

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

December 29, 2009
REVISED January 8, 2010

**PERMIT TO INSTALL
341-07**

ISSUED TO
Consumers Energy
Karn-Weadock Generating Station

LOCATED AT
2742 North Weadock Highway
Essexville, Michigan

IN THE COUNTY OF
Bay

**STATE REGISTRATION NUMBER
B2840**

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: February 26, 2009	
DATE PERMIT TO INSTALL APPROVED: December 29, 2009	SIGNATURE: G. Vinson Hellwig
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant/Measurement Abbreviations	
AQD	Air Quality Division	Btu	British thermal unit
ANSI	American National Standards Institute	°C	Degrees Celsius
BACT	Best Available Control Technology	CO	Carbon monoxide
CAA	Clean Air Act	dscf	Dry standard cubic foot
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	GW, GW-hr	Gigawatts, Gigawatt-hour
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallon of Applied Coating Solids	H ₂ S	Hydrogen sulfide
GC	General Condition	hp	horsepower
HAP	Hazardous Air Pollutant	kW, kW-hr	kilowatts, kilowatt-hours
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfuction Abatement Plan	MW, MW-hr	Megawatts, Megawatt-hour
MDEQ	Michigan Department of Environmental Quality	ng	Nanogram
MIOSHA	Michigan Occupational Safety & Health Administration	NMHC	Non-methane hydrocarbons
MSDS	Material Safety Data Sheet	NO _x	Oxides of nitrogen
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM	Particulate matter
NSPS	New Source Performance Standards	PM ₁₀	PM less than or equal to 10 microns aerodynamic diameter
NSR	New Source Review	PM _{2.5}	PM less than or equal to 2.5 microns aerodynamic diameter
PEM	Predictive Emission Monitoring	pph	Pound per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch, absolute
RACT	Reasonably Available Control Technology	psig	Pounds per square inch, gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur dioxide
SRN	State Registration Number	THC	Total hydrocarbons
TAC	Toxic Air Contaminant	tpy	Tons per year
TEQ	Toxicity Equivalence Quotient	µg	Microgram
VE	Visible Emissions	VOC	Volatile organic compounds
		yr	Year

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(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 Environmental Quality. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided no later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal 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-ASCPCBOILER	930MW (gross rated output) Advanced Supercritical Pulverized Coal-fired (ASCPC) boiler and steam turbine generator. Nominal gross heat input rating 8,190 MMBtu/hr	TBD	NA
EU-AUXBOILER	Auxiliary Boiler is a 220 MMBtu/hr natural gas-fired boiler used to assist in startup of the ASCPC boiler and to provide heat when EU-ASCPCBOILER is not operating	TBD	NA
EU-COOLINGTOWERS	Two mechanical draft cooling towers	TBD	NA
EU-EMRG_GEN	Emergency Generator, 2,000 kW, diesel fired, with 10,000 gallon AST	TBD	NA
EU-FIREPUMP	Primary fire pump, diesel fueled	TBD	NA
EU-FIREBSTR	Fire booster pump, diesel fueled	TBD	NA
EU-WFGD_QP	Flue Gas Desulfurization quench pump, diesel fueled	TBD	NA
EU-RAILUNLOAD	Equipment used for handling and transport of coal received by rail. This Emission Unit includes the coal dumper house, the coal barn and transfer towers up to the coal crusher house. The dumper house uses rubber curtains and fabric filters for dust control. All external conveyors are half moon shaped enclosures with a raised trough-belt design. Transfer towers are enclosed and use fabric filters for dust control.	TBD	NA
EU-COALCRUSHER	The coal crushing equipment. Coal is reduced in size and sent to the day storage silos. Emissions are controlled by a fabric filter. All external conveyors are half moon shaped enclosures with a raised trough-belt design.	TBD	NA
EU-COALSILOS	The day storage silos. Crushed coal is stored here prior to being sent to the pulverizing system. Emissions are controlled by one fabric filter.	TBD	NA
EU-RESERVESTORAGE	The radial stacker, reserve stockout pile, reserve storage pile and reclaim hoppers. Coal from the rail dumper goes to outdoor storage via the radial stacker. Dust suppressants and crusting agents are used to minimize wind-borne emissions. The dust from each reclaim hopper is controlled by a fabric filter.	TBD	NA

