	PM-10	0.03 lb/MMBtu[1]	Test Protocol	EU-CFB-BOILER	SC 1.9, 1.10, 1.13, and 1.14	R 336.2802
1.1bb	PM-2.5*	0.03 lb/MMBtu[1]	Test Protocol	EU-CFB-BOILER	SC 1.9, 1.10, 1.13, and 1.14	R 336.2802
1.1c	PM-10	26.9 tpy	12-month rolling time period calculation[2]	EU-CFB-BOILER	SC 1.9, 1.13, 1.14, and 1.16	R 336.2802
1.1cc	PM-2.5*	26.9 tpy	12-month rolling time period calculation[2]	EU-CFB-BOILER	SC 1.9, 1.13, 1.14, and 1.16	R 336.2802
1.1d	SO_2	0.20 lb/MMBtu[1]	24 hour rolling average	EU-CFB-BOILER	SC 1.9, 1.11, and 1.15	40CFR60.42b R 336.1401
1.1e	SO_2	0.15 lb/MMBtu[1]	30 day rolling average	EU-CFB-BOILER	SC 1.9, 1.11, and 1.15	40CFR60.42b R 336.1401 R 336.2802
1.1f	SO_2	125 tpy	12-month rolling time period calculation[2]	EU-CFB-BOILER	SC 1.9, 1.11, 1.15, and 1.16	R 336.2802
1.1g	NO_x	0.10 lb/MMBtu[1]	Test Protocol	EU-CFB-BOILER	SC 1.9, 1.13, and 1.14	40CFR60.44b
1.1h	NO_x	89.8 tpy	12-month rolling time period calculation[2]	EU-CFB-BOILER	SC 1.9, 1.13, 1.14, and 1.16	R 336.2802
1.1i	CO	0.17 lb/MMBtu[1]	Test Protocol	EU-CFB-BOILER	SC 1.9, 1.13, and 1.14	R 336.2802
1.1j	CO	152.6 tpy	12-month rolling time period calculation[2]	EU-CFB-BOILER	SC 1.9, 1.13, 1.14, and 1.16	R 336.2802
1.1k	mercury	3.0E-06 lb/MMBtu[1]	Test Protocol	EU-CFB-BOILER	SC 1.9, 1.13, and 1.14	R 336.1224

* PM-2.5 is established using PM-10 as a surrogate per the U.S. EPA Memorandum from John S. Seitz, Director Office of Air Quality Planning and Standards to Regional Air Directors, *Interim Implementation of New Source Review Requirements for PM2.5* (October 23, 1997)

[1] based on heat input to the boiler

[2] compliance with the tpy limit will be determined by calculating the emission rate using the stack test results expressed in lb/MMBtu heat input and the 12-month heat input for each fuel based on monthly fuel usage records.

Material Usage Limits

1.2 The permittee shall not process or combust any fuel in EU-CFB-BOILER other than bituminous and subbituminous coals, wood as defined in 40 C.F.R. 60.41b, and natural gas. **(R 336.1224, R 336.1225, R 336.1401, R 336.1901)**

1.3 The sulfur content of all coal used in EU-CFB-BOILER shall not exceed a maximum of 1.5 percent by weight, calculated on the basis of 12,000 Btu per pound of coal. **(R 336.1224, R 336.1225, R 336.1401, R 336.1901)**

Process/Operational Limits

1.4 The permittee shall operate EU-CFB-BOILER simultaneously with not more than two of the following emission units: EU-OLDBOILER, EU-BOILER4, or EU-BOILER5. **(Section 109 of the Clean Air Act—National Ambient Air Quality Standards)**

1.5 The permittee shall develop, and submit to the AQD for review and approval, a written startup, shutdown and malfunction plan (SSMP). This SSMP must describe in detail, procedures for operating and maintaining EU-CFB-BOILER during periods of startup, shutdown, and malfunction, and include a program of corrective action for malfunctioning process equipment and associated air pollution control and monitoring equipment. The permittee shall operate EU-CFB-BOILER according to the provisions of the SSMP during periods of startup, shutdown, or malfunction. **(R 336.1911)**

1.6 The permittee shall operate and maintain EU-CFB-BOILER, including air pollution control equipment and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions. Operating limits shall be established during the initial performance test for EU-CFB-BOILER and shall include:

a. maximum fuel use rate
b. minimum exhaust gas flow rate
c. minimum fabric filter pressure drop
d. selective non-catalytic reduction system ammonia or urea solution concentration and injection rate, and the gas temperature range at the injection location

