

**MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT  
AIR QUALITY DIVISION**

February 11, 2011

**PERMIT TO INSTALL**  
25-07

**ISSUED TO**  
Holland Board of Public Works – James DeYoung Plant

**LOCATED AT**  
64 Pine Avenue  
Holland, Michigan

**IN THE COUNTY OF**  
Ottawa

**STATE REGISTRATION NUMBER**  
B2357

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Natural Resources and Environment. 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: <b>June 1, 2010</b>	
DATE PERMIT TO INSTALL APPROVED: <b>February 11, 2011</b>	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

**PERMIT TO INSTALL**  
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**Common Abbreviations / Acronyms**

<b>Common Acronyms</b>		<b>Pollutant/Measurement Abbreviations</b>	
APCS	Air Pollution Control System	Btu	British Thermal Unit
AQD	Air Quality Division	°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	g	Gram
EPA	U.S. Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	HCl	Hydrogen Chloride
GACS	Gallon of Applied Coating Solids	H <sub>2</sub> S	Hydrogen Sulfide
GC	General Condition	HF	Hydrogen Fluoride
HAP	Hazardous Air Pollutant	hp	Horsepower
HVLP	High Volume Low Pressure *	lb	Pound
ID	Identification	Pb	Lead
LAER	Lowest Achievable Emission Rate	m	Meter
MACT	Maximum Achievable Control Technology	mg	Milligram
MAERS	Michigan Air Emissions Reporting System	mm	Millimeter
MAP	Malfunction Abatement Plan	MM	Million
MDEQ	Michigan Department of Environmental Quality	MW	Megawatts
MSDS	Material Safety Data Sheet	GW	Gigawatts
NA	Not Applicable	ng	Nanogram
NESHAP	National Emission Standard for Hazardous Air Pollutants	NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standards	PM	Particulate Matter
NSR	New Source Review	PM10	PM less than or equal to 10 microns diameter
PS	Performance Specification	PM2.5	PM less than or equal to 2.5 microns diameter
PSD	Prevention of Significant Deterioration	pph	Pound per hour
PTE	Permanent Total Enclosure	ppm	Parts per million
PTI	Permit to Install	ppmv	Parts per million by volume
RACT	Reasonably Available Control Technology	ppmw	Parts per million by weight
ROP	Renewable Operating Permit	psia	Pounds per square inch absolute
SC	SC	psig	Pounds per square inch gauge
SNCR	Selective non-Catalytic Reduction	scf	Standard cubic feet
SRN	State Registration Number	sec	Seconds
TAC	Toxic Air Contaminant	SO <sub>2</sub>	Sulfur Dioxide
TEQ	Toxicity Equivalence Quotient	H <sub>2</sub> SO <sub>4</sub>	Sulfuric Acid
VE	Visible Emissions	THC	Total Hydrocarbons
		tpy	Tons per year
		µg	Microgram
		VOC	Volatile Organic Compounds
		yr	Year

### GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The 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 Natural Resources and Environment **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law nor does it affect any liability for past violations under the Natural Resources and Environmental Protection Act, 1994 PA 451.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

**SPECIAL CONDITIONS**

**EMISSION UNIT SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-Unit10	<p>A Circulating Fluidized Bed (CFB) Boiler with a maximum heat input rating of 865 million Btu (MMBtu) per hour.</p> <p>The boiler will be fired with coal (bituminous and sub-bituminous), petroleum coke blended coal (petcoke), tire derived fuel (TDF), wood waste, and sewage sludge. Natural gas will be used as a start-up fuel.</p> <p>The air pollution control system (APCS) will consist of selective non-catalytic reduction (SNCR) to control oxides of nitrogen (NO<sub>x</sub>); limestone injection to control sulfur dioxide (SO<sub>2</sub>), sulfuric acid (H<sub>2</sub>SO<sub>4</sub>), hydrogen fluoride (HF) and hydrogen chloride (HCl); fabric filter (FF) to control particulate matter (PM), particulate matter less than 10 micron (PM<sub>10</sub>), lead (Pb), and opacity; and sorbent injection to control mercury (Hg). Also, good combustion practice to control carbon monoxide (CO) and volatile organic compounds (VOCs).</p>	To Be Determine (TBD)	FG-Facility
EU-Cooling	Mechanical induced draft cooling tower with drift eliminator	TBD	FG-Facility
EU-CoalProcess	<p>Bituminous and Sub-Bituminous coal (Coal) handling system including: the barge unloading system; all coal fuel conveyors and transfer points; the reclaim hopper and vibrating feeders; coal drop points; the transfer/crusher house; the active storage pile; and the in-active storage pile. Emissions from the barge unloading are controlled by water sprays. A 10,000 scfm fabric filter controls emissions from the transfer/crusher house. All transfer conveyors are equipped with three sided enclosures.</p>	TBD	FG-Facility
EU-SolidFuelSilo	<p>The post crushing storage and handling of solid fuel prior to combustion. There are three individual silos. One 15,000 scfm fabric filter controls the emissions. All transfer conveyors are equipped with three sided enclosures. This equipment serves Unit 10 only.</p>	TBD	FG-Facility

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-AltFuel	The delivery and handling of alternate fuels prior to transport to the solid fuel silos. Equipment includes a receiving hopper/bin and associated conveyors. Alternate fuels include petroleum coke blended coal (petcoke), tire derived fuel (TDF), and wood waste. All transfer conveyors are equipped with three sided enclosures.	TBD	FG-Facility
EU-LimestoneSilo	Storage and handling of processed limestone prior to introduction to the CFB. Limestone is delivered via truck to facility at the proper size and moisture content. Truck unloading is accomplished pneumatically. All transfer conveyors are equipped with three sided enclosures.	TBD	FG-Facility
EU-SludgeSilo	Storage and handling of dewatered sludge prior to introduction to the CFB. Sludge is delivered via truck and stored in a day silo. Truck unloading is accomplished pneumatically. All transfer conveyors are equipped with three sided enclosures.	TBD	FG-Facility
EU-SorbentSilo	Storage and handling of sorbent. Sorbent is delivered via truck to facility and is stored in a hopper. Truck unloading is accomplished pneumatically. All transfer conveyors are equipped with three sided enclosures.	TBD	FG-Facility
EU-FlyAsh	The handling and storage of flyash generated by Unit 10. Transfer of flyash is pneumatic.	TBD	FG-Facility
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.			