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-LIMESTONE	Equipment used for handling and transport of limestone received by ship. This Emission Unit includes the ship unloading equipment, the limestone dome, and transfer towers. Ships are unloaded by a conveyor which drops limestone through a wet-suppression ring into a hopper. The hopper dust is controlled by a fabric filter. The limestone dome reclaim unit is controlled by a fabric filter. All external conveyors are half moon shaped with raised trough-belt design. Transfer towers are enclosed and use fabric filters for dust control.	TBD	NA
EU-LIMESTONEPREP	The limestone preparation. The limestone preparation building is controlled by an individual fabric filter.	TBD	NA
EU-ASHHANDLING	Ash removal systems. Fly ash is collected from the economizer, air heater hoppers, and the fabric filter hopper and stored in a silo. From the silo ash is unloaded into trucks for delivery to the on-site landfill. Emissions from the silo and fly ash removal equipment are controlled by a fabric filter dust collector. Bottom ash is collected from the bottom ash hopper and sent to a concrete bunker prior to loading. The bottom ash handling system is a wet system which suppresses dust.	TBD	NA
EU-LIMESTORAGE	Storage and handling of hydrated lime. Hydrated lime is delivered via truck to facility and is stored in a silo. Emissions are controlled by fabric filter.	TBD	NA
EU-SORBENTSTORAGE	Storage and handling of activated carbon. Activated carbon is delivered via truck to facility and is stored in a silo. Emissions are controlled by fabric filter.	TBD	NA

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-ASCPCBOILER

DESCRIPTION: 930 MW (gross rated output) advanced supercritical pulverized coal-fired boiler and steam turbine generator. Nominal design gross heat input rating 8,190 MMBtu/hr

POLLUTION CONTROL EQUIPMENT: For NO_x, combustion controls for NO_x are low-NO_x burners and overfire air. Also for post-combustion control on the flue gas, a selective catalytic reduction (SCR) system will be installed after (downstream from) the economizer. For CO and VOC, proper design and operation of the boiler and efficient combustion of the coal will limit the emissions. For PM (and PM₁₀ and PM_{2.5}) a fabric filter (baghouse) will provide emission control. For SO₂, a limestone forced oxidation wet flue gas desulfurization (FGD) system will be used to control emissions. This control method produces a gypsum sludge for dewatering and disposal. For acid gases, control will be hydrated lime injection before (upstream from) the baghouse. The lime neutralizes the acid gas and is collected as PM in the baghouse. For control of mercury emissions, co-benefits from the SCR, wet FGD system and baghouse and a sorbent (e.g., powdered activated carbon) will be injected upstream from the baghouse. The mercury is adsorbed on the active surfaces of the sorbent which is collected as PM in the baghouse. Ash (both fly ash and bottom ash) is a product of the combustion reaction and requires collection and disposal.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Opacity	10 percent	Six minute average except one six minute average per hour of not more than 20 percent	EU-ASCPCBOILER	SC VI.1a or SC VI.1b	R 336.1301(c) R 336.2810 40 CFR 52.21(j) 40 CFR 60.42Da(b)
2. PM	0.011 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.2	R 336.1331 R 336.1299(2)(b) R 336.2810 40 CFR 52.21(j) 40 CFR 60.42Da(c)(2)
3. PM ₁₀	0.024 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.3	R 336.2810 40 CFR 52.21(j)
4. PM ₁₀	196.6 pph	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.3	R 336.2803 R 336.2804 40 CFR 52.21 (c) and (d) R 336.2810 40 CFR 52.21(j)
5. SO ₂	0.06 lb/MMBtu heat input	30-day rolling average as determined each day the boiler operates	EU-ASCPCBOILER	SC V.1 SC VI.2 SC VI.8	R 336.1401 R 336.2810 40 CFR 52.21(j) 40 CFR Part 60 Subpart Da

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
6. SO ₂	491.4 pph	24-hr rolling averaging period as determined each hour the boiler operates	EU-ASCPCBOILER	SC V.1 SC VI.2 SC VI.8	R 336.2803 R 336.2804 40 CFR 52.21 (c) and (d) R 336.2810 40 CFR 52.21(j) 40 CFR Part 60 Subpart Da
7. NO _x	0.05 lb/MMBtu heat input excluding periods of startup and shutdown	30-day rolling average as determined each day the boiler operates	EU-ASCPCBOILER	SC V.1 SC VI.2 SC VI.6	R 336.2810 40 CFR 52.21(j) 40 CFR Part 60 Subpart Da
8. NO _x	409.5 pph	24-hr rolling averaging period as determined each hour the boiler operates	EU-ASCPCBOILER	SC V.1 SC VI.2 SC VI.6	R 336.2803 R 336.2804 40 CFR 52.21 (c) and (d) R 336.2810 40 CFR 52.21(j) 40 CFR Part 60 Subpart Da
9. CO	0.125 lb/MMBtu heat input excluding periods of startup and shutdown	24-hr rolling average as determined each hour the boiler operates	EU-ASCPCBOILER	SC VI.2 SC VI.7	R 336.2810 40 CFR 52.21(j)
10. CO	1,023.8 pph	24-hr rolling averaging period as determined each hour the boiler operates	EU-ASCPCBOILER	SC VI.2 SC VI.7	R 336.2804 40 CFR 52.21(d) R 336.2810 40 CFR 52.21(j)
11. VOC	0.0030 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.4	R 336.1122(f) R 336.1299(2)(b) R 336.1702(a) R 336.2810 40 CFR 52.21(j)
12. VOC	24.6 pph	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.4	R 336.1122(f) R 336.1702(a) R 336.2810 40 CFR 52.21(j)
13. Lead	7.985x10 ⁻⁶ lb/MMBtu heat input	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.5	R 336.1901 R 336.2804 40 CFR 52.21(d)
14. Sulfuric acid mist (H ₂ SO ₄)	0.004 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.6	R 336.1225 R 336.2810 40 CFR 52.21(j)
15. Sulfuric acid mist (H ₂ SO ₄)	32.8 pph	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.6	R 336.1225 R 336.2810 40 CFR 52.21(j)
16. Hydrogen Chloride (HCl)	0.0010 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.7	R 336.1225 R 336.1299(2)(b)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
17. Hydrogen Fluoride (HF)	0.00014 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-ASCPCBOILER	SC V.7	R 336.1225 R 336.1299(2)(b) R 336.2810 40 CFR 52.21(j)
18. Mercury	0.0079 lb/GW-hr gross energy output	12-month rolling average as determined at the end of each calendar month	EU-ASCPCBOILER	SC V.8 SC VI.3 SC VI.5 SC VI.9	R 336.1228 R 336.1229(2)(b) R 336.1299(2)(b)