(R 336.1205, R 336.2802)

1.7 Following the date on which the initial performance test for EU-CFB-BOILER is completed the permittee shall not operate above any of the applicable maximum operating limits or below any of the applicable minimum operating limits listed in SC 1.6 at all times except during periods of startup, shutdown and malfunction. Operating limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits. **(R 336.1205, R 336.2802)**

Equipment

1.8 The permitee shall not operate EU-CFB-BOILER unless the selective non-catalytic reduction system for NO_x control and fabric filter for particulate control are installed, maintained, and operated in a satisfactory manner. **[40 CFR 52.21(c) and (d)]**

Testing

1.9 Within 60 days after achieving the maximum production rate at which EU-CFB-BOILER will operate, but not later than 180 days after initial startup, the permittee shall verify emission rates from EU-CFB-BOILER for the following pollutants:

- PM
- Total PM-10
- PM-2.5
- SO_2
- NO_x
- mercury

No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The AQD must approve the final plan prior to testing. All testing shall be at owner's expense, in accordance with Department requirements. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 45 days following the last date of the test. **(40 CFR Part 60, R 336.1224, R 336.1225)**

Monitoring

1.10 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the visible emissions from EU-CFB-BOILER on a continuous basis. The permittee shall install and operate the COM system to meet the timelines, requirements and reporting detailed in Appendix A. and shall use the COM data for determining compliance with GC 11, SC 1.1a, 1.1b, 1.1bb, 1.1c and 1.1cc. **(40 CFR §60.48b)**

1.11 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the SO_2 from EU-CFB-BOILER on a continuous basis. The permittee shall install and operate the CEM system to meet the timelines, requirements and reporting detailed in Appendix A. and shall use the CEM data for determining compliance with SC 1.1d, 1.1e, and 1.1f. **(40 CFR §60.47b)**

1.12 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NO_x from EU-CFB-BOILER on a continuous basis. The permittee shall install and operate the CEM system to meet the timelines, requirements and reporting detailed in Appendix A. and shall use the CEM data for determining compliance with SC 1.1g and 1.1h. **(40 CFR §60.48b)**

1.13 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the volumetric exhaust gas flow rate from EU-CFB-BOILER on a continuous basis. The permittee shall install and operate the CEM system to meet the timelines, requirements and reporting detailed in Appendix A. and shall use the CEM data for determining compliance with SC 1.1a through SC 1.1k. **(40 CFR §60.48b)**

1.14 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the oxygen content or CO_2 content from EU-CFB-BOILER on a continuous basis. The permittee shall install and operate the CEM system to meet the timelines, requirements and reporting detailed in Appendix A. and shall use the CEM data for determining compliance with SC 1.1a through SC 1.1k. **(40 CFR §60.48b)**

1.15 The permittee shall, on the basis indicated, analyze and record the following information:

(a) For each coal shipment received, the permittee shall obtain from the coal supplier a laboratory analysis of the ash content in percent by weight, sulfur content in percent by weight, and heat value in Btu per pound. The determination of sulfur content shall be carried out in accordance with a procedure acceptable to the Air Quality Division. For each coal shipment received, the permittee shall record the date received, source of coal and shipper, and tons received.

(b) At least once per calendar year, the permittee shall have an analysis performed of the coal ash content, sulfur content, and heat value in Btu per pound. This analysis shall be independent of the analyses received from the coal supplier with each coal delivery. The determination of coal sulfur content shall be carried out in accordance with ASTM Method 3177-75, Method 4239-85, or a method approved by the District Supervisor.
R 336.1224, R 336.1225

Recordkeeping/Reporting/Notification

1.16 The permittee shall maintain the following records

- Amounts of each fuel combusted in EU-CFB-BOILER on a monthly basis
- Amount of limestone injected in EU-CFB-BOILER on a monthly basis
- Analysis results required under special condition 1.15
- All records required by 40 CFR §60.7 and §60.52a
- Total Megawatts produced on a monthly basis

All records shall be maintained in a format acceptable to the Air Quality Division and shall be retained for a period of at least five years.