**The following conditions apply to: EU-Unit10**

**DESCRIPTION**

A Circulating Fluidized Bed (CFB) Boiler with a maximum heat input rating of 865 million Btu (MMBtu) per hour. The boiler will be fired with coal (bituminous and sub-bituminous), petroleum coke blended coal (petcoke), tire derived fuel (TDF), wood waste, and sewage sludge. Natural gas will be used as the initial start-up fuel.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT**

The air pollution control system (APCS) will consist of selective non-catalytic reduction (SNCR) to control oxides of nitrogen (NO<sub>x</sub>); limestone injection to control sulfur dioxide (SO<sub>2</sub>), sulfuric acid (H<sub>2</sub>SO<sub>4</sub>), hydrogen fluoride (HF), and hydrogen chloride (HCl); fabric filter (FF) to control particulate matter (PM), particulate matter less than or equal to 10 micron (PM<sub>10</sub>), lead (Pb), and opacity; and sorbent injection to control mercury (Hg). Also, good combustion practice to control carbon monoxide (CO) and volatile organic compounds (VOCs).

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. Opacity	10 percent	6-minute Average, (except one 6-minute average per hour of not more than 20 percent)	EU-Unit10	SC VI.1 / Appendix A, SC VI.12 / Appendix C	R 336.1301(c), R 336.2810, 40 CFR 52.21(j), 40 CFR 62.42Da(b)
2. PM	0.010 lb/MMBtu heat input	Test protocol will specify averaging time	EU-Unit10	SC V.2, SC VI.12 / Appendix C	R 336.1331, R 336.1299(2)(b), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.42Da(c)(2)
3. PM <sub>10</sub>	0.025 lb/MMBtu heat input	Test protocol will specify averaging time	EU-Unit10	SC V.3, SC VI.12 / Appendix C	R 336.2810, 40 CFR 52.21(j)
4. PM <sub>10</sub>	21.6 pph	Test protocol will specify averaging time	EU-Unit10	SC V.3, SC VI.12 / Appendix C	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c),(d), & (j)
5. SO <sub>2</sub>	1.4 lb/MW-hr gross output, excluding periods of start-up and shutdown	30-day rolling averaging period	EU-Unit10	SC V.1, SC VI.2, SC VI.3, & SC VI.4 / Appendix B; SC VI.7, SC VI.12 / Appendix C	R 336.1401, 40 CFR 60.43Da(i)(1)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
6. SO <sub>2</sub>	109.2 pph	24-hour rolling averaging period as determined each hour the boiler operates	EU-Unit10	SC V.1; SC VI.2 & SC VI.3 / Appendix B; SC VI.6, SC VI.12 / Appendix C	R 336.1401, R 336.2802(4), R 336.2803, R 336.2804, 40 CFR 52.21(a)(2), 40 CFR 52.21(c)&(d)
7. NO <sub>x</sub>	1.0 lb/MW-hr gross output, excluding periods of start-up and shutdown	30-day rolling averaging period	EU-Unit10	SC V.1, SC VI.2, SC VI.3, & SC VI.4 / Appendix B; SC VI.9, SC VI.12 / Appendix C	40 CFR 60.44Da(e)(1)
8. NO <sub>x</sub>	78.0 pph	24-hour rolling averaging period as determined each hour the boiler operates	EU-Unit10	SC V.1, SC VI.2 & SC VI.3 / Appendix B; SC VI.8, SC VI.12 / Appendix C	R 336.2802(4), R 336.2803, R 336.2804, 40 CFR 52.21(a)(2), 40 CFR 52.21(c)&(d)
9. CO	0.15 lb/MMBtu heat input, excluding periods of start-up and shutdown	30-day rolling averaging period	EU-Unit10	SC VI.2 & SC VI.3 / Appendix B; SC VI.10, SC VI.12 / Appendix C	R 336.2810, 40 CFR 52.21(j)
10. CO	129.8 pph	24-hour rolling averaging period as determined each hour the boiler operates	EU-Unit10	SC VI.2 & SC VI.3 / Appendix B; SC VI.10, SC VI.12 / Appendix C	R 336.2804, R 336.2810, 40 CFR 52.21(d), 40 CFR 52.21(j)
11. VOC	0.0036 lb/MMBtu heat input, excluding periods of start-up and shutdown	Test protocol will specify averaging time	EU-Unit10	SC V.4, SC VI.12 / Appendix C	R 336.1122(f), R 336.1299(2)(b), R 336.1702(a)
12. VOC	3.1 pph	Test protocol will specify averaging time	EU-Unit10	SC V.4, SC VI.12 / Appendix C	R 336.1122(f), R 336.1702(a), R 336.2802(4), 40 CFR 52.21(a)(2)
13. Mercury (Hg)	0.0078 lb/GW-hr gross output	12-month rolling average	EU-Unit10	SC V.4, SC VI.3, SC VI.4, & SC VI.5 / Appendix B; SC VI.11, SC VI.12 / Appendix C	R 336.1228, R 336.1229(2)(b), R 336.1299(2)(b)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
14. Lead (Pb)	2.17 x 10 <sup>-5</sup> lb/MMBtu heat input	Test protocol will specify averaging time	EU-Unit10	SC V.4, SC VI.12 / Appendix C	R 336.1901, R 336.2802(4), R 336.2804, 40 CFR 52.21(a)(2), 40 CFR 52.21(d)
15. Lead (Pb)	0.019 pph	Test protocol will specify averaging time	EU-Unit10	SC V.4, SC VI.12 / Appendix C	R 336.1901, R 336.2802(4), R 336.2804, 40 CFR 52.21(a)(2), 40 CFR 52.21(d)
16. Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	0.006 lb/MMBtu heat input	Test protocol will specify averaging time	EU-Unit10	SC V.4, SC VI.12 / Appendix C	R 336.1225(1), R 336.2802(4), 40 CFR 52.21(a)(2)
17. Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	5.19 pph	Test protocol will specify averaging time	EU-Unit10	SC V.4, SC VI.12 / Appendix C	R 336.1225(1), R 336.2802(4), 40 CFR 52.21(a)(2)
18. Hydrogen Fluoride (HF)	0.0017 lb/MMBtu heat input	Test protocol will specify averaging time	EU-Unit10	SC V.4, SC VI.12 / Appendix C	R 336.1225(1), R 336.1299(2)(b), R 336.2802(4), 40 CFR 52.21(a)(2)
19. Hydrogen Fluoride (HF)	1.47 pph	Test protocol will specify averaging time	EU-Unit10	SC V.4, SC VI.12 / Appendix C	R 336.1225(1), R 336.1299(2)(b), R 336.2802(4), 40 CFR 52.21(a)(2)
20. Hydrogen Chloride (HCl)	0.063 lb/MMBtu heat input	Test protocol will specify averaging time	EU-Unit10	SC V.4, SC VI.12 / Appendix C	R 336.1225(1), R 336.1299(2)(b)