II. MATERIAL LIMIT(S)

1. The permittee shall only use natural gas as the initial start-up fuel. Start-up is defined in SC III.2. **(R 336.1205(1)(a), R 336.2810, 40 CFR 52.21(j))**
2. The EU-ASCPCBOILER daily average throughput shall not exceed the following:
 - a) 100 percent sub-bituminous coal,
 - b) 50 percent, based on higher heating value in Btu per pound, of bituminous coal. **(R 336.1205, R 336.1225, R 336.1299(2)(b), R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-ASCPCBOILER unless a malfunction abatement plan (MAP) as described in Rule 911(2), for operation of the process and emission control equipment, has been submitted before trial operation, and 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 336.1225, R 336.1299(2)(b), R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2810, 40 CFR 52.21(j))**
2. Startup operations for EU-ASCPCBOILER shall not exceed 24 hours. Shutdown operations for EU-ASCPCBOILER shall not exceed 16 hours. Startup is defined as the period of time from initiation of combustion firing until the unit reaches steady state operation (i.e. minimum of 35 percent of steam generator load). Cold startup is defined as a startup 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 35 percent baseload, until the point at which the combustion process has stopped. **(R 336.1912, R 336.2810, 40 CFR 52.21(j))**
3. The SO₂ concentration of the exhaust gas from EU-ASCPCBOILER at the inlet to the limestone forced oxidation wet flue gas desulfurization system, shall not exceed a maximum of 1.4 lb/MMBtu heat input, 30-day rolling average as determined each day the boiler operates. **(R 336.1205, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum heat input rate of EU-ASCPCBOILER shall not exceed 8,190 million British thermal units per hour (MMBtu/hr). **(R 336.1205(1)(a))**
2. The permittee shall not operate EU-ASCPCBOILER unless the low NO_x burners, selective catalytic reduction (SCR) system, fabric filter (baghouse), limestone forced oxidation wet flue gas desulfurization system, hydrated lime injection system, 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-ASCPCBOILER as required in SC III.1. **(R 336.1225, R 336.1299(2)(b), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21(j))**

V. TESTING/SAMPLING

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

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial start-up, the permittee shall verify NO_x and SO₂ emission rates from EU-ASCPCBOILER, as required by federal Standards of Performance for New Stationary Sources and Appendix B of this permit, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and Da. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). 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 60.8, 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-ASCPCBOILER, as required by federal Standards of Performance for New Stationary Sources and Appendix A of this permit, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and Da. The permittee shall perform subsequent tests every 12 calendar months using the procedures in 40 CFR 60.50Da. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Stack testing procedures and the location of stack testing ports shall be in accordance with the requirements of 40 CFR 60.50Da(b) and the applicable federal Reference Methods, 40 CFR Part 60 Appendix A (USEPA Method 5B with 2-hour test runs or an alternate method and/or run time approved by the AQD). 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 60.8, 40 CFR Part 60.48Da(o)(1), 40 CFR 60.50Da)**
3. Within 180 days after commencement of initial start-up, verification of PM₁₀ emission rates from EU-ASCPCBOILER, by testing at owner's expense, in accordance with Department requirements, will be required. 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 (USEPA Method 5B for filterable PM and Method 202 or OTM-28 for condensible PM with 2-hour test runs) or an alternate method and/or run time approved by the AQD. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**

4. Within 180 days after commencement of initial start-up, verification of VOC emission rates from EU-ASCPCBOILER, by testing at owner's expense, in