1.17 The permittee shall provide the following notifications:

- All notifications required by 40 CFR §60.7 and §60.8

Miscellaneous

1.18 The permittee shall comply with all applicable sections of 40 CFR Part 60, Subpart Db.

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
1.19	SV-CFB-BOILER	72	165	R 336.1224, R 336.1225
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.			

The following conditions apply to: EU-BOILER4 and EU-BOILER5

Visible Emission Limits

2.1 Visible emissions from EU-BOILER4 and EU-BOILER5, when firing fuel oil, shall not exceed 20 percent opacity, as specified in the federal Standards of Performance for New Stationary Sources, 40 CFR 60.43c(c). **[40 CFR Part 60 Subparts A & Dc]**

Material Usage Limits

2.2 The sulfur content of the fuel oil shall not exceed 0.5 percent by weight. **[R336.1205(1)(a) and (b), 40 CFR 60.42c(d)]**

Equipment

2.3 The permittee shall not operate EU-BOILER4 and EU-BOILER5 unless each low-NO_x burner and flue gas recirculation system is installed, maintained, and operated in a satisfactory manner. **[R336.1205(1)(a) and (b), R336.1225, R336.1702(a), R336.1901, R336.1910]**

Monitoring

2.4 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas and fuel oil usage for EU-BOILER4 and EU-BOILER5 on a continuous basis. **[R336.1205(1)(a) and (b), R336.1225, R336.1702(a)]**

Recordkeeping/Reporting/Notification

2.5 The permittee shall keep, in a satisfactory manner, monthly natural gas and fuel oil usage records for EU-BOILER4 and EU-BOILER5. 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) and (b), R336.1225, R336.1702(a), 40 CFR 60.48c(g)]**

2.6 The permittee shall keep, in a satisfactory manner, fuel oil supplier certification for each delivery of fuel oil. The certification shall include the name of the fuel oil supplier and a statement from the fuel oil supplier that the fuel oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c. **[40CFR 60.48c(f)]**

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
2.7	SV-BOILER	108	150	R336.1225, 40 CFR 52.21 (c) & (d)
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air. This condition shall become void upon receipt by the AQD District Supervisor of the notification required in SC 1.19.			

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement
2.8	SV-BOILER	60	160	R336.1225, 40 CFR 52.21 (c) & (d)
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air. This condition shall become effective upon receipt by the AQD District Supervisor of the notification required in SC 1.19.			

The following conditions apply to: EU-UNLOAD

3.1 The permittee shall install, operate, and maintain an enclosure around the wood and coal unloading areas and shall utilize procedures to minimize the generation and transport of fugitive emissions from this operation.

3.2 The permittee shall not stockpile wood or coal on site outside of the fuel silos. Use of an unloading area to facilitate the unloading and transfer of wood or coal to the fuel silos is considered to be normal operation.

The following conditions apply to: EU-FUELSILOS

4.1 The permittee shall install, operate, and maintain, a filter on each fuel storage silo vent.

The following conditions apply to: EU-STONESILO

5.1 The permittee shall utilize equipment and procedures to minimize the generation and transport of fugitive emissions from this operation.

5.2 The permittee shall install, operate, and maintain, a filter on each limestone storage silo vent.

The following conditions apply to: EU-ASHSILO

6.1 The permittee shall utilize equipment and procedures to minimize the generation and transport of fugitive emissions from this operation.

6.2 The permittee shall install, operate, and maintain, a filter on each ash storage silo vent.

The following conditions apply to: EU-TRANSFER

7.1 The permittee shall install and maintain enclosures on all conveyors in EU-TRANSFER

7.2 The permittee shall install, operate, and maintain, an emission capture system with fabric filter control for all EU-TRANSFER conveyor transfer points.

The following conditions apply to: FG-3BOILERS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement
8.1a	NO_x	FG-3BOILERS	99.9 tpy	12-month rolling time period as determined at the end of each calendar month	SC 8.4, 8.5, 8.6, and 8.7	R336.1205(1)(a) and (b)
8.1b	SO_2	FG-3BOILERS	99.9 tpy	12-month rolling time period as determined at the end of each calendar month	SC 8.4, 8.5, 8.6, and 8.7	R336.1205(1)(a) and (b)

Recordkeeping / Reporting / Notification

8.2 All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **[R336.1205(1)(a) and (b)]**

8.3 The permittee shall keep, in a satisfactory manner, monthly fuel use (natural gas and fuel oil) records for FG-3BOILERS. 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) and (b)]**

