MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

June 29, 2011
REVISED July 12, 2011

PERMIT TO INSTALL
317-07

ISSUED TO
Wolverine Power Supply Cooperative, Inc.

LOCATED AT
Sections 23 and 24, T35N (City of Rogers City, Michigan)
Section 26 and 35 T35N-R5E (Rogers Township, Michigan)

IN THE COUNTY OF
Presque Isle

STATE REGISTRATION NUMBER
N7867

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: **April 6, 2011**	
DATE PERMIT TO INSTALL APPROVED: **June 29, 2011**	SIGNATURE: **G. Vinson Hellwig**
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	3
General Conditions	4
Special Conditions	6
Emission Unit Identification	6
Flexible Group Identification	7
Auxiliary Boiler	8
Emergency Generator	12
Fire Pump	16
Turbine Generator	19
Cooling Towers	23
Circulating Fluidized Bed Boilers	25
Limestone Crushing	34
Limestone Preparation	37
CFB Bed Ash Collection/Removal	40
Economizer Flyash Collection/Removal and Storage	43
Solid Fuel Handling	46
Coal Crushing	49
Coal Silo	52
Appendix A – Continuous Opacity Monitoring System (COMs) Requirements	55
Appendix B – CEMS/CERMS Requirements	56
Appendix C – Reporting Requirements	58
C - 1: Reporting During Normal Operation	58
C - 2: Reporting when CEMS Data Unavailable	59
C – 3: Reporting for Excess Emissions During Emergency Conditions	59

C – 4: Reporting for Fuel Pretreatment 60

C – 5: Reporting for Unavailability of Opacity, SO_2 or NO_x Emissions Data..... 60

C – 6: Miscellaneous Reporting 60

C – 7: Excess Visible Emissions Reporting..... 61

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
CERM	Continuous Emission Rate Monitoring	°F	Degrees Fahrenheit
CFR	Code of Federal Regulations	gr	Grains
COM	Continuous Opacity Monitoring	Hg	Mercury
EPA	U.S. Environmental Protection Agency	hr	Hour
EU	Emission Unit	H_2S	Hydrogen Sulfide
FG	Flexible Group	HP	Horsepower
GACS	Gallon of Applied Coating Solids	lb	Pound
GC	General Condition	g	Gram
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	GW	Gigawatts
MAP	Malfunction Abatement Plan	ng	Nanogram
MDEQ	Michigan Department of Environmental Quality	NMHC	Non-Methane Hydrocarbons
MIOSHA	Michigan Occupational Safety & Health Administration	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO_x	Oxides of Nitrogen
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM	Particulate Matter
NSPS	New Source Performance Standards	PM10	PM less than or equal to a nominal 10 micrometers, in diameter
NSR	New Source Review	PM2.5	PM less than or equal to a nominal 2.5 micrometers, in diameter
PS	Performance Specification	pph	Pound per hour
PSD	Prevention of Significant Deterioration	ppm	Parts per million
PTE	Permanent Total Enclosure	ppmv	Parts per million by volume
PTI	Permit to Install	ppmw	Parts per million by weight
RACT	Reasonably Available Control Technology	psia	Pounds per square inch absolute
ROP	Renewable Operating Permit	psig	Pounds per square inch gauge
SC	Special Condition	scf	Standard cubic feet
SCR	Selective Catalytic Reduction	sec	Seconds
SRN	State Registration Number	SO_2	Sulfur Dioxide
TAC	Toxic Air Contaminant	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
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. **(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 48909-7760, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(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.

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
EUCFB1	Circulating fluidized bed (CFB) boiler with a maximum heat input rating of 3,030 million Btu per hour. The boiler will be fired with Powder River Basin Coal (sub-bituminous), petroleum coke and biomass. Illinois Basin Coal (bituminous) may be used as a secondary fuel and No. 2 fuel oil for start-up. The air pollution control system (APC) will consist of selective non-catalytic reduction (SNCR), limestone injection, polishing scrubber, fabric filter, and sorbent injection.	SVCFB1
EUCFB2	Circulating fluidized bed (CFB) boiler with a maximum heat input rating of 3,030 million Btu per hour. The boiler will be fired with Powder River Basin Coal (sub-bituminous), petroleum coke and biomass. Illinois Basin Coal (bituminous) may be used as a secondary fuel and No. 2 fuel oil for start-up. The air pollution control system (APC) will consist of selective non-catalytic reduction (SNCR), limestone injection, polishing scrubber, fabric filter, and sorbent injection.	SVCFB2
EUAUXBOILER	A diesel fuel oil-fired boiler with a maximum heat input rating of 72.4 million Btu per hour. The APC will consist of a Low NO_x burner.	SVAUXBOILER
EUEMGGEN	A diesel fuel oil-fired emergency generator with a nameplate capacity of 4,000 horsepower.	SVEMGGEN
EUFIREPUMP	A diesel fuel oil-fired engine driven fire pump with a nameplate capacity of 420 horsepower.	SVFIREPUMP
EUBLACKSTART	A diesel fuel oil-fired turbine generator with a maximum heat input rating of 540 million Btu per hour.	SVBLACKSTART
EUCOOLING1	Mechanical induced draft cooling tower with drift eliminator	SVCOOLING1
EUCOOLING2	Mechanical induced draft cooling tower with drift eliminator	SVCOOLING2
EULIMESTONE	Processing and handling of limestone prior to storage. This equipment includes two crushers controlled by a common fabric filter.	SVLIMESTONE
EULIMESTONEPREP	Limestone preparation facilities. There are two identical trains. Each train consists of a limestone mill and separator, a cyclone collector heater, screen, dust collectors and blowers. The finished product is stored in a silo.	SVLIMESTONEPREP1 SVLIMESTONEPREP2
EUBEDASH	Equipment used for the collection and removal of ash from the fluidized bed from each unit. This equipment includes both mechanical and pneumatic conveying systems, surge bins, clinker grinders and a common storage silo. This emission unit also includes the wet unloading equipment and the bed ash re-injection system.	SVBEDASH
EUFLYASH	Equipment used for the collection and removal of ash from the economizer and fabric filter hoppers. This equipment includes pneumatic conveying systems and a common storage silo. This emission unit also includes both wet and dry unloading equipment.	SVFLYASH

Emission Unit ID	Emission Unit Description	Stack Identification
EUSOLIDFUELHANDLING	Equipment used for solid fuel handling system. Equipment includes the dockside barge unloading system, conveying system, transfer towers and storage piles. The conveyors will use hood covers. The transfer towers are equipped with magnetic separators and either dust suppression or fabric filters.	SVTTOWER3, SVTTOWER4
EUFUELCRUSHER	Two hammer mill crushers, with associated equipment, used to reduce solid fuel to the appropriate size for boiler feed. This equipment is housed in the Crusher and Sample House and controlled by a common dust collector.	SVFUELCRUSHER
EUFUELSILOS	Five storage silos used to hold the crushed solid fuel prior to boiler feed. Two dust collectors control emissions from these silos.	SVFUELSILO1, SVFUELSILO2
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
FGCFB	EUCFB1, EUCFB2	SVCFB1, SVCFB2
FGCOOLINGTWR	EUCOOLING1, EUCOOLING2	SVCOOLING1, SVCOOLING2

The following conditions apply to: EUAUXBOILER

DESCRIPTION
A diesel fuel oil-fired boiler with a maximum heat input rating of 72.4 million Btu per hour. The boiler will supply steam for building heating typically when the main CFB boilers are not operating and for various applications during plant start-up.

POLLUTION CONTROL EQUIPMENT
Low NOx burner to control emissions of NOx and good combustion control technology to control emissions of CO and VOC.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	10 percent	6-minute average except one 6-minute average per hour of not more than 20 percent	EUAUXBOILER	SC V.1	R 336.1301 R 336.2810 40 CFR 52.21(j) 40 CFR 60.43c(c)
2. PM	0.11 pph	Test protocol will specify averaging time	EUAUXBOILER	SC V.2	R 336.1331 R 336.2810 40 CFR 52.21(j) R 336.1299(2)(b)
3. PM10	2.17 pph	Test protocol will specify averaging time	EUAUXBOILER	SC V.3	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d) R 336.2810 40 CFR 52.21(j)
4. PM2.5	2.17 pph	Test protocol will specify averaging time	EUAUXBOILER	SC V.3	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d) R 336.2810 40 CFR 52.21(j)
5. NO_x	1.67 pph	Test protocol will specify averaging time	EUAUXBOILER	SC V.3	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d) R 336.2810 40 CFR 52.21(j)
6. CO	6.11 pph	Test protocol will specify averaging time	EUAUXBOILER	SC V.3	R 336.2804 40 CFR 52.21(d) R 336.2810 40 CFR 52.21(j)
7. VOC	0.30 pph	Test protocol will specify averaging time	EUAUXBOILER	SC V.2	R 336.2810 40 CFR 52.21(j) R 336.1299(2)(b)
8. Hydrogen Chloride (HCl)	0.050 pph	Test protocol will specify averaging time	EUAUXBOILER	SC V.2	R 336.1225(1) R 336.1299(2)(b)

II. MATERIAL LIMIT(S)

1. The permittee shall only combust diesel fuel in EUAUXBOILER. The sulfur in the diesel fuel shall not exceed 0.5 percent sulfur, by weight. **(R 336.12810, 40 CFR 52.21 (j), 40 CFR 60.42c(d), R 336.1299(2)(b))**

2. The permittee shall only combust ultra low sulfur diesel fuel in EUAUXBOILER. Ultra low sulfur diesel fuel is defined as having a sulfur content not to exceed 15 parts per million. **(R 336.2810, 40 CFR 52.21(j), R 336.1299(2)(b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUAUXBOILER for more than 4,000 hours per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a), R 336.1225, R 336.1702)**

2. The permittee shall not operate EUAUXBOILER unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

3. Within 180 days after commencement of initial start-up of EUAUXBOILER, the permittee shall develop and submit an approvable Energy Efficiency Management Plan (EEMP) to the AQD District Supervisor. Thereinafter, the permittee shall not operate EUAUXBOILER unless EEMP is implemented and maintained. At a minimum, the EEMP shall specify the following:

   a. Work practice standards, to ensure optimal energy efficiency in the operation of all motors, fans, and equipment necessary to operate the EUAUXBOILER.
   b. A maintenance plan, to ensure optimal energy efficiency of all motors, fans, and equipment necessary to operate the EUAUXBOILER.

   The permittee shall amend the EEMP within 45 days if any changes are deemed necessary, or upon request by the AQD District Supervisor. The permittee shall submit the EEMP and any amendments to the AQD District Supervisor for review and approval. **(R 336.2810, 40 CFR 52.21(j))**

4. The permittee shall not operate EUAUXBOILER unless an acceptable plan that describes how emissions will be minimized during all startups and shutdowns has been submitted to the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices and good combustion control. **(R 336.1911, R 336.1912, R 336.2802, 40 CFR 52.21)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUAUXBOILER unless the low-NOx burner is installed, maintained, and operated in a satisfactory manner. **(R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall equip and maintain EUAUXBOILER with a non-resettable hour meter to track the number of hours the auxiliary boiler operates. **(R 336.1205(1)(a))**

3. EUAUXBOILER shall not exceed a maximum heat input rating of 72.4 million Btu per hour. **(R 336.1205(1)(a), 40 CFR Part 72.2)**

4. The permittee shall incorporate energy efficient equipment wherever practical in the design of EUAUXBOILER. The design of EUAUXBOILER, at a minimum, shall specify the following:

   a. All motors over 100 horsepower shall be variable speed.
   b. Air pollution control devices shall be operated at the minimum pressure drop required to maintain compliance with permit limits and conditions.
   c. Thermal performance of all heat transfer components at the facility, including structures, shall be designed to maximize energy efficiency.
   d. Energy efficiency shall be optimized, where practical, for all fans, motors and other equipment necessary to operate EUAUXBOILER and support systems.

   (R 336.2810, 40 CFR 52.21(j))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 60 days after achieving maximum production rate of EUAUXBOILER, but not later than 180 days after commencement of initial start-up of EUAUXBOILER, the permittee shall evaluate visible emissions from EUAUXBOILER, as required by federal Standards of Performance for New Stationary Sources, at owner's expense, in accordance 40 CFR Part 60 Subparts A and Dc. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 60 days following the last date of the evaluation. **(40 CFR 60.45c)**

2. Within 180 days after commencement of initial start-up of EUAUXBOILER and every five years thereafter, the permittee shall verify PM, VOC, and HCl emission rates from EUAUXBOILER, by testing at owner's expense, in accordance with Department requirements. 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. 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. **(R 336.2810, 40 CFR 52.21(j), R 3336.1299(2)(b))**

3. Within 180 days after commencement of initial start-up of EUAUXBOILER and every five years thereafter, the permittee shall verify PM_{10}, PM2.5, NO_x, and CO emission rates from EUAUXBOILER, by testing at owner's expense, in accordance with Department requirements. 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. 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. **(R 336.2810, 40 CFR 52.21(j))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor and record, in a satisfactory manner, the monthly hours of operation for EUAUXBOILER. **(R 336.1205(1)(a))**

2. The permittee shall keep, in a satisfactory manner, fuel supplier certification records for each delivery of the diesel fuel oil. The certification shall include the name of the oil supplier, sulfur content, and a statement that the fuel complies with the specifications under the definition of distillate oil in 40 CFR 60.41c. **(40 CFR 60.48c(f), 40 CFR 60.47c(c))**

3. The permittee shall keep, in a satisfactory manner, monthly records of the diesel fuel use for EUAUXBOILER. **(40 CFR 60.48c(g))**

VII. REPORTING

1. The permittee shall provide written notification to the Department of the date construction commences, the anticipated start-up and actual start-up of EUAUXBOILER in accordance with 40 CFR 60.7 and 60.48c(a). The notification shall include the design heat input, an identification of the fuels to be combusted and the annual capacity factor for EUAUXBOILER. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(R 336.1201(7), 40 CFR 60.7, 40 CFR 60.48c(a))**

2. The permittee shall submit to the Department a complete report of opacity observations to the AQD within 60 days following the last date of the evaluation. **(40 CFR 60.48c(b))**

3. The permittee shall submit to the Department a complete report of verification PM, PM10, PM2.5, NO_x, CO, VOC, and HCl emission rates to the AQD within 60 days following the last date of the test. **(R 336.2810, 40 CFR 52.21(j), R 336.1299(2)(b))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVAUXBOILER	36.0	450.0	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to EUAUXBOILER. **(40 CFR Part 60 Subparts A & Dc)**

The following conditions apply to: EUEMGGEN

DESCRIPTION
A diesel fuel oil-fired emergency generator with a nameplate capacity of 4,000 horsepower. The emergency generator will supply all essential safe standby loads of the plant when all other normal power sources are not available.

POLLUTION CONTROL EQUIPMENT
Good combustion control technology to control emissions of CO and VOC.

I. EMISSION LIMIT(S)

Emission limitations for emergency generator engines built during calendar year 2007 through 2010.

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.20 g/HP-hr*	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2810 40 CFR 52.21(j) 40 CFR 60.4205(b)
2. PM10	1.76 pph	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2810 40 CFR 52.21(j)
3. PM2.5	1.76 pph	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2810 40 CFR 52.21(j)
4. NO_x	5.8 g/HP-hr*	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d) R 336.2810 40 CFR 52.21(j) 40 CFR 60.4205(b)
5. CO	3.7 g/HP-hr*	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2804 40 CFR 52.21 (d) R 336.2810 40 CFR 52.21(j) 40 CFR 60.4205(b)
6. HC (Total Hydrocarbons)	1.0 g/HP-hr*	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	40 CFR 60.4205(b)

Emission limitations for emergency generator engines built during calendar year 2011 and thereafter.

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
7. PM	0.15 g/HP-hr*	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2810 40 CFR 52.21(j) 40 CFR 60.4205(b)
8. PM10	1.76 pph	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2810 40 CFR 52.21(j)
9. PM2.5	1.76 pph	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2810 40 CFR 52.21(j)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
10. NMHC + NO_x	4.8 g/HP-hr*	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d) 40 CFR 60.4205(b)
11. CO	2.6 g/HP-hr*	Test protocol will specify averaging time	EUEMGGEN	SC VI.1, VI.2, GC 13	R 336.2804 40 CFR 52.21 (d) 40 CFR 60.4205(b)
*Emission limits based on Tier 2 Exhaust Emission Standards listed in 40 CFR 89.112 for new nonroad combustion ignition engines with a model year of 2011 or later.					

II. MATERIAL LIMIT(S)

1. The permittee shall only burn diesel fuel, in EUEMGGEN, with a maximum sulfur content of 15 ppm per gallon, and a minimum centane index of 40; or a maximum aromatic content of 35 percent by volume. **(40 CFR 60.4207(b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain EUEMGGEN according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the manufacturer to ensure compliance with the applicable emission standards in 40 CFR 60.4205(b). **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4205(b), 40 CFR 60.4206, 40 CFR 60.4211(c))**

2. The permittee shall not operate EUEMGGEN for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a), R 336.2810, 40 CFR 52.21(j))**

3. The permittee may operate EUEMGGEN for no more than 100 hours per 12-month rolling time period as determined at the end of each calendar month for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. **(R 336.1205(1)(a), R 336.1225, R 336.1702, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4211(e))**

4. The permittee shall not operate EUEMGGEN unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

5. Within 180 days after commencement of initial start-up of EUEMGGEN, the permittee shall develop and submit an approvable Energy Efficiency Management Plan (EEMP) to the AQD District Supervisor. Thereinafter, the permittee shall not operate EUEMGGEN unless EEMP is implemented and maintained. At a minimum, the EEMP shall specify the following:

a. Work practice standards, to ensure optimal energy efficiency in the operation of all motors, fans, and equipment necessary to operate the EUEMGGEN.
b. A maintenance plan, to ensure optimal energy efficiency of all motors, fans, and equipment necessary to operate the EUEMGGEN.

The permittee shall amend the EEMP within 45 days if any changes are deemed necessary, or upon request by the AQD District Supervisor. The permittee shall submit the EEMP and any amendments to the AQD District Supervisor for review and approval. **(R 336.2810, 40 CFR 52.21(j))**

6. The permittee shall not operate EUEMGGEN unless an acceptable plan that describes how emissions will be minimized during all startups and shutdowns has been submitted to the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices and good combustion control. **(R 336.1911, R 336.1912, R 336.2802, 40 CFR 52.21)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUEMGGEN with a non-resettable hour meter to track the number of hours the engine operates. **(R 336.1205(1)(a), 40 CFR 60.4209(a))**

2. EUEMGGEN shall not exceed a nameplate capacity of 4,000 HP. **(R 336.1205(1)(a), 40 CFR Part 72.2)**

3. The permittee shall incorporate energy efficient equipment wherever practical in the design of EUEMGGEN. The design of EUEMGGEN, at a minimum, shall specify the following:

a. All motors over 100 horsepower shall be variable speed.
b. Air pollution control devices shall be operated at the minimum pressure drop required to maintain compliance with permit limits and conditions.
c. Thermal performance of all heat transfer components at the facility, including structures, shall be designed to maximize energy efficiency.
d. Energy efficiency shall be optimized, where practical, for all fans, motors and other equipment necessary to operate EUEMGGEN and support systems.

(R 336.2810, 40 CFR 52.21(j))

V. TESTING/SAMPLING NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor and record in a satisfactory manner, a log of the monthly hours of operation of EUEMGGEN. The log shall include the time of operation and the reason the engine was in operation. **(R 336.1205(1)(a), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4214(b))**

2. The permittee shall submit an initial notification which includes the following information:

a) A statement that EUEMGGEN operates as an emergency engine, as defined in 40 CFR 63.6675, and a statement that EUEMGEN has no additional requirements under 40 CFR Part 63, Subparts A or ZZZZ; **(40 CFR 63.6645(f), 40 CFR 63.6590(b))**

b) The name and address of the owner or operator; **(40 CFR 63.9(b)(2)(i), 40 CFR 63.6645(f))**

c) The physical location of the affected source; **(40 CFR 63.9(b)(2)(ii), 40 CFR 63.6645(f))**

d) A statement that the initial notification is required under 40 CFR Part 63, Subpart ZZZZ, 63.6645(f); **(40 CFR 63.9(b)(2)(iii), 40 CFR 63.6645(f))**

e) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant; **(40 CFR 63.9(b)(2)(iv), 40 CFR 63.6645(f))** and

f) A statement of whether the affected source is a major source or an area source. **(40 CFR 63.9(b)(2)(v), 40 CFR 63.6645(f))**

3. The permittee shall keep, in a satisfactory manner, fuel supplier certification records for each delivery of the diesel fuel oil. The certification shall include the name of the oil supplier, sulfur content, and a statement that the fuel complies with the specifications under the definition of distillate oil in 40 CFR 60.41c. **(R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUEMGGEN authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUEMGGEN. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEMGGEN	16	14	R 336.1225 R 336.2803, R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and IIII, as they apply to EUEMGGEN. **(40 CFR Part 60 Subparts A & IIII)**

2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines, as they apply to EUEMGGEN. **(40 CFR, Part 63, Subparts A and ZZZZ)**

The following conditions apply to: EUFIREPUMP

DESCRIPTION
A diesel fuel oil-fired engine driven fire pump with a nameplate capacity of 420 horsepower. The engine driven fire pump serves as a backup stand by for the primary pump (electric motor-driven jockey pump), which maintains the water pressure within the fire suppression system.

POLLUTION CONTROL EQUIPMENT
Good combustion control technology to control emissions of CO and VOC.

I. EMISSION LIMIT(S)

Pollutant	Limit*	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM	0.15 g/HP-hr*	Test protocol will specify averaging time	EUFIREPUMP	SC VI.1, GC 13	R 336.2810 40 CFR 52.21(j) 40 CFR 60.4205(c) & Table 4
2. PM10	0.14 pph	Test protocol will specify averaging time	EUFIREPUMP	SC VI.1, GC 13	R 336.2810 40 CFR 52.21(j)
3. PM2.5	0.14 pph	Test protocol will specify averaging time	EUFIREPUMP	SC VI.1, GC 13	R 336.2810 40 CFR 52.21(j)
4. NMHC + NO_x	3.0 g/HP-hr*	Test protocol will specify averaging time	EUFIREPUMP	SC VI.1, GC 13	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d) R 336.2810 40 CFR 52.21(j) 40 CFR 60.4205(c) & Table 4

* Emission limits based on Table 4 of 40 CFR 60.4205 and 420 HP with a model year of 2008 or later.

II. MATERIAL LIMIT(S)

1. The permittee shall only burn diesel fuel, in EUFIREPUMP, with a maximum sulfur content of 15 ppm per gallon, and a minimum centane index of 40; or a maximum aromatic content of 35 percent by volume. **(40 CFR 60.4207(b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain EUFIREPUMP according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the manufacturer to ensure compliance with the applicable emission standards in 40 CFR 60.4205(c). **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4205(c), 40 CFR 60.4206, 40 CFR 60.4211(c))**

2. The permittee shall not operate EUFIREPUMP for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a), R 336.2810, 40 CFR 52.21(j))**

3. The permittee may operate EUFIREPUMP for no more than 100 hours per 12-month rolling time period as determined at the end of each calendar month for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the

manufacturer, the vendor, or the insurance company associated with the engine. Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. **(R 336.1205(1)(a), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4211(e))**

4. The permittee shall not operate EUFIREPUMP unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

5. Within 180 days after commencement of initial start-up of EUFIREPUMP, the permittee shall develop and submit an approvable Energy Efficiency Management Plan (EEMP) to the AQD District Supervisor. Thereinafter, the permittee shall not operate EUFIREPUMP unless EEMP is implemented and maintained. At a minimum, the EEMP shall specify the following:

   a. Work practice standards, to ensure optimal energy efficiency in the operation of all motors, fans, and equipment necessary to operate the EUFIREPUMP.
   b. A maintenance plan, to ensure optimal energy efficiency of all motors, fans, and equipment necessary to operate the EUFIREPUMP.

   The permittee shall amend the EEMP within 45 days if any changes are deemed necessary, or upon request by the AQD District Supervisor. The permittee shall submit the EEMP and any amendments to the AQD District Supervisor for review and approval. **(R 336.2810, 40 CFR 52.21(j))**

6. The permittee shall not operate EUFIREPUMP unless an acceptable plan that describes how emissions will be minimized during all startups and shutdowns has been submitted to the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices and good combustion control. **(R 336.1911, R 336.1912, R 336.2802, 40 CFR 52.21)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUFIREPUMP with a non-resettable hour meter to track the number of hours the engine operates. **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4209(a))**

2. EUFIREPUMP shall not exceed a nameplate capacity of 420 HP. **(R 336.1205(1)(a), 40 CFR Part 72.2)**

3. The permittee shall incorporate energy efficient equipment wherever practical in the design of EUFIREPUMP. The design of EUFIREPUMP, at a minimum, shall specify the following:

   a. All motors over 100 horsepower shall be variable speed.
   b. Air pollution control devices shall be operated at the minimum pressure drop required to maintain compliance with permit limits and conditions.
   c. Thermal performance of all heat transfer components at the facility, including structures, shall be designed to maximize energy efficiency.
   d. Energy efficiency shall be optimized, where practical, for all fans, motors and other equipment necessary to operate EUFIREPUMP and support systems.

   (R 336.2810, 40 CFR 52.21(j))

V. TESTING/SAMPLING NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall monitor and record in a satisfactory manner, a log of the monthly hours of operation of EUFIREPUMP. The log shall include the time of operation and the reason the engine was in operation. **(R 336.1205(1)(a), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4214(b))**

2. The permittee shall keep, in a satisfactory manner, fuel supplier certification records for each delivery of the diesel fuel oil. **(R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUFIREPUMP authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUFIREPUMP. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVFIREPUMP	8	8	R 336.1225 R 336.2803, R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and IIII, as they apply to EUFIREPUMP. **(40 CFR Part 60 Subparts A & IIII)**

The following conditions apply to: EUBLACKSTART

DESCRIPTION
A diesel fuel oil-fired turbine generator with a maximum heat input rating of 540 million Btu per hour. The generator will be used to start the plant when there is no power available from the electric grid and the plant must be brought back into service.

POLLUTION CONTROL EQUIPMENT
Good combustion control technology to control emissions of CO and VOC.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM10	0.03 lb/MMBtu heat input	Test protocol will specify averaging time	EUBLACKSTART	SC V.2	R 336.2810 40 CFR 52.21(j)
2. PM10	16.20 pph	Test protocol will specify averaging time	EUBLACKSTART	SC V.2	R 336.2810 40 CFR 52.21(j)
3. PM2.5	16.20 pph	Test protocol will specify averaging time	EUBLACKSTART	SC V.2	R 336.2810 40 CFR 52.21(j)
4. NO_x	0.16 lb/MMBtu heat input	Test protocol will specify averaging time	EUBLACKSTART	SC V.2	R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d) R 336.2810 40 CFR 52.21(j)
5. NO_x	96 ppm at 15% oxygen**, during operating loads less than 75 percent of peak load or at operating temperatures less than 0°F	Test protocol will specify averaging time	EUBLACKSTART	SC V.1, VI.1	40 CFR 60.4320(a)
6. CO	0.045 lb/MMBtu heat input	Test protocol will specify averaging time	EUBLACKSTART	SC V.2	R 336.2804 40 CFR 52.21 (d) R 336.2810 40 CFR 52.21(j)
7. SO_2	0.011 lb/MMBtu heat input	Test protocol will specify averaging time	EUBLACKSTART	SC VI.2	R 336.1401 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d) R 336.2810 40 CFR 52.21(j) 40 CFR 60.4330(a)(2)

** Compliance Method for NO_X Emission Limits:
Continuous compliance with the NO_X emission limits shall be based upon subsequent stack testing, pursuant to 40 CFR 60.4400 (Testing/Sampling SC V.1) or by a continuous monitoring system, pursuant to 40 CFR 60.4340(b) (Monitoring/Recordkeeping SC VI.1)

II. MATERIAL LIMIT(S)

1. The permittee shall only combust ultra low sulfur diesel fuel in EUBLACKSTART. Ultra low sulfur diesel fuel is defined as having a sulfur content not to exceed 15 parts per million. **(R 336.1401, R 336.2810, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUBLACKSTART for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(1)(a), R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not operate EUBLACKSTART unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

3. Within 180 days after commencement of initial start-up of EUBLACKSTART, the permittee shall develop and submit an approvable Energy Efficiency Management Plan (EEMP) to the AQD District Supervisor. Thereinafter, the permittee shall not operate EUBLACKSTART unless EEMP is implemented and maintained. At a minimum, the EEMP shall specify the following:

   a. Work practice standards, to ensure optimal energy efficiency in the operation of all motors, fans, and equipment necessary to operate the EUBLACKSTART.
   b. A maintenance plan, to ensure optimal energy efficiency of all motors, fans, and equipment necessary to operate the EUBLACKSTART.

   The permittee shall amend the EEMP within 45 days if any changes are deemed necessary, or upon request by the AQD District Supervisor. The permittee shall submit the EEMP and any amendments to the AQD District Supervisor for review and approval. **(R 336.2810, 40 CFR 52.21(j))**

4. The permittee shall not operate EUBLACKSTART unless an acceptable plan that describes how emissions will be minimized during all startups and shutdowns has been submitted to the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices and good combustion control. **(R 336.1911, R 336.1912, R 336.2802, 40 CFR 52.21)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall operate and maintain EUBLACKSTART with good air pollution control practices for minimizing emissions at all times including start-up, shutdown and malfunction. **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4333)**

2. The permittee shall equip and maintain EUBLACKSTART with a non-resettable hour meter to track the number of hours the engine operates. **(R 336.1205(1)(a))**

3. EUBLACKSTART shall not exceed a maximum heat input rating of 540 million Btu per hour. **(R 336.1205(1)(a), 40 CFR Part 72.2)**

4. The permittee shall incorporate energy efficient equipment wherever practical in the design of EUBLACKSTART. The design of EUBLACKSTART, at a minimum, shall specify the following:

   a. All motors over 100 horsepower shall be variable speed.
   b. Air pollution control devices shall be operated at the minimum pressure drop required to maintain compliance with permit limits and conditions.
   c. Thermal performance of all heat transfer components at the facility, including structures, shall be designed to maximize energy efficiency.
   d. Energy efficiency shall be optimized, where practical, for all fans, motors and other equipment necessary to operate EUBLACKSTART and support systems.

   (R 336.2810, 40 CFR 52.21(j))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 60 days after achieving the maximum production rate of EUBLACKSTART, but not later than 180 days after initial start-up of EUBLACKSTART, federal Standards of Performance for New Stationary Sources require verification of NO_X emission rates from EUBLACKSTART, by testing at owner's expense, in accordance with 40 CFR Parts 60.8 and 60.4400. The permittee shall conduct three separate test runs, at least 20 minutes each, at ambient temperatures greater than 0 °F, and at any load condition within ±25 percent of 100 percent peak load. Testing must be conducted annually (at least every 14 calendar months). If the stack test result is less than or equal to 75 percent of the NO_X limit in SC Emission Limit I.2, the test plan can be changed to once every two years (at least every 26 calendar months). If subsequent test results yield NO_X emissions greater than 75 percent of the NO_X limit in SC Emission Limit I.2, annual testing must be resumed. Subsequent stack testing is not required if the permittee shows continuous compliance with the NO_X emission limits with the continuous emission monitoring system pursuant to 40 CFR 60.4340(b)(1) or the continuous parameter monitoring system pursuant to 40 CFR 60.4340(b)(2). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD, including provisions for monitoring the heat input to show compliance with the NO_x emission limit in SC Emission Limit I.1. 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. **(40 CFR 60.4340(a), 40 CFR 60.4400)**

2. Within 180 days after commencement of initial start-up, verification of PM2.5, PM_{10}, NO_x, CO, and SO_2 emission rates from EUBLACKSTART, by testing at owner's expense, in accordance with Department requirements will be required. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall 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. **(R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. In lieu of the subsequent stack test requirements listed in Testing/Sampling SC V.1, the permittee may instead install, calibrate, maintain and operate one of the following continuous monitoring systems:

   a. Continuous emission monitoring system to measure NO_X emissions as described in 40 CFR 60.4335(b), 60.4345 and 60.4405; **(40 CFR 60.4340(b)(1))** or

   b. Continuous parameter monitoring system pursuant to 40 CFR 60.4340(b)(2)(i) or (iv) to continuously monitor parameters that are indicative to NO_X formation. The parameters must be continuously monitored and recorded during the initial performance test to establish acceptable values and ranges. The permittee must develop and keep on-site a parameter monitoring plan pursuant to 40 CFR 60.4355 (a)(1) through (6). **(40 CFR 60.4340(b)(2), 40 CFR 60.4355, 40 CFR 60.4410)**

2. The permittee shall determine compliance with the 0.06 pound of SO_2 per MMBtu heat input limit in Emission Unit SC I.5 using either of the following methods:

   a. The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content is 0.05 weight percent or less; **(40 CFR 60.4365(a))** or

   b. Representative fuel sampling data, as specified in 40 CFR Part 75, Appendix D, Section 2.3.1.4 or Section 2.3.2.4, that shows that the sulfur content does not exceed 0.06 pound of SO_2 per MMBtu heat input. **(40 CFR 60.4365(b))**

3. The permittee shall keep, in a satisfactory manner, a log of the monthly hours of operation of EUBLACKSTART. **(R 336.1205(1)(a), R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

1. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation of EUBLACKSTART in accordance with 40 CFR 60.7(a)(3). **(40 CFR 60.7)**

2. If EUBLACKSTART contains a continuous emission or continuous parameter monitoring system as described in Monitoring/Recordkeeping SC VI.1, the permittee shall submit excess emissions reports under 40 CFR 60.7(c) for excess emissions and monitor downtown as described in 40 CFR 60.4350 and 40 CFR 60.4380. Excess emissions should be reported during all periods of operation including start-up, shutdown and malfunction. All reports must be postmarked by the 30th day following the end of each 6-month period. **(40 CFR 60.7(c), 40 CFR 60.4375(a), 40 CFR 60.4395)**

3. The permittee shall submit of a complete report of the stack test results to the AQD within 60 days following the last date of the stack test. **(40 CFR 60.4340(a), 40 CFR 60.4400, 40 CFR 60.4375)**

4. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUBLACKSTART authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUBLACKSTART. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBLACKSTART	168	63	R 336.1225 R 336.2803, R 336.2804 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and KKKK, as they apply to EUBLACKSTART. **(40 CFR Part 60 Subparts A & KKKK)**

The following conditions apply to: FGCOOLINGTWR

DESCRIPTION
Two mechanical induced draft cooling towers with drift eliminators.

I. EMISSION LIMIT(S) NA

II. MATERIAL LIMIT(S) NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 180 days after start-up of FGCFB, the permittee shall submit, to the AQD District Supervisor, an inspection and maintenance program for each cooling tower in FGCOOLINGTWR. The permittee shall comply with the submitted program until the AQD District Supervisor approves the program or approves an amended program. Thereafter, the permittee shall comply with the approved program. At any time, the permittee may submit a modified program to the AQD District Supervisor for review and approval. **(R 336.2810, 40 CFR 52.21(j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each cooling tower in FGCOOLINGTWR with drift eliminators with a vendor-certified maximum drift rate of 0.0005 percent or less. **(R 336.2810, 40 CFR 52.21(j))**

V. TESTING/SAMPLING
Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 180 days after start-up of FGCFB, and every seven years thereafter, the permittee shall determine drift loss from each cooling tower by testing, at owner's expense, in accordance with Department requirements. The permittee shall use the 1994 version of the Cooling Technology Institute's Acceptable Test Code (ATC) 140, unless the AQD approves use of an alternate method. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Determination of drift loss includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.2810, 40 CFR 52.21(j))**

VI. MONITORING/RECORDKEEPING
Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. For each cooling tower in FGCOOLINGTWR, the permittee shall maintain a record, for the life of the cooling tower, of the vendor's certification required in SC IV.1. **(R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall monitor the following for each cooling tower in FGCOOLINGTWR:
   a. On a weekly basis, parameters needed to determine the total dissolved solids content of the circulating water.
   b. On a monthly basis, parameters needed to determine the water recirculation rate. **(R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall calculate the PM and PM10 emission rates from each cooling tower in FGCOOLINGTWR monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. **(R 336.2810, 40 CFR 52.21(j))**

4. The permittee shall keep, for each cooling tower in FGCOOLINGTWR, a record of the date the two most recent drift loss determinations were conducted. **(R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

1. The permittee shall submit a complete report of the performance test results to the AQD within 60 days following the last date of the test. **(R 336.2001, R 336.2002, R 336.2003)**

2. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of FGCOOLINGTWR authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGCOOLINGTWR. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S) NA

IX. OTHER REQUIREMENT(S) NA

The following conditions apply to: FGCFB

DESCRIPTION:
Two solid fuel-fired circulating fluidized bed (CFB) boilers, each with a maximum heat input rating of 3,030 million Btu per hour. The boilers will be fired with Powder River Basin Coal (sub-bituminous), up to 70% petroleum coke, and up to 20% biomass. Illinois Basin Coal (bituminous) may be used as a secondary fuel and No. 2 fuel oil will be used as a start-up fuel.

Emission Units: Includes emission units EUCFB1 and EUCFB2.

POLLUTION CONTROL EQUIPMENT:
The air pollution control system (APC) for each boiler will consist of selective non-catalytic reduction (SNCR) to control NOx emissions; limestone injection and polishing scrubber to control SO2, Sulfuric Acid Mist, and acid gases emissions; a pulse jet fabric filter to control particulate emissions; sorbent injection to control Mercury emissions; and good combustion control technology to control CO and VOC emissions.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	10 percent	6-minute average, except one 6-minute average per hour of not more than 20 percent	Each CFB	SC VI.1	R 336.1301(c) R 336.2810 40 CFR 52.21(j) 40 CFR 60.42Da(b)
2. PM	0.010 lb/MMBtu heat input	Test protocol will specify averaging time	Each CFB	SC V.2	R 336.1299(2)(b) R 336.1331 R 336.2810 40 CFR 52.21(j) 40 CFR60.42Da(c)(2)
3. PM10	0.026 lb/MMBtu heat input, excluding periods of start-up and shutdown	Test protocol will specify averaging time	Each CFB	SC V.3	R 336.2810 40 CFR 52.21(j)
4. PM10	78.8 pph	Test protocol will specify averaging time	Each CFB	SC V.3	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d) R 336.2810 40 CFR 52.21(j)
5. PM2.5	0.024 lb/MMBtu heat input, excluding periods of startup and shutdown	Test protocol will specify averaging time	Each CFB	SC V.3	R 336.2810 40 CFR 52.21(j)
6. PM2.5	72.7 pph, excluding periods of startup and shutdown	Test protocol will specify averaging time	Each CFB	SC V.3	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d) R 336.2810 40 CFR 52.21(j)
7. PM2.5	54.5 pph, during periods of startup and shutdown	Test protocol will specify averaging time	Each CFB	SC V.3	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d) R 336.2810 40 CFR 52.21(j)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
8. NO_X	0.07 lb/MMBtu heat input, excluding periods of start-up and shutdown	30-day rolling averaging period	Each CFB	SC VI.2 SC VI.6	R 336.2810 40 CFR 52.21(j)
9. NO_X	281.1 pph	24-hour rolling averaging period as determined each hour the boiler operates	Each CFB	SC VI.2 SC VI.6	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d) R 336.2810 40 CFR 52.21(j)
10. NO_X	1.0 lb/MW-hr gross output	30-day rolling averaging period	Each CFB	SC V.1 SC VI.7	40 CFR 60.44Da(e)(1)
11. CO	0.15 lb/MMBtu heat input, excluding periods of start-up and shutdown	30-day rolling averaging period	Each CFB	SC VI.2 SC VI.8	R 336.2810 40 CFR 52.21(j)
12. CO	744 pph	24-hour rolling average as determined each hour the boiler operates	Each CFB	SC VI.2 SC VI.8	R 336.2804 40 CFR 52.21(d) R 336.2810 40 CFR 52.21(j)
13. SO_2	0.06 lb/MMBtu heat input, excluding periods of start-up and shutdown	30-day rolling averaging period	Each CFB	SC VI.2 SC VI.9	R 336.1401 R 336.2810 40 CFR 52.21(j)
14. SO_2	0.05 lb/MMBtu heat input, excluding periods of start-up and shutdown	12-month rolling average	Each CFB	SC VI.2 SC VI.9	R 336.1401 R 336.2810 40 CFR 52.21(j)
15. SO_2	303 pph	24-hour rolling average as determined each hour the boiler operates	Each CFB	SC VI.2 SC VI.9	R 336.2803 R 336.2804 40 CFR 52.21(c) & (d) R 336.2810 40 CFR 52.21(j)
16. SO_2	1.4 lb/MW-hr gross output	30-day rolling average	Each CFB	SC V.1 SC VI.10	40 CFR 60.43Da(i)(1)
17. VOC	0.003 lb/MMBtu heat input, excluding periods of start-up and shutdown	Test protocol will specify averaging time	Each CFB	SC V.4 SC VI.12	R 336.1122(f) R 336.1299(2)(b) R 336.1702(a) R 336.2810 40 CFR 52.21(j)
18. VOC	17.8 pph	Test protocol will specify averaging time	Each CFB	SC V.4 SC VI.12	R 336.1122(f) R 336.1225(1), (2), and (6) R 336.1299(2)(b) R 336.1702(a) R 336.2804 40 CFR 52.21 (d) R 336.2810 40 CFR 52.21(j)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
19. Lead (Pb)	1.3 x 10^{-5} lb/MMBtu heat input	Test protocol will specify averaging time	Each CFB	SC V. 5 SC VI.12	R 336.1901 R 336.2804 40 CFR 52.21(d)
20. Sulfuric Acid (H_2SO_4)	0.003 lb/MMBtu heat input	Test protocol will specify averaging time	Each CFB	SC V.6 SC VI.12	R 336.1225(1) R 336.2810 40 CFR 52.21(j)
21. Hydrogen Chloride (HCl)	0.0011 lb/MMBtu heat input	Test protocol will specify averaging time	Each CFB	SC V.7 SC VI.12	R 336.1225(1) R 336.1299(2)(b)
22. Hydrogen Fluoride (HF)	0.00014 lb/MMBtu heat input	Test protocol will specify averaging time	Each CFB	SC V.7 SC VI.12	R 336.1225(1) R 336.1299(2)(b) R 336.2810 40 CFR 52.21(j)
23. Arsenic (As)	2.5 x 10^{-5} lb/MMBtu heat input	Test protocol will specify averaging time	Each CFB	SC V.8 SC VI.12	R 336.1225(2)
24. Mercury (Hg)	0.0077 lb/GW-hr gross output	12-month rolling average	Each CFB	SC V.9 SC VI.3 SC VI.5	R 336.1228 R 336.1229(2)(b) R 336.1299(2)(b)
25. $CO2_e$	2.1 lb/KW-hr gross output[1]	12-month rolling average	Each CFB	SC VI.5	R 336.2810 40 CFR 52.21 (j)
26. $CO2_e$	6,024,107 tons per year	12-month rolling average	FGCFB	SC VI.2	R 336.2810 40 CFR 52.21 (j)

[1]Emissions shall be calculated based on CO2 CERMS data and fuel factors for non-CO2 GHGs as defined in 40 CFR Part 98.

II. MATERIAL LIMIT(S)

1. During start-up of FGCFB, the permittee shall only combust ultra low sulfur diesel fuel, low sulfur coal, and biomass. Start-up is defined in Process/Operational SC III.1. Ultra low sulfur diesel fuel is defined as diesel fuel with a sulfur content not to exceed 0.0015 percent by weight (15 ppm). Low sulfur coal is defined as coal with a sulfur content not to exceed 0.3 percent by weight. Biomass is defined in Material Limit SC II.3. **(R 336.1205(1)(a), R 336.2810, 40 CFR 52.21(j))**

2. After FGCFB reaches 50 percent of maximum heat input, the permittee shall combust only Powder River Basin (PRB) sub-bituminous coal, Illinois Basin bituminous coal, petroleum coke, and biomass in FGCFB. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**

3. The biomass usage for each boiler included in FGCFB shall include a minimum of 5% but no more than 20 percent on a heat input basis per year. Biomass is defined as non-chemically treated wood and wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sander dust, wood chips, scraps, slabs, millings, shavings, processed pellets made from wood or other forest residues, switch grass, and other similar fuels. **(R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**

4. The petroleum coke usage for each boiler included in FGCFB shall not exceed 70 percent on a heat input basis per 30 day rolling time period. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**

5. The permittee shall not combust diesel fuel in FGCFB that exceeds 0.5 percent sulfur, by weight. **(R 336.12810, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate both EUCFB1 and EUCFB2 simultaneously anytime during a start-up operation. Start-up operations for each boiler included in FGCFB shall not exceed 24 hours. Shutdown operations for each boiler included in FGCFB shall not exceed 8 hours. FGCFB shall not exceed 12 cold start-ups and shutdowns for each boiler in a 12-month time period. Start-up is defined as the period of time from initiation of combustion firing until the unit reaches steady state operation (i.e. minimum of 50% load). Cold start-up is defined as a start-up after 48 or more hours following the last fuel input to the boiler. Shutdown is defined as that period of time from the initial lowering of the boiler output below 50% of the maximum heat input, until the point at which the combustion process has stopped and the bed material fluidizing air has been discontinued. **(R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not operate FGCFB unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

3. Within 180 days after commencement of initial start-up of FGCFB, the permittee shall develop and submit an approvable Biomass Fuel Procurement and Management Plan (BFCMP) to the AQD District Supervisor. Thereinafter, the permittee shall not operate FGCFB unless BFCMP is implemented and maintained. At a minimum, the BFCMP shall specify the following:

   a. A description of the fuel to be burned.
   b. Odor minimization measures to be taken, if required.
   c. A program for auditing and verifying generally accepted practices for sustainable forest management are maintained.

   The permittee shall amend the BFCMP within 45 days if any changes are deemed necessary, or upon request by the AQD District Supervisor. The permittee shall submit the BFCMP and any amendments to the AQD District Supervisor for review and approval. **(R 336.2810, 40 CFR 52.21(j))**

4. Within 180 days after commencement of initial start-up of FGCFB, the permittee shall develop and submit an approvable Energy Efficiency Management Plan (EEMP) to the AQD District Supervisor. Thereinafter, the permittee shall not operate FGCFB unless EEMP is implemented and maintained. At a minimum, the EEMP shall specify the following:

   a. Work practices to be followed to ensure optimal energy efficiency in the operation of all motors, fans, and equipment necessary to operate the CFB Boiler.
   b. A maintenance plan to be followed to ensure optimal energy efficiency of all motors, fans, and equipment necessary to operate the CFB Boiler.

   The permittee shall amend the EEMP within 45 days if any changes are deemed necessary, or upon request by the AQD District Supervisor. The permittee shall submit the EEMP and any amendments to the AQD District Supervisor for review and approval. **(R 336.2810, 40 CFR 52.21(j))**

5. The permittee shall not operate FGCFB unless an acceptable plan that describes how emissions will be minimized during all startups and shutdowns has been submitted to the AQD District Supervisor. The plan

shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices and good combustion control. **(R 336.1911, R 336.1912, R 336.2802, 40 CFR 52.21)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUCFB1 unless the selective non-catalytic reduction system (SNCR), pulse jet fabric filter with polyphenylene sulfide bags, polishing scrubber (spray dryer absorber), and sorbent injection system is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved malfunction abatement plan (MAP) for EUCFB1 as required in Process/Operational Restriction SC III.2. **(R 336.1225, R 336.1299(2)(b), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall not operate EUCFB2 unless the selective non-catalytic reduction system (SNCR), pulse jet fabric filter with polyphenylene sulfide bags, polishing scrubber (spray dryer absorber), and sorbent injection system is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved malfunction abatement plan (MAP) for EUCFB2 as required in Process/Operational Restriction SC III.2. **(R 336.1225, R 336.1299(2)(b), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21(j))**

3. Each boiler included in FGCFB shall not exceed a maximum heat input rating of 3,030 million Btu per hour. **(R 336.1205(1)(a), 40 CFR Part 72.2)**

4. The permittee shall incorporate energy efficient equipment wherever practical in the design of each boiler included in FGCFB. The design of each boiler, at a minimum, shall specify the following:

   a. All motors over 100 horsepower shall be variable speed.
   b. Air pollution control devices shall be operated at the minimum pressure drop required to maintain compliance with permit limits and conditions.
   c. Thermal performance of all heat transfer components at the facility, including structures, shall be designed to maximize energy efficiency.
   d. Energy efficiency shall be optimized, where practical, for all fans, motors and other equipment necessary to operate FGCFB and support systems.

   (R 336.2810, 40 CFR 52.21(j))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial start-up, the permittee shall verify NO_X and SO_2 emission rates from each boiler included in FGCFB, as required by federal Standards of Performance for New Stationary Sources and Appendix B of this permit, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and Da. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan 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. **(40 CFR 60.48Da, 60.50Da)**

2. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial start-up, the permittee shall verify PM emission rates from each boiler included in FGCFB, as required by federal Standards of Performance for New Stationary Sources and Appendix A of this permit, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and Da. The permittee shall perform subsequent tests every 12 calendar months using the procedures in 40 CFR 60.50Da. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date

of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A (Method 5). No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan 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. **(40 CFR Part 60.48Da(o)(1), 40 CFR 60.50Da)**

3. Within 180 days after commencement of initial start-up, verification of PM10 and PM2.5 emission rates from each boiler included in FGCFB, by testing at owner's expense, in accordance with Department requirements, will be required. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall 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. **(R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**

4. Within 180 days after commencement of initial start-up, verification of VOC emission rates from each boiler included in FGCFB, by testing at owner's expense, in accordance with Department requirements, will be required. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall 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. **(R 336.1299(2)(b), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**

5. Within 180 days after commencement of initial start-up, verification of Pb emission rates from each boiler included in FGCFB, by testing at owner's expense, in accordance with Department requirements, will be required. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall 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. **(R 336.1901, R 336.2001, R 336.2003, R 336.2004)**

6. Within 180 days after commencement of initial start-up, verification of H_2SO_4 emission rates from each boiler included in FGCFB, by testing at owner's expense, in accordance with Department requirements, will be required. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall 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. **(R 336.1225(1), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**

7. Within 180 days after commencement of initial start-up, verification of HCl and HF emission rates from each boiler included in FGCFB, by testing at owner's expense, in accordance with Department requirements, will be required. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall 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. **(R 336.1225(1), R 336.2001, R 336.2003, R 336.2004, R 336.1299(2)(b))**

8. Within 180 days after commencement of initial start-up, verification of As emission rates from each boiler included in FGCFB, by testing at owner's expense, in accordance with Department requirements, will be required. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall 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. **(R 336.1225(2), R 336.2001, R 336.2003, R 336.2004)**

9. Within 180 days after commencement of initial start-up, verification of total Hg emission rates from each boiler included in FGCFB, by testing at owner's expense, in accordance with Department requirements, will be required. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall 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. **(R 336.1228, R 336.1229(2)(b), R 336.2001, R 336.2003, R 336.2004, R 336.1299(2)(b))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the opacity from each boiler included in FGCFB on a continuous basis. The opacity monitor shall be operated in accordance with procedures outlined in Appendix A attached and in 40 CFR 60.49Da. **(R 336.1301(c), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)**

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NO_X, CO, SO_2 and CO_2 emissions from each boiler included in FGCFB on a continuous basis. The monitors shall be operated in accordance with procedures outlined in Appendix B attached and in 40 CFR 60.49Da. **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)**

3. The permittee shall, install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record mercury emissions from each boiler included in FGCFB on a continuous basis. The monitor shall be operated in accordance with Appendix B, attached. **(R 336.1299(2)(b))**

4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the exhaust gas volumetric flow rate from each boiler included in FGCFB on a continuous basis. The monitor shall be operated in accordance with procedures outlined in Appendix B attached and in 40 CFR 60.49Da(m). **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)**

5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the gross energy output from each boiler included in FGCFB on a continuous basis. The monitor shall be operated in accordance with procedures outlined in 40 CFR 60.49Da(k). **(R 336.1299(2)(b), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)**

6. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 12 months after commencement of initial start-up of each boiler included FGCFB, the permittee shall keep, in a satisfactory manner, 24-hour rolling average and 30-day rolling average NO_X emission rate records for each boiler included in FGCFB, as described in Emission Limit SC I.8 and I.9. **(40 CFR 60.49Da(e), R 336.2810, 40 CFR 52.21(j))**

7. Within 60 days after achieving the maximum production rate, but not later than 180 days after initial start-up, of each boiler included FGCFB, the permittee shall keep, in a satisfactory manner, 30-day rolling average NO_X Gross Energy Output emission rate records for each boiler included in FGCFB, as described in Emission Limit SC I.10. **(40 CFR 60.48Da(i))**

8. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 12 months after commencement of initial start-up of each boiler included in FGCFB, the permittee shall keep, in a satisfactory manner, 24-hour rolling average and 30-day rolling average CO emission rate records for each boiler included in FGCFB, as described in Emission Limit SC I.11 and I.12. **(R 336.2810, 40 CFR 52.21(j))**

9. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 12 months after commencement of initial start-up of each boiler included in FGCFB, the permittee shall keep, in a satisfactory manner, 24-hour rolling average, 30-day rolling average, and 12-month rolling

average SO_2 emission rate records for each boiler included in FGCFB, as described in Emission Limit SC I.13, I.14, and I.15. **(40 CFR 60.49Da(e), R 336.2810, 40 CFR 52.21(j))**

10. Within 60 days after achieving the maximum production rate, but not later than 180 days after initial start-up, of each boiler included FGCFB, the permittee shall keep, in a satisfactory manner, 30-day rolling average SO_2 Gross Energy Output emission rate records for each boiler included in FGCFB, as described in Emission Limit SC I.16. **(40 CFR 60.48Da(m))**

11. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 12 months after commencement of initial start-up of each boiler included in FGCFB, the permittee shall keep, in a satisfactory manner, monthly and 12-month rolling average Hg Gross Energy Output emission rate records for each boiler included in FGCFB, as described in Emission Limit SC I.24. If the monitoring required by Monitoring/Recordkeeping SC VI.3 is only capable of detecting gaseous mercury, the permittee shall use the testing required by Testing/Sampling SC V.9 to develop a correction factor to adjust the mercury monitoring data to total mercury. **(R 336.1228, R 336.1229(2)(b), R 336.1299(2)(b))**

12. The permittee shall maintain records for FGCFB for information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to, the following:

    a) Compliance tests and any testing required under 40 CFR Subpart Da or the conditions of this permit

    b) Monitoring data

    c) Heat input calculations

    d) Fuel analysis including identification, type, heating value (Btu/lb), and the amounts of all fuels combusted in FGCFB on a daily average basis

    e) Total gigawatt-hours of energy produced on a monthly basis

    f) Records of the duration of all times FGCFB is operated under startup or shutdown conditions as defined in SC III.1

    g) All records required by 40 CFR§60.7 and §60.52a

    h) All calculations necessary to demonstrate compliance with the limits contained in this permit, or the reporting requirements contained in Appendix C of this permit.

All of the above information shall be stored in a format acceptable to the Air Quality Division, shall be maintained for a period of at least five years, and shall be consistent with the requirements of 40 CFR 60.7(f). **(R 336.1205(1)(a), R 336.1225, R 336.1228, R 336.1229(2)(b), R 336.1299(2)(b), R 336.1301, R 336.1331, R 336.1401, R 336.1702(a), R 336.1901, R 336.1912, R 336.2802(4), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(a)(2), 40 CFR 52.21(c),(d), & (j), 40 CFR 60.42Da, 40 CFR 60.7(f))**

VII. REPORTING

1. The permittee shall comply with the reporting requirements listed in Appendix C-1. **(40 CFR 60.51Da(a), 40 CFR 60.51Da(b))**

2. The permittee shall comply with the reporting requirements listed in Appendix C-2 when CEMS data is unavailable for 90% of boiler operating hours for 30 successive boiler operating days. **(40 CFR 60.51Da(c))**

3. The permittee shall comply with the reporting requirements listed in Appendix C-3 for excess emissions during emergency conditions. **(40 CFR 60.51Da(d))**

4. The permittee shall comply with the reporting requirements listed in Appendix C-4 if fuel pre-treatment will be utilized. **(40 CFR 60.51Da(e))**

5. The permittee shall comply with the reporting requirements listed in Appendix C-5 for unavailability of emissions data. **(40 CFR 60.51Da(f))**

6. The permittee shall comply with the reporting requirements listed in Appendix C-6 for miscellaneous reporting. **(40 CFR 60.51Da(h))**

7. The permittee shall comply with the reporting requirements listed in Appendix C-7 during periods of excess visible emissions. **(40 CFR 60.51Da(i))**

8. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of FGCFB authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGCFB. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (feet)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCFB1	19.0	450	R 336.1225 R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)
2. SVCFB2	19.0	450	R 336.1225 R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all of the applicable requirements contained in the Clean Air Interstate Rule, as it applies to FGCFB. **(40 CFR Part 97)**

2. The permittee shall comply with all of the applicable requirements contained in the federal Acid Rain Program, as it applies to FGCFB. **(40 CFR Parts 72 - 76)**

3. The permittee shall comply with all of the applicable requirements contained in the New Source Performance Standards, as it applies to FGCFB. **(40 CFR Part 60, Subpart Da)**

4. Within 12 months after commencement of initial start-up, permittee shall quantify mercury (Hg) emissions from EUCFB1 or EUCFB2 by performing a speciated mercury stack test, at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Quantification of emissions includes the submittal of a complete report of the test results to the AQD within 90 days following the last date of the test.[1] **(R 336.2001, R 336.2003, Act 451 of 1994 Part 55 324.5503(p))**

Footnotes:
[1]This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: EULIMESTONE

DESCRIPTION

Limestone is delivered to the power plant by dump trucks. The trucks will discharge limestone onto the ground or an existing pile. Mobile equipment will transport the limestone to hoppers which will be belt fed to one of two reversible hammer mill crushers. From the crushers the limestone is fed by conveyor to the limestone preparation building.

POLLUTION CONTROL EQUIPMENT

Fabric Filter dust collector to control particulate matter.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	7 percent	Test protocol will specify averaging time	The drop point and transfer points of EULIMESTONE	SC VI.1	R 336.1301, R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.672
2. Opacity	0 percent	Test protocol will specify averaging time	The building housing the crushing equipment.	SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.672
3. Opacity	7 percent	Test protocol will specify averaging time	Emissions from SVLIMESTONE	SC VI.1	R 336.1301, R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.672
4. Opacity	5 percent	Test protocol will specify averaging time	Visible emissions from all wheel loaders and all truck traffic.	SC VI.3	R 336.1301, R 336.2810, 40 CFR 52.21 (j), Act 451 324.5524
5. PM	0.00016 gr / dscf of exhaust gases, as calculated on a dry gas basis	Test protocol will specify averaging time	Limestone processing equipment	GC 13	R 336.1301 R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
6. PM10	0.010 pph	Test protocol will specify averaging time	Limestone processing equipment	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
7. PM2.5	0.010 pph	Test protocol will specify averaging time	Limestone processing equipment	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)

II. MATERIAL LIMIT(S) NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 180 days of initial start-up of EULIMESTONE the permittee shall submit to the AQD District Supervisor a program for continuous fugitive emissions control for all material handling operations. The program shall be reviewed and approved by the AQD District Supervisor and is implemented and maintained. If at any time the fugitive dust control program fails to address or inadequately addresses an

event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1371, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EULIMESTONE unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any portion of EULIMESTONE unless the fabric filter with broken bag leak detectors or an alternative monitoring method approved in writing by the AQD District Supervisor is installed and/or implemented, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by SC III.2. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 60 days after achieving maximum production rate, but not later than 180 days after commencement of trial operation, the permittee shall evaluate visible emissions from EULIMESTONE, at owner's expense, in accordance with federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subparts A and OOO. The permittee must have prior approval from the AQD for visible emission observation procedures. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 45 days following the last date of the evaluation. **(R 336.1301, 40 CFR Part 60 Subparts A & OOO)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 and I.3 on a daily basis when EULIMESTONE is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.675)**

2. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.2 on a daily basis when EULIMESTONE is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 22 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 22 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.675)**

3. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.4 on a daily basis when EULIMESTONE is operating. If during the observation there are any visible emissions detected from an emission point, a Method 9D certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, Method 9D observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21(j) Act 451 324.5524)**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EULIMESTONE authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EULIMESTONE. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLIMESTONE	20	20	R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and OOO, as they apply to EULIMESTONE. **(40 CFR Part 60 Subparts A & OOO)**

The following conditions apply to: EULIMESTONEPREP

DESCRIPTION

Limestone preparation facilities. There are two identical trains. Each train consists of a limestone mill and separator, a cyclone collector heater, screen, dust collectors and blowers. The finished product is stored in a silo.

POLLUTION CONTROL EQUIPMENT

Fabric Filter dust collector to control particulate matter.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	7 percent	Test protocol will specify averaging time	The drop point and transfer points of EULIMESTONEPREP	SC VI.1	R 336.1301, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.672
2. Opacity	0 percent	Test protocol will specify averaging time	The building housing the crushing equipment.	SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.672
3. Opacity	7 percent	Test protocol will specify averaging time	Emissions from each individual dust collector in EULIMESTONEPREP.	SC VI.1	R 336.1301, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.672
4. PM	0.0000018 gr/dscf of exhaust gases, as calculated on a dry gas basis	Test protocol will specify averaging time	Each individual limestone preparation train.	GC 13	R 336.1301 R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
5. PM10	0.0006 pph	Test protocol will specify averaging time	Each individual limestone preparation train.	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
6. PM2.5	0.0006 pph	Test protocol will specify averaging time	Each individual limestone preparation train.	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)

II. MATERIAL LIMIT(S) NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 180 days of initial start-up of EULIMESTONEPREP the permittee shall submit to the AQD District Supervisor a program for continuous fugitive emissions control for all material handling operations. The program shall be reviewed and approved by the AQD District Supervisor and is implemented and maintained. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor.

The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1371, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EULIMESTONEPREP unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any portion of EULIMESTONEPREP unless the fabric filter with broken bag leak detectors or an alternative monitoring method approved in writing by the AQD District Supervisor is installed and/or implemented, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by SC III.2. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Within 60 days after achieving maximum production rate, but not later than 180 days after commencement of trial operation, the permittee shall evaluate visible emissions from EULIMESTONEPREP, at owner's expense, in accordance with federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subparts A and OOO. The permittee must have prior approval from the AQD for visible emission observation procedures. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 45 days following the last date of the evaluation. **(R 336.1301, 40 CFR Part 60 Subparts A & OOO)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 and I.3 on a daily basis when EULIMESTONEPREP is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.675)**

2. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.2 on a daily basis when EULIMESTONEPREP is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 22 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from

that emission point. Records of the non-certified visible emissions observations, EPA Method 22 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.675)**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EULIMESTONEPREP authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EULIMESTONEPREP. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLIMESTONEPREP1	46	90	R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)
2. SVLIMESTONEPREP2	46	90	R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and OOO, as they apply to EULIMESTONEPREP. **(40 CFR Part 60 Subparts A & OOO)**

The following conditions apply to: EUBEDASH

DESCRIPTION
Equipment used for the collection and removal of ash from the fluidized bed from each unit. This equipment includes both mechanical and pneumatic conveying systems, surge bins, clinker grinders and a common storage silo. This emission unit also includes the wet unloading equipment and the bed ash re-injection system.

POLLUTION CONTROL EQUIPMENT
Fabric Filter dust collector to control particulate matter.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5 percent	Test protocol will specify averaging time	Emissions from the dust collector in EUBEDASH	SC VI.1	R 336.1301, R 336.2810, 40 CFR 52.21(j),
2. PM	0.000011 gr/dscf of exhaust gases, as calculated on a dry gas basis	Test protocol will specify averaging time	Bed ash collection and removal equipment	GC 13	R 336.1301 R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 Subparts (c), (d) & (j)
3. PM10	0.0012 pph	Test protocol will specify averaging time	Bed ash collection and removal equipment	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 Subparts (c), (d) & (j)
4. PM2.5	0.0012 pph	Test protocol will specify averaging time	Bed ash collection and removal equipment	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 Subparts (c), (d) & (j)

II. MATERIAL LIMIT(S)

1. The permittee shall not process more then 1,440 tons of ash per calendar day in EUBEDASH. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c), (d) & (j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 180 days of initial start-up of EUBEDASH the permittee shall submit to the AQD District Supervisor a program for continuous fugitive emissions control for all material handling operations. The program shall be reviewed and approved by the AQD District Supervisor and is implemented and maintained. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or

operational changes to achieve compliance with all applicable emission limits. **(R 336.1371, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EUBEDASH unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any portion of EUBEDASH unless the fabric filter with broken bag leak detectors or an alternative monitoring method approved in writing by the AQD District Supervisor is installed and/or implemented, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by SC III.2. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 on a daily basis when EUBEDASH is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall keep, in a satisfactory manner, daily records of the ash processed through EUBEDASH as required by SC No. II.1. **(R 336.1205(1)(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) & (j))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUBEDASH authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUBEDASH. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBEDASH	26	125	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S) NA

The following conditions apply to: EUFLYASH

DESCRIPTION
Equipment used for the collection and removal of ash from the economizer and fabric filter hoppers. This equipment includes pneumatic conveying systems and a common storage silo. This emission unit also includes both wet and dry unloading equipment.

POLLUTION CONTROL EQUIPMENT
Bin Vent Filters

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	5 percent	Test protocol will specify averaging time	Emissions from the bin vent filters in EUFLYASH	SC VI.1	R 336.1301 R 336.2810 40 CFR 52.21(j)
2. PM	0.000032 gr/dscf of exhaust gases, as calculated on a dry gas basis	Test protocol will specify averaging time	Fly ash collection and removal equipment	GC 13	R 336.1301 R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 Subparts (c), (d) & (j)
3. PM10	0.0012 pph	Test protocol will specify averaging time	Fly ash collection and removal equipment	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 Subparts (c), (d) & (j)
4. PM2.5	0.0012 pph	Test protocol will specify averaging time	Fly ash collection and removal equipment	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 Subparts (c), (d) & (j)

II. MATERIAL LIMIT(S)

1. The permittee shall not process more then 1,440 tons of ash per calendar day in EUFLYASH. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c), (d) & (j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 180 days of initial start-up of EUFLYASH the permittee shall submit to the AQD District Supervisor a program for continuous fugitive emissions control for all material handling operations. The program shall be reviewed and approved by the AQD District Supervisor and is implemented and maintained. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or

operational changes to achieve compliance with all applicable emission limits. **(R 336.1371, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EUFLYASH unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any portion of EUFLYASH unless the associated bin vent filters are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by SC III.2. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 on a daily basis when EUFLYASH is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21(j))**

2. The permittee shall keep, in a satisfactory manner, daily records of the ash processed through EUFLYASH as required by SC No. II.1. **(R 336.1205(1)(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) & (j))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUFLYASH authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUFLYASH. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVFLYASH	16	90	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S) NA

The following conditions apply to: EUSOLIDFUELHANDLING

DESCRIPTION
Solid fuel handling system: Equipment includes the barge unloading system, conveying system, Transfer Towers 3 and 4, and storage piles. The conveyors will use hood covers.

POLLUTION CONTROL EQUIPMENT
Magnetic separators and either dust suppression or fabric filter dust collectors to control particulate matter.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test protocol will specify averaging time	The drop points and transfer points of EUSOLID-FUELHANDLING	SC V.1 SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.254
2. Opacity	5 percent	Test protocol will specify averaging time	Each individual dust collector in EUSOLID-FUELHANDLING	SC V.1 SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21(j)
3. PM	0.00184 gr/dscf of exhaust gases, as calculated on a dry gas basis	Test protocol will specify averaging time	Transfer Tower 3	GC 13	R 336.1301 R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
4. PM10	0.236 pph	Test protocol will specify averaging time	Transfer Tower 3	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
5. PM2.5	0.236 pph	Test protocol will specify averaging time	Transfer Tower 3	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
6. PM	0.00184 gr/dscf of exhaust gases, as calculated on a dry gas basis	Test protocol will specify averaging time	Transfer Tower 4	GC 13	R 336.1301, R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
7. PM10	0.236 pph	Test protocol will specify averaging time	Transfer Tower 4	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
8. PM2.5	0.236 pph	Test protocol will specify averaging time	Transfer Tower 4	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)

II. MATERIAL LIMIT(S)

1. The permittee shall not handle more then 60,000 tons of solid fuel per calendar day through each transfer tower of EUSOLIDFUELHANDLING. **(R 336.1205(1)(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) & (j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 180 days of initial start-up of EUSOLIDFUELHANDLING the permittee shall submit to the AQD District Supervisor a program for continuous fugitive emissions control for all material handling operations. The program shall be reviewed and approved by the AQD District Supervisor and is implemented and maintained. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1371, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EUSOLIDFUELHANDLING unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any portion of EUSOLIDFUELHANDLING unless the conveyor hoods are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by SC III.2. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

2. The permittee shall not operate any portion of EUSOLIDFUELHANDLING unless the fabric filter with broken bag leak detectors or an alternative monitoring method approved in writing by the AQD District Supervisor is installed and/or implemented, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by SC III.2. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING

1. Within 180 days after initial start-up of EUSOLIDFUELHANDLING, the permittee shall conduct visible emissions tests from EUSOLIDFUELHANDLING by testing at owner's expense, in accordance with federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subparts A and Y. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan 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. **(40 CFR Part 60 Subparts A & Y)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep monitoring records from the broken bag leak detectors or alternative monitoring measures as approved by the AQD District Supervisor on the fabric filter of EUSOLIDFUELHANDLING. **(R 336.1331, R 336.1910)**

2. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 and I.2 on a daily basis when EUSOLIDFUELHANDLING is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall keep, in a satisfactory manner, daily records of the solid fuel handled through each transfer tower of EUSOLIDFUELHANDLING as required by Material Limit SC No. II.1. **(R 336.1205(1)(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) & (j))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUSOLIDFUELHANDLING authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUSOLIDFUELHANDLING. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVTTOWER3	30	20	R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)
2. SVTTOWER4	30	20	R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Y, as they apply to EUSOLIDFUELHANDLING. **(40 CFR Part 60 Subparts A & Y)**

The following conditions apply to: EUFUELCRUSHER

DESCRIPTION
Two hammer mill crushers, with associated equipment, used to reduce solid fuel to the appropriate size for boiler feed. This equipment is housed in the Crusher and Sample House and controlled by a common fabric filter dust collector.

POLLUTION CONTROL EQUIPMENT
Fabric Filter dust collector to control particulate matter.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test protocol will specify averaging time	The drop points and transfer points of EUFUELCRUSHER	SC V.1 SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.254
2. Opacity	5 percent	Test protocol will specify averaging time	Each individual dust collector in EUFUELCRUSHER	SC V.1 SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21(j)
3. PM	0.00002 gr/dscf of exhaust gases, as calculated on a dry gas basis	Test protocol will specify averaging time	Fabric filter for EUFUELCRUSHER	GC 13	R 336.1301 R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
4. PM10	0.00276 pph	Test protocol will specify averaging time	Fabric filter for EUFUELCRUSHER	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
5. PM2.5	0.00276 pph	Test protocol will specify averaging time	Fabric filter for EUFUELCRUSHER	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)

II. MATERIAL LIMIT(S) NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 180 days of initial start-up of EUFUELCRUSHER the permittee shall submit to the AQD District Supervisor a program for continuous fugitive emissions control for all material handling operations. The program shall be reviewed and approved by the AQD District Supervisor and is implemented and maintained. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1371, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EUFUELCRUSHER unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and

maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any portion of EUFUELCRUSHER unless the associated bin vent filters are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by SC III.2. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING

1. Within 180 days after initial start-up of EUFUELCRUSHER, the permittee shall conduct visible emissions tests from EUFUELCRUSHER by testing at owner's expense, in accordance with federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subparts A and Y. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan 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. **(40 CFR Part 60 Subparts A & Y)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep monitoring records from the broken bag leak detectors or alternative monitoring measures as approved by the AQD District Supervisor on the fabric filter of EUFUELCRUSHER. **(R 336.1331, R 336.1910)**

2. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 and I.2 on a daily basis when EUFUELCRUSHER is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUFUELCRUSHER authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUFUELCRUSHER. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVFUELCRUSHER	46	90	R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Y, as they apply to EUFUELCRUSHER. **(40 CFR Part 60 Subparts A & Y)**

The following conditions apply to: EUFUELSILO

DESCRIPTION
Five storage silos used to hold the solid fuel prior to boiler feed.

POLLUTION CONTROL EQUIPMENT
Two fabric filter dust collectors, for control of particulate matter.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test protocol will specify averaging time	The drop point and transfer point portions of EUFUELSILO	SC V.1 SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.254
2. Opacity	5 percent	Test protocol will specify averaging time	Each dust collector filter for EUFUELSILO	SC V.1 SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21(j)
3. PM	0.00025 gr/dscf of exhaust gases, as calculated on a dry gas basis	Test protocol will specify averaging time	Each dust collector filter for EUFUELSILO	GC 13	R 336.1301, R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
4. PM10	0.00276 pph	Test protocol will specify averaging time	Each dust collector for EUFUELSILO	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)
5. PM2.5	0.00276 pph	Test protocol will specify averaging time	Each dust collector for EUFUELSILO	GC 13	R 336.2803, R 336.2804, R 336.2810 40 CFR 52.21 (c), (d) & (j)

II. MATERIAL LIMIT(S) NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 180 days of initial start-up of EUFUELSILO the permittee shall submit to the AQD District Supervisor a program for continuous fugitive emissions control for all material handling operations. The program shall be reviewed and approved by the AQD District Supervisor and is implemented and maintained. If at any time the fugitive dust control program fails to address or inadequately addresses an event that meets the characteristics of a revision or update, the permittee shall amend the fugitive dust control program within 45 days after such an event occurs. The permittee shall also amend the fugitive dust control program within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the fugitive dust control program and any amendments to the fugitive dust control program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the fugitive dust control program or amended fugitive dust control program shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1371, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EUFUELSILO unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted to the AQD District Supervisor and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a

malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate any portion of EUFUELSILO unless the fabric filter with broken bag leak detectors or an alternative monitoring method approved in writing by the AQD District Supervisor is installed and/or implemented, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by SC III.2. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING

1. Within 180 days after initial start-up of EUFUELSILO, the permittee shall conduct visible emissions tests from EUFUELSILO by testing at owner's expense, in accordance with federal Standards of Performance for New Stationary Sources 40 CFR Part 60 Subparts A and Y. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan 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. **(40 CFR Part 60 Subparts A & Y)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall keep monitoring records from the broken bag leak detectors or alternative monitoring measures as approved by the AQD District Supervisor on the fabric filter of EUFUELSILO. **(R 336.1331, R 336.1910)**

2. The permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 and I.2 on a daily basis when EUFUELSILO is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUFUELSILO authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUFUELSILO. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVFUELSILO1	32	170	R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)
2. SVFUELSILO2	32	170	R 336.2803, R 336.2804 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Y, as they apply to EUFUELSILO. **(40 CFR Part 60 Subparts A & Y)**

APPENDIX A
Continuous Opacity Monitoring System (COMS) Requirements

1. Within 30 calendar days of the issuance of this permit, the permittee 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 COMS.

2. Within 150 calendar days of the issuance of this permit, the permittee shall submit two copies of a complete test plan for the COMS to the AQD for approval.

3. Within 180 calendar days of the issuance of this permit, the permittee shall complete the installation and testing of the COMS.

4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the COMS complies with the requirements of Performance Specification (PS) 1.

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.

6. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 1 of Appendix B, 40 CFR Part 60.

7. The permittee shall perform an annual audit of the COMS using the procedures set forth in EPA 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.

8. In accordance with 40 CFR 60.7(c) and (d), the permittee 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:

   a) A report of each exceedance above 10 percent. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.

   b) A report of all periods of COMS downtime and corrective action.

   c) A report of the total operating time of each boiler included in FGCFB during the reporting period.

   d) If no exceedances or COMS downtime occurred during the reporting period, the permittee shall report that fact.

   All monitoring data is shall be kept on file for a period of at least five years and made available to the AQD upon request.

APPENDIX B
NO_x, SO_2, CO, CO_2, Hg Monitoring
Continuous Emission Monitoring and Continuous Emission Rate Monitoring System (CEMS/CERMS) Requirements

1. Within 30 calendar days after commencement of initial start-up, the permittee 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/CERMS.

2. Within 150 calendar days after commencement of initial start-up, the permittee shall submit two copies of a complete test plan for the CEMS/CERMS to the AQD for approval.

3. Within 180 calendar days after commencement of initial start-up, the permittee shall complete the installation and testing of the CEMS/CERMS.

4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS/CERMS complies with the requirements of the corresponding Performance Specifications (PS) in the following table:

Pollutant	Applicable PS
NO_x/SO_2	2
CO	4
CO_2	3
CERMS	6
Mercury (Hg)	12A*
*Or other PS as approved by the AQD	

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.

6. The CEMS/CERMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2, 3, 6 and 12A (see No. 4 above) of Appendix B to 40 CFR Part 60.

7. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS/CERMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F of 40 CFR Part 60).

8. When an Hg CEM is used, and daily calibration and cylinder gas audits are performed using elemental Hg, a single point converter check must be performed weekly using a NIST traceable source of oxidized Hg.

9. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, 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:

   a) A report of each exceedance above the limits specified in the Emission Limits of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.

   b) A report of all periods of CEMS/CERMS downtime and corrective action.

   c) A report of the total operating time of each boiler included in FGCFB during the reporting period.

   d) A report of any periods that the CEMS/CERMS exceeds the instrument range.

e) If no exceedances or CEMS/CERMS downtime occurred during the reporting period, the permittee shall report that fact.

10. The permittee shall keep all monitoring data on file for a period of at least five years and make them available to the AQD upon request.

APPENDIX C
Reporting Requirements

C - 1: Reporting Requirements During Normal Operation as required by 40 CFR §60.51Da(a) and 40 CFR §60.51Da(b)

1. For sulfur dioxide (SO_2), nitrogen oxide (NO_x), and particulate matter (PM) emissions:

   Performance test data from initial and subsequent performance tests and from the performance evaluation of the continuous monitors (including the transmisometer)

2. For sulfur dioxide (SO_2), nitrogen oxide (NO_x), the following information shall be reported for each 24-hour period:

   a) Calendar date.

   b) The average sulfur dioxide and nitrogen oxide emission rates (lb/MMBtu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective action dates.

   c) Percent reduction of the potential combustion concentrations of SO_2 for each successive boiler operating days, ending with the last 30-day period in the quarter: reasons for non-compliance with the standard; and, description of corrective actions taken.

   d) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.

   e) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of start-up, shutdown, malfunction (NO_x only), emergency conditions (SO_2 only), or other reasons, and justification for excluding data for reasons other than start-up, shutdown, malfunction, or emergency conditions.

   f) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

   g) Identification of times when hourly averages have been obtained based on manual sampling methods.

   h) Identification of times when the pollutant concentration exceeded full span of the CEMS.

   i) Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.

3. The permittee shall submit all of the above information on a calendar quarter basis, no later 30 days after the end of the quarter.

APPENDIX C
Reporting Requirements Continued

C - 2: Reporting Requirements when CEMS data is unavailable for less than 90% of boiler operating hours for 30 successive boiler operating days as required by 40 CFR §60.51Da(c)

1. If the minimum quantity of emissions data, 90% of all operating hours for each 30 successive operating days, is not obtained for any 30 successive boiler operating days, the following information shall be reported to the Administrator for that 30-day period:
   a) The number of hourly averages available for outlet emission rates (n_o) and inlet emission rates (n_i) as applicable
   b) The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i) as applicable
   c) The lower confidence limit for the mean outlet emission rate (E_o) and the upper confidence limit for the mean inlet emission rate (E_i) as applicable.
   d) The applicable potential combustion concentration.
   e) The ratio of the upper confidence limit for the mean outlet emission rate (E_o) and the allowable emission rate (E_{std}) as applicable.
2. The permittee shall submit all of the above information on a calendar quarter basis, no later 30 days after the end of the quarter.

C - 3: Reporting Requirements for Excess Emissions During Emergency Conditions as required by 40 CFR §60.51Da(d)

1. If the SO2 emission limit is exceeded during emergency conditions because of control system malfunction, the permittee shall submit a signed statement indicating if emergency conditions existed and requirements under 60.48Da(d) were met during each period, and listing the following information:
   a) Time periods the emergency condition existed
   b) Electrical output and demand on the owner or operator's electric utility system and the affected facility;
   c) Amount of power purchased from interconnected neighboring utility companies during the emergency period;
   d) Percent reduction in emissions achieved
   e) Atmospheric emission rate of the pollutant discharged
   f) Actions taken to correct control system malfunction
2. The permittee shall submit all of the above information on a calendar quarter basis, no later 30 days after the end of the quarter.

APPENDIX C
Reporting Requirements Continued

C - 4: Reporting Requirements for Fuel Pretreatment as required by 40 CFR §60.51Da(e)

1. If fuel pretreatment credit toward the SO_2 emission standard under 60.43Da is claimed, the permittee shall submit a signed statement:
   a) Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of 60.50Da and Method 19 of Appendix A of this part and:
   b)Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter, the nature and location of the fuel pretreatment facility.
2. The permittee shall submit all of the above information on a calendar quarter basis, no later than 30 days after the end of the quarter.

C - 5: Reporting Requirements for Unavailability of Opacity, SO_2 or NO_x Emissions Data as required by 40 CFR §60.51Da(f)

1. For any periods for which opacity, SO2, or NOx emissions data are not available, the permittee shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.
2. The permittee shall submit all of the above information on a calendar quarter basis, no later than 30 days after the end of the quarter.

C – 6: Miscellaneous Reporting as required by 40 CFR §60.51Da(h)

1. The permittee shall submit a signed statement indicating whether:
   a) The required CEMS calibration, span and drift check or other periodic audits have or have not been performed as specified.
   b) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
   c) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
   d) Compliance with the standards has or has not been achieved during the reporting period.
2. The permittee shall submit all of the above information on a calendar quarter basis, no later than 30 days after the end of the quarter.

APPENDIX C
Reporting Requirements Continued

C - 7: Excess Visible Emissions Reporting as required by 40 CFR §60.51Da(i)

1. For purposes of the reports required under 40 CFR §60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable standard under 40 CFR §60.42Da(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses shall be submitted to the Air Quality Division.

2. The permittee shall submit all of the above information on a calendar quarter basis, no later than 30 days after the end of the quarter.