**II. MATERIAL LIMIT(S)**

1. The permittee shall only fire on EU-Unit10 bituminous coal, sub-bituminous coal, petcoke, TDF, sewage sludge, and wood waste. Also, the permittee shall only use natural gas as the initial start-up fuel. Start-up is defined in SC III.1. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall limit the use of petcoke to no more than 50 percent of the total heat input per 12-month rolling time period to EU-Unit10. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**
3. The permittee shall limit the use of TDF to no more than 30 percent of the total heat input per 12-month rolling time period to EU-Unit10. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**
4. The permittee shall limit the use of wood waste to no more than 30 percent of the total heat input per 12-month rolling time period to EU-Unit10. Wood waste 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. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**

5. The permittee shall limit the use of sewage sludge to no more than 20 percent of the total heat input per 12-month rolling time period to EU-Unit10. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**
6. The permittee shall only combust sewage sludge that is generated by the Holland Board of Public Works, Wastewater Treatment Plant. **(R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 52.21(j))**
7. The chlorine content of the solid fuel blend fired in EU-Unit10 shall not exceed 1,118 ppm (on a dry basis). **(R 336.1225(1), R 336.1299(2)(b), R 336.2802(4), 40 CFR 52.21(a)(2))**

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Start-up operations for EU-Unit10 shall not exceed 24 hours. Shutdown operations for EU-Unit10 shall not exceed 8 hours. Startup is defined as the period of time from initiation of combustion firing until the unit reaches steady state operation. 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 percent 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 EU-Unit10 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 AQD 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 operation changes to achieve compliance with all applicable emissions limits. **(R 336.1911)**
3. The permittee shall not operate EU-Unit10 unless a Wood Waste Plan (WWP) as described in Appendix D has been approved by the AQD District Supervisor, and is implemented and maintained. If at any time the WWP fails to address or inadequately addresses sampling, the permittee shall amend the WWP within 45 days or upon request from the AQD District Supervisor. The permittee shall submit the WWP and any amendments to the WWP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the WWP or amended WWP shall be considered approved. **(R 336.1225, R 336.1702, R 336.1901)**

### **IV. DESIGN/EQUIPMENT PARAMETERS(S)**

1. The permittee shall not operate EU-Unit10 unless the selective non-catalytic reduction (SNCR), limestone injection, fabric filter (FF), and sorbent injection system are 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 EU-Unit10 as required in 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 EU-Unit10 shall not exceed a maximum heat input rating of 865 million Btu per hour. **(R 336.1205(1)(a), 40 CFR Part 72.2)**

#### **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<sub>x</sub> and SO<sub>2</sub> emission rates from EU-Unit10, as required by federal Standards of Performance for New Stationary Sources, 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, 40 CFR 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 EU-Unit10, as required by federal Standards of Performance for New Stationary Sources, 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. 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 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial start-up, verification of PM<sub>10</sub> emission rates from EU-Unit10, 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 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial start-up, verification of Pb, HCl, HF, VOC, and H<sub>2</sub>SO<sub>4</sub>, and total mercury (Hg) emission rates from EU-Unit10, 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, R 336.1228, R 336.1229(2)(b), R 336.1299(2)(b), R 336.1702(a), R 336.1901, R 336.2001, R 336.2003, R 336.2004)**

#### **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 EU-Unit10 on a continuous basis. The opacity monitor shall be operated in accordance with procedures outlined in Appendix A and in 40 CFR 60.49Da. **(R 336.1301(c), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da(b))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a devices to monitors and record the NO<sub>x</sub>, CO, and SO<sub>2</sub> emissions and the carbon dioxide or oxygen (CO<sub>2</sub>/O<sub>2</sub>) content from

EU-Unit10 on a continuous basis. The monitors shall be operated in accordance with procedures outlined in Appendix B 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 devices to monitors and record the exhaust volumetric flow rate from EU-Unit10 on a continuous basis. The monitor shall be operated in accordance with procedures outlined in Appendix B and in 40 CFR 60.49Da(m). **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)**
4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the gross energy output in MW-hr from EU-Unit10 on a continuous basis. The monitor shall be operated in accordance with procedures outlined in Appendix B and in 40 CFR 60.49Da(k). **(R 336.1228, R 336.1229(2)(b), R 336.1299(2)(b), 40 CFR 60.49Da)**
5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record mercury (Hg) emissions from EU-Unit10 on a continuous basis. The monitor shall be operated in accordance with procedures outlined in Appendix B. **(R 336.1228, R 336.1229(2)(b), R 336.1299(2)(b))**
6. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 180 days after commencing operation, as defined in 40 CFR 72.2, of EU-Unit10, the permittee shall keep, in a satisfactory manner, 24-hour rolling average SO<sub>2</sub> mass emission rate records for EU-Unit10, as described in SC I.6. **(R 336.1401, R 336.1802(4), R 336.2803, R 336.2804, 40 CFR 52.21(a)(2), 40 CFR 52.21(c)&(d))**
7. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencing operation, as defined in 40 CFR 72.2, of EU-Unit10, the permittee shall keep, in a satisfactory manner, 30-day rolling average SO<sub>2</sub> gross output emission rate records for EU-Unit10, as described in SC I.5. **(40 CFR 60.48Da(m), 40 CFR 60.49Da(e))**
8. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 180 days after commencing operation, as defined in 40 CFR 72.2, of EU-Unit10, the permittee shall keep, in a satisfactory manner, 24-hour rolling average NO<sub>x</sub> mass emission rate records for EU-Unit10, as described in SC I.8. **(R 336.2802(4), R 336.2803, R 336.2804, 40 CFR 52.21(a)(2), 40 CFR 52.21(c)&(d))**
9. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencing operation, as defined in 40 CFR 72.2, of EU-Unit10, the permittee shall keep, in a satisfactory manner, 30-day rolling average NO<sub>x</sub> gross output emission rate records for EU-Unit10, as described in SC I.7. **(40 CFR 60.48Da(i) , 40 CFR 60.49Da(e))**
10. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 180 days after commencing operation, as defined in 40 CFR 72.2, of EU-Unit10, the permittee shall keep, in a satisfactory manner, 24-hour rolling average and 30-day rolling average CO emission rate records for EU-Unit10, as described in SC I.9 and SC I.10. **(R 336.2804, R 336.2810, 40 CFR 52.21(d), 40 CFR 52.21(j))**
11. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 180 days after commencing operation, as defined in 40 CFR 72.2, of EU-Unit10, the permittee shall keep, in a satisfactory manner, monthly and 12-month rolling average mercury (Hg) gross output emission rate records for EU-Unit10, as described in SC I.13. If the monitoring required by SC VI.5 is only capable of detecting gaseous mercury (Hg), the permittee shall use the testing required by SC V.4 to develop a correction factor to adjust the mercury (Hg) monitoring data to total mercury (Hg). **(R 336.1228, R 336.1229(2)(b), R 336.1299(2)(b))**

12. The permittee shall maintain records for EU-Unit10 for all 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:
- Initial compliance tests and any testing required under 40 CFR Subpart Da or the special conditions of this permit.
  - Monitoring data
  - Fuel analysis
  - Daily fuel usage amounts and heating values (Btu's/lb) of all fuels combusted in EU-Unit10 on a supplier shipment basis (as received).
  - All calculations necessary to show 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 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 336.1910, R 336.1912, R 336.12802(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))**

13. The permittee shall maintain records of the following for EU-Unit10, on a daily basis, to demonstrate compliance with SC II.7. This information shall include, but shall not be limited, to the following:
- Chlorine content of all solid fuels on a supplier shipment basis (as received).
  - Daily solid fuel usage amounts and mixing ratios, if fuel is blended, as fired in EU-Unit10.
  - All calculations necessary to show compliance with the chlorine limit in SC II.7.

All of the above information shall be stored in a format acceptable to the Air Quality Division and made available upon request. **(R 336.1225(1), R 336.1299(2)(b), R 336.2802(4), 40 CFR 52.21(a)(2))**

## **VII. REPORTING**

- The permittee shall comply with the reporting requirements listed in Appendix C-1. **(40 CFR 60.51Da (a) and 40 CFR 60.51Da (b))**
- The permittee shall comply with the reporting requirements listed in Appendix C-2 when CEMS data is unavailable for 90 percent of boiler operating hours for 30 successive boiler operating days. **(40 CFR 60.51Da(c))**
- The permittee shall comply with the reporting requirements listed in Appendix C-3 for excess emissions during emergency conditions. **(40 CFR 60.51Da(d))**
- 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))**
- The permittee shall comply with the reporting requirements listed in Appendix C-5 for unavailability of emissions data. **(40 CFR 60.51Da(f))**
- The permittee shall comply with the reporting requirements listed in Appendix C-6 for miscellaneous reporting. **(40 CFR 60.51Da(h))**
- The permittee shall comply with the reporting requirements listed in Appendix C-7 during periods of excess visible emissions. **(40 CFR 60.51Da(i))**

- Upon prior approval from the AQD District Supervisor, the permittee may, in lieu of submitting written reports, may submit quarterly electronic reports for opacity, and/or SO<sub>2</sub>, and/or NO<sub>x</sub>, and/or mercury (Hg) under special conditions I.1, I.5, I.6, I.7, I.8, and I.13. The format of the electronic submittal shall have received the approval of the AQD District Supervisor. All electronic reports shall be submitted no later than 30 calendar days after the close of the previous calendar quarter. The electronic reports shall be accompanied by a certification statement from the permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of 40 CFR Subpart Da were achieved during the reporting period. **(40 CFR 60.51Da(k))**

**VIII. STACK/VENT RESTRICTION(S)**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (feet)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirement</b>
1. SV-Unit10	8.75	250	R 336.1225, R 336.1901 R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

- The permittee shall comply with all of the applicable requirements contained in the 40 CFR Part 60, Subparts A and Da, as applicable to EU-Unit10. **(40 CFR Part 60, Subparts A and Da)**
- The permittee shall comply with all of the applicable requirements contained in the Clean Air Interstate Rule, as it applies to EU-Unit10. **(R 336.1420, R 336.1821 thru R 336.1834, 40 CFR Part 97)**
- The permittee shall comply with all of the applicable requirements contained in the federal Acid Rain Program, as it applies to EU-Unit10. **(40 CFR Parts 72 - 76)**
- The permittee shall cease operation and remove from service, existing emission unit EU-Unit3 upon commencement of initial start-up of EU-Unit10 and by December 31, 2014. Within seven days of ceasing operation of EU-Unit3 and start-up of EU-Unit10, the permittee shall notify the AQD District Supervisor, in writing, as to the date these activities were completed. **(R 336.2802(4), 40 CFR 52.21(a)(2))**
- The permittee shall notify the AQD District Supervisor, in writing, of the start of construction or reconstruction of EU-Unit10 within 30 days after such date. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EU-Unit10 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 EU-Unit10. **(R 336.1201(7)(a), 40 CFR 60.7(a)(1))**
- The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**

7. Within 12 months after commencement of initial start-up, permittee shall quantify mercury (Hg) emissions from EU-Unit10 by performing a speciated mercury (Hg) 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<sup>1</sup>. **(R 336.2001, R 336.2003, Act 451 of 1994 Part 55 324.5503(p))**

**Footnote(s):**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**The following conditions apply to: EU-CoolingTower**

**DESCRIPTION**

Mechanical induced draft cooling tower with drift eliminator.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT:** NA

**I. EMISSION LIMIT(S):**

NA

**II. MATERIAL LIMIT(S):**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not operate EU-CoolingTower 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 operation changes to achieve compliance with all applicable emissions limits. **(R 336.1911, R 336.2810, 40 CFR 52.21(j))**

**IV. DESIGN/EQUIPMENT PARAMETER(S):**

1. The permittee shall equip and maintain EU-CoolingTower 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 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial start-up of EU-Unit10, and every five years thereafter, the permittee shall submit a technical feasibility analysis for determination of drift loss from EU-CoolingTower by testing. The analysis shall include consideration of the 1994 version of the Cooling Technology Institute's Acceptable Test Code (ATC) 140, but may also include alternate methods proposed by the permittee. **(R 336.2810, 40 CFR 52.21(j))**
2. Within 90 days of written determination by the AQD that a drift loss test on EU-CoolingTower is feasible, the permittee shall submit a complete test plan to the AQD. **(R 336.2810, 40 CFR 52.21(j))**
3. Within 90 days of AQD approval of the test plan, the permittee shall determine drift loss from EU-CoolingTower by testing, at owner's expense. Determination of drift loss includes the submittal of a

complete test 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 EU-CoolingTower, the permittee shall maintain a record, for the life of the cooling tower, of the vendor's certification required in Special Condition IV.1. **(R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall monitor the following for EU-CoolingTower:
  - 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.
  - c) Calculations of PM and PM10 emission rates (by using the total dissolved solids content of the circulating water and water recirculation rate) from EU-CoolingTower monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and make them available to the Department upon request. **(R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall keep, for EU-CoolingTower, a record of the date the two most recent drift loss determinations were conducted. **(R 336.2810, 40 CFR 52.21(j))**

**VII. REPORTING:**

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

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 EU-CoolingTower 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 EU-CoolingTower. **(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
NA	NA	NA	NA

**IX. OTHER REQUIREMENT(S):**

NA

**The following conditions apply to: EU-CoalProcess**

**DESCRIPTION**

Bituminous and Sub-Bituminous coal (Coal) handling system including: the barge unloading system; all coal fuel conveyors and transfer points; the reclaim hopper and vibrating feeders; coal drop points; the transfer/crusher house; the active storage pile; and the in-active storage pile.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT**

Emissions from the barge unloading are controlled by water sprays. A 10,000 SCFM fabric filter controls emissions from the transfer/crusher house. All transfer conveyors are equipped with three sided enclosures.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. Opacity	10 percent	Test protocol will specify averaging time	The drop points and transfer points in EU-CoalProcess	SC V.1 SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.254(c)
2. Opacity	5 percent	Test protocol will specify averaging time	SV-TransferHouse	SC V.1, SC VI.2	R 336.1301, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j), 40 CFR 60.254(c)
3. PM	0.004 gr/dscf calculated on a dry gas basis	Test protocol will specify averaging time	SV-TransferHouse	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
4. PM10	0.34 lb/hr	Test protocol will specify averaging time	SV-TransferHouse	GC 13	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j)

**II. MATERIAL LIMITS**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Within 180 days from the initial start-up of EU-Unit10, 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 District Supervisor. Subsequently it shall be implemented, updated as necessary, and kept at the facility. 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 EU-CoalProcess unless a malfunction abatement plan (MAP) as described in Rule 911(2), is implemented, updated as necessary, and kept at the facility. 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 EU-CoalProcess unless the fabric filter is installed, maintained and operated in a satisfactory manner. The permittee shall equip the fabric filter with broken bag leak detectors, or an alternative monitoring method approved in writing by the AQD Supervisor. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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 EU-CoalProcess unless the three sided conveyor enclosures are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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))**
3. The permittee shall not operate any portion of EU-CoalProcess unless the water sprays for the barge unloading operation are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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))**
4. The permittee shall not operate the crushing operations in the transfer house portion of EU-CoalProcess for more than 12 hours per calendar day. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

#### **V. TESTING/SAMPLING**

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

1. Within 180 days after initial start-up of EU-CoalProcess, the permittee shall conduct visible emissions tests from EU-CoalProcess 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 EU-CoalProcess. **(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 perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 on a daily basis when EU-CoalProcess is operating. If during the observations 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 observed, 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 336.1301, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j), 40 CFR 60.254(c))**
3. If the permittee does not install a bag leak detection system per the alternative monitoring requirements outlined in Special Condition IV.1, the permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.2 on a daily basis when EU-CoalProcess is operating. If during the observations 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 observed, 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 336.1301, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j), 40 CFR 60.254(c))**
4. The permittee shall keep, in a satisfactory manner, daily records of the hours of operation for the crushing operations in the transfer house portion of EU-CoalProcess. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

**VII. REPORTING**

NA

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-TransferHouse	24	120	R 336.1901, 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 and specified in 40 CFR Part 60 Subparts A and Y, as they apply to EU-CoalProcess. **(40 CFR Part 60 Subparts A & Y)**

2. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EU-CoalProcess 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 EU-CoalProcess. **(R 336.1201(7)(a))**
3. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**

**The following conditions apply to: EU-SolidFuelSilo**

**DESCRIPTION**

The post crushing storage and handling of solid fuel prior to combustion. There are three individual silos. This equipment serves Unit 10 only.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT**

Emissions from the three silos will be controlled by one 15,000 SCFM fabric filter. All transfer conveyors are equipped with three sided enclosures.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. Opacity	10 percent	Test protocol will specify averaging time	The drop points and transfer points in EU-SolidFuelSilo	SC VI.2	R 336.1301, R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.254(c)
2. Opacity	5 percent	Test protocol will specify averaging time	SV-SolidFuelSilo	SC V.1, SC VI.2	R 336.1301, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j), 40 CFR 60.254(c)
3. PM	0.004 gr/dscf calculated on a dry gas basis	Test protocol will specify averaging time	SV-SolidFuelSilo	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
4. PM10	0.51 lb/hr	Test protocol will specify averaging time	SV-SolidFuelSilo	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 from the initial start-up of EU-Unit10, 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 District Supervisor. Subsequently it shall be implemented, updated as necessary, and kept at the facility. 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 EU-SolidFuelSilo unless a malfunction abatement plan (MAP) as described in Rule 911(2), is implemented, updated as necessary, and kept at the facility. 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 EU-SolidFuelSilo unless the fabric filter is installed, maintained and operated in a satisfactory manner. The permittee shall equip the fabric filter with broken bag leak detectors, or an alternative monitoring method approved in writing by the AQD Supervisor. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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 EU-SolidFuelSilo unless the three sided conveyor enclosures are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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))**
3. The permittee shall not operate the silo loading operations of EU-SolidFuelSilo for more than 12 hours per calendar day. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

#### **V. TESTING/SAMPLING**

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

1. Within 180 days after initial start-up of EU-SolidFuelSilo, the permittee shall conduct visible emissions tests from EU-SolidFuelSilo 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 EU-SolidFuelSilo. **(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 perform and document non-certified visible emissions observations as required in Emission Limit SC I.1 on a daily basis when EU-SolidFuelSilo is operating. If during the observations 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 observed, 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 336.1301, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j), 40 CFR 60.254(c))**

3. If the permittee does not install a bag leak detection system per the alternative monitoring requirements outlined in Special Condition IV.1, the permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.2 on a daily basis when EU-SolidFuelSilo is operating. If during the observations 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 observed, 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 336.1301, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j), 40 CFR 60.254(c))**
4. The permittee shall keep, in a satisfactory manner, daily records of the hours of operation for the silo loading operations of EU-SolidFuelSilo. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

**VII. REPORTING**

NA

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-SolidFuelSilo	30	225	R 336.1901, 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 and specified in 40 CFR Part 60 Subparts A and Y, as they apply to EU-SolidFuelSilo. **(40 CFR Part 60 Subparts A & Y)**
2. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EU-SolidFuelSilo 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 EU-SolidFuelSilo. **(R 336.1201(7)(a))**
3. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**

**The following conditions apply to: EU-AltFuel**

**DESCRIPTION**

The delivery and handling of alternate fuels prior to transport to the solid fuel silos. Equipment includes a receiving hopper/bin and associated conveyors. Alternate fuels include petroleum coke blended coal (petcoke), tire derived fuel (TDF), and wood waste.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT**

All transfer conveyors are equipped with three sided enclosures.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. Opacity	10 percent	Test protocol will specify averaging time	The drop points and transfer points in EU-AltFuel	SC VI.1	R 336.1301, R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.254(c)

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Within 180 days from the initial start-up of EU-Unit10, 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 District Supervisor. Subsequently it shall be implemented, updated as necessary, and kept at the facility. 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 EU-AltFuel unless a malfunction abatement plan (MAP) as described in Rule 911(2), is implemented, updated as necessary, and kept at the facility. 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 EU-AltFuel unless the three sided conveyor enclosures are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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))**

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 EU-AltFuel is operating. If during the observations 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 observed, 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 336.1301, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j), 40 CFR 60.254(c))**

**VII. REPORTING**

NA

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
NA	NA	NA	NA

**IX. OTHER REQUIREMENT(S)**

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EU-AltFuel 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 EU-AltFuel. **(R 336.1201(7)(a))**

**The following conditions apply to: EU-LimestoneSilo**

**DESCRIPTION**

Storage and handling of processed limestone prior to introduction to the CFB. Limestone is delivered via truck to facility at the proper size and moisture content. Truck unloading is accomplished pneumatically.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT**

The truck unloading operation is done within a three sided structure to reduce fugitive emissions. The limestone storage silo is ducted to the EU-Unit10 Fabric Filter. All transfer conveyors are equipped with three sided enclosures.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. Opacity	10 percent	Test protocol will specify averaging time	The drop points and transfer points in EU-LimestoneSilo	SC VI.1	R 336.1301, R 336.2810, 40 CFR 52.21 (j)

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Within 180 days from the initial start-up of EU-Unit10, 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 District Supervisor. Subsequently it shall be implemented, updated as necessary, and kept at the facility. 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 EU-LimestoneSilo unless a malfunction abatement plan (MAP) as described in Rule 911(2), is implemented, updated as necessary, and kept at the facility. 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 EU-LimestoneSilo unless the limestone truck unloading enclosure is installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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 EU-LimestoneSilo unless the conveyor enclosures are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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))**
3. The permittee shall not operate the limestone feed storage portion of EU-LimestoneSilo unless the exhaust stream is ducted to the EU-Unit10 Fabric Filter. **(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))**

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 EU-LimestoneSilo is operating. If during the observations 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 observed, 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 336.1301, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

**VII. REPORTING**

NA

**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
NA	NA	NA	NA

**IX. OTHER REQUIREMENT(S)**

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EU-LimestoneSilo 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 EU-LimestoneSilo. **(R 336.1201(7)(a))**

**The following conditions apply to: EU-SludgeSilo**

**DESCRIPTION**

Storage and handling of de-watered sludge prior to introduction to the CFB. Sludge is delivered via truck and stored in a day silo. All transfer conveyors are equipped with three sided enclosures.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT**

De-watered is sludge that has been put through a belt press or centrifugal de-watering process and contains no more than 50% solids material.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Within 180 days from the initial start-up of EU-Unit10, 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 District Supervisor. Subsequently it shall be implemented, updated as necessary, and kept at the facility. 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 EU-SludgeSilo unless a malfunction abatement plan (MAP) as described in Rule 911(2), is implemented, updated as necessary, and kept at the facility. 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. The permitted shall only store and utilize sewage sludge which has been de-watered. De-watered sludge is sludge that has been put through a belt press or centrifugal de-watering process and contains no more than 50% solids material. **(R 336.1901)**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

NA

**VII. REPORTING**

NA

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
NA	NA	NA	NA

**IX. OTHER REQUIREMENT(S)**

NA

**The following conditions apply to: EU-SorbentSilo**

**DESCRIPTION**

Storage and handling of sorbent. Sorbent is delivered via truck to facility and is stored in a hopper. Truck unloading is accomplished pneumatically. All transfer conveyors are equipped with three sided enclosures.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Within 180 days from the initial start-up of EU-Unit10, 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 District Supervisor. Subsequently it shall be implemented, updated as necessary, and kept at the facility. 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 EU-SorbentSilo unless a malfunction abatement plan (MAP) as described in Rule 911(2), is implemented, updated as necessary, and kept at the facility. 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 the silo loading operations of EU-SorbentSilo for more than 4 hours per calendar day. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep, in a satisfactory manner, daily records of the hours of operation for the silo loading operations of EU-SorbentSilo. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

**VII. REPORTING**

NA

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
NA	NA	NA	NA

**IX. OTHER REQUIREMENT(S)**

NA

**The following conditions apply to: EU-FlyAsh**

**DESCRIPTION**

The handling and storage of flyash generated by Unit 10. Transfer of flyash is pneumatic.

**Flexible Group ID:** FG-Facility

**POLLUTION CONTROL EQUIPMENT**

The flyash storage silo is ducted to the EU-Unit10 Fabric Filter. The loading operation is pneumatic. All transfer conveyors are equipped with three sided enclosures.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. Opacity	10 percent	Test protocol will specify averaging time	The drop points and transfer points in EU-FlyAsh	SC VI.1	R 336.1301, R 336.2810, 40 CFR 52.21 (j)

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Within 180 days from the initial start-up of EU-Unit10, 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 District Supervisor. Subsequently it shall be implemented, updated as necessary, and kept at the facility. 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 EU-FlyAsh unless a malfunction abatement plan (MAP) as described in Rule 911(2), is implemented, updated as necessary, and kept at the facility. 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 EU-FlyAsh unless the silo bin vent filter is installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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 EU-FlyAsh unless the conveyor enclosures are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device and/or implementing each alternative monitoring method in accordance with a malfunction abatement plan (MAP) as required by Special Condition 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))
3. The permittee shall not operate the flyash storage portion of EU-FlyAsh unless the exhaust stream is ducted to the Unit 10 Fabric Filter. (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))

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 EU-FlyAsh is operating. If during the observations 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 observed, 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 336.1301, R 336.1901, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))

**VII. REPORTING**

NA

**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
NA	NA	NA	NA

**IX. OTHER REQUIREMENTS**

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EU-FlyAsh 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 EU-FlyAsh. **(R 336.1201(7)(a))**

**FLEXIBLE GROUP SUMMARY TABLE**

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

<b>Flexible Group ID</b>	<b>Flexible Group Description</b>	<b>Associated Emission Unit IDs</b>
FG-Facility	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

**The following conditions apply to: FG-Facility**

**DESCRIPTION**

All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

As listed in each emission unit of the FG-Facility

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing/ Monitoring Method	Underlying Applicable Requirement
NA	NA	NA	NA	NA	NA

**II. MATERIAL LIMIT(S)**

NA

**IV. DESIGN/EQUIPMENT PARAMETERS(S)**

NA

**V. TESTING SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

NA

**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
NA	NA	NA	NA

**IX. OTHER REQUIREMENTS**

1. The permittee shall calculate, in a satisfactory manner, the annual fugitive dust emissions of particulate matter, using the current U. S. EPA Compilation of Air Pollutant Emission Factors (AP-42) or other emission factors approved by the Department such as those used in the MAERS. The permittee shall report the actual emission levels for each emission unit (EU) and for FG-Facility to the AQD through the annual emission reporting required under Section 5503(k) of Article II, Chapter 1, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451)<sup>1</sup>. **(Act 451 of 1994 Part 55 324.5503(k), R 336.202)**

**Footnote(s):**

<sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**APPENDIX A**  
**Continuous Opacity Monitoring System (COMS) Requirements**

1. Within 30 calendar days of commencing operation, as defined in 40 CFR 72.2, 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 commencing operation, as defined in 40 CFR 72.2, 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 commencing operation, as defined in 40 CFR 72.2, 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; and 40 CFR 60.48 Da(o)(2).
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<sub>x</sub>, Hg, SO<sub>2</sub>, CO, CO<sub>2</sub>/O<sub>2</sub> Monitoring**  
**Continuous Emission Monitoring and Continuous Emission Rate Monitoring System (CEMS/CERMS)**  
**Requirements**

1. Within 30 calendar days after commencing operation, as defined in 40 CFR 72.2, 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 commencing operation, as defined in 40 CFR 72.2, 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 commencing operation, as defined in 40 CFR 72.2, 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:

<b>Pollutant</b>	<b>Applicable PS</b>
NO <sub>x</sub> /SO <sub>2</sub>	2
CO	4
CO <sub>2</sub> /O <sub>2</sub>	3
CERMS	6
Mercury (Hg)	12A*
*Or other Performance Specification (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 EU-Unit10 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.
11. SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub> or flow CEM installed and certified meeting the ongoing quality assurance (QA) of Part 75 may be used provided that the CEM also meets the requirement 40 CFR Part 60, Subpart 60.49Da, (b),(c),(d), and (m).

### 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<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), 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 transmissometer)
2. For sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), the following information shall be reported for each 24-hour period:
  - Calendar date.
  - 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.
  - Percent reduction of the potential combustion concentrations of SO<sub>2</sub> 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.
  - Identification of the times when emissions data have been excluded from the calculation of average emission rates because of start-up, shutdown, malfunction (NO<sub>x</sub> only), emergency conditions (SO<sub>2</sub> only), or other reasons, and justification for excluding data for reasons other than start-up, shutdown, malfunction, or emergency conditions.
  - Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
  - Identification of times when hourly averages have been obtained based on manual sampling methods.
  - Identification of times when the pollutant concentration exceeded full span of the CEMS.
  - 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.
4. 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 (Hg only) of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.

#### **C - 2: Reporting Requirements when CEMS data is unavailable for less than 90 percent (SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>/O<sub>2</sub>) 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 percent 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<sub>o</sub>) and inlet emission rates (n<sub>i</sub>) as applicable
  - b) The standard deviation of hourly averages for outlet emission rates (s<sub>o</sub>) and inlet emission rates (s<sub>i</sub>) as applicable
  - c) The lower confidence limit for the mean outlet emission rate (E<sub>o</sub>) and the upper confidence limit for the mean inlet emission rate (E<sub>i</sub>) 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  $SO_2$  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 than 30 days after the end of the quarter.

**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,  $SO_2$ , or  $NO_x$  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.

**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.

## **APPENDIX D Wood Waste Plan**

### **1. Definitions**

**Wood waste** - Wood in any form that has no paint, stain, or other types of coatings, and has not been treated with wood preservatives, including but not limited to, formaldehyde, copper, chromium, arsenate, creosote, or pentachlorophenol.

**Batch** - A quantity of material contained in one storage unit (i.e., stockpile, barge, etc.) where no additional material is put into the storage unit after sampling. If additional material is added to a storage unit after sampling, a new batch has been created and must be analyzed and given a new identification number.

**Source** - A process that generates wood waste.

**Supplier** - An entity with different ownership and/or address.

### **2. All wood waste (as defined) must be acceptable for use as a fuel under federal and state regulations. A certificate of analysis must accompany each delivery and must be kept on file for a period of 5 years and made available to the AQD upon request.**

Each delivery from a supplier/source of wood waste must be accompanied by documentation demonstrating that the wood waste contains no paint, stain, coatings and has not been treated with wood preservatives, as defined. The documentation shall include supplier/source certification and analytical data. The analysis must be for the batch of wood waste accepted for use as a fuel by the permittee. Separate deliveries may have identical documentation from the supplier/source if they are loaded from a unique batch from a single supplier/source. The delivery shall be rejected if this demonstration can not be met.

The supplier/source certification shall include a unique identification number, date of delivery, sampling analysis, date the sampling analysis was performed, and analytical methods used.

### **3. Sampling and analysis of wood waste must be kept on file for a period of 5 years and made available to the AQD upon request.**

For each supplier/source of wood waste, the permittee shall conduct monthly sampling and analysis of the material. Samples shall be taken at the time of delivery from the delivery vessel, prior to mixing with material in on-site storage, and labeled with the unique batch identification number. Sufficient material shall be collected to provide three samples, each of sufficient volume for the required analysis.

One of the three samples of the wood waste from each batch collected at the time of delivery shall be submitted by the facility to an independent laboratory to verify the information provided on the supplier/source certificate of analysis for the batch. The laboratory analysis shall include the constituents (reported in mg/Kg, by weight) and properties of the wood waste, including but not limited to the following: antimony, arsenic, barium, beryllium, benzo-a-pyrene, cadmium, chlorine, chromium, copper, cresols, lead, manganese, mercury, nickel, pentachlorophenol, phenol, silver, thallium, total zinc, BTU content per pound, percent sulfur, percent ash, and percent moisture.

After 12 consecutive monthly samples from the same supplier/source are analyzed and found to be acceptable, the permittee shall conduct sampling and analysis once each calendar quarter. If a supplier/source does not deliver in a given month, then no sampling or analysis is required, for that month.

Samples shall be maintained by the facility until the end of the calendar year and shall be made available to the AQD upon request.

Any independent laboratory used by the facility for material analyses shall develop a Quality Assurance Plan (QAP). Detailed in the QAP shall be the QA/QC procedures, sample handling, storage, chain of custody procedures, analytical methods for all analyses, a description of the laboratory instrumentation, and the instrumental detection limits. The analytical methods used by the independent laboratory should be

consistent with the methods used by the Department. The facility shall maintain a copy of the approved QAP on site or at the corporate offices and be available for AQD inspection.

A record of all batches analyzed and along with records of the analytical data from both the supplier/source and the permittee's independent laboratory for the same batch, shall be kept on file and made available to the AQD upon request.