8.4 The permittee shall keep, in a satisfactory manner, monthly and previous 12-month NO_x and SO_2 emission calculation records for FG-3BOILERS, as required by SC 8.1a, 8.1b and 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) and (b)]**

Procedures for Calculating Facility NO_x and SO_2 Emissions

8.5 Compliance with the NO_x and SO_2 emission limits will be demonstrated by keeping track of all fuel usage (natural gas and fuel oil) for all equipment using such fuel at this facility and multiplying that fuel usage by an equipment specific emission factor. The emission factors are typically expressed as a mass weight of pollutant per unit of fuel. **[R336.1205(1)(a) and (b)]**

8.6 The permittee shall use emission factors from equipment vendor guarantees or from source specific testing (stack testing) or from the fuel supplier certifications (for SO_2 calculations). If vendor data or stack test data is not available, the permittee shall use emission factors contained in the most recent AP-42 (Compilation of Air Pollutant Emission Factors) or the most recent FIRE (Factor Information Retrieval) database. If other emission source values are used, the permittee shall obtain the approval of the district supervisor before using the emission factors to calculate emissions. **[R336.1205(1)(a) and (b)]**

8.7 The permittee shall document the source and date of origin of the emission factors used in the calculations. **[R336.1205(1)(a) and (b)]**

The following conditions apply to: FGFACILITY

9.1 Upon written notification by the Air Quality Division, the permittee shall develop, implement, and operate a program for the control of fugitive emissions from the facility in accordance with the requirements of R336.1371 and R336.1372.

Recordkeeping / Reporting / Notification

9.2 All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **[R 336.1205(1)(a) and (b)]**

9.3 The permittee shall keep, in a satisfactory manner, monthly fuel use (coal, wood, natural gas, and fuel oil) records for FG-FACILITY. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R 336.1205(1)(a) and (b)]**

9.4 This Permit to Install (No 60-07) shall become effective on June 16, 2008, unless a timely request for review is filed with the Administrator of the United States Environmental Protection Agency pursuant to 40 CFR 124.15 and 124.19. **(40 CFR 124.15 and 124.19)**

APPENDIX A

Installation and operation of the continuous emission monitoring system (CEMS) or continuous opacity monitoring system (COMS)

Applicant shall monitor and record the visible emissions, volumetric exhaust gas flow rate, oxygen content or CO_2 content, and SO_2 and NO_x emissions from EU-CFB-BOILER on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division (AQD). Installation and operation of the continuous emission monitoring system (CEMS) and continuous opacity monitoring system (COMS) shall meet the following timelines:

a) Within 30 calendar days of the issuance of this permit, applicant shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS/COMS.
b) Not less than 60 days prior to testing, the applicant shall submit two copies of a complete test plan for the CEMS/COMS to the AQD for approval.
c) Prior to startup of EU-CFB-BOILER, the applicant shall complete the installation and testing of the CEMS/COMS.
d) Within 60 days of completion of testing, the applicant shall submit to the AQD two copies of the final report demonstrating the CEMS/COMS complies with the requirements of Performance Specification (PS) 1, 2, or 3 of Appendix B, 40 CFR Part 60 as applicable.

The CEMS/COMS required by this condition shall meet the following requirements:

e) The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
f) The CEMS/COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 1, 2, or 3 of Appendix B, 40 CFR Part 60 as applicable.
g) Each calendar quarter, the applicant shall perform and report the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the Applicant shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F).
h) The applicant shall perform an annual audit of the COMS using the procedures set forth in USEPA Publication 450/4-92-010, "Performance Audits Procedures for Opacity Monitors", or a procedure acceptable to AQD. Within 30 days after the completion of the audit, the results of the annual audit shall be submitted to the AQD.
i) All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

In accordance with 40 CFR 60.7(c) and (d), the applicant shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to Air Quality Division, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:

j) A report of each exceedance above the respective emission limit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
k) A report of all periods of CEMS/COMS downtime and corrective action.
l) A report of the total operating time of EU-CFB-BOILER during the reporting period.
m) If no exceedances or CEMS/COMS downtime occurred during the reporting period, applicant shall report that fact.
n) A report of any periods that the CEMS exceeds the instrument range.

These monitors and the resulting data shall be used for determing compliance with Special Conditions SC 1.1a through SC 1.1o. (40 CFR §60.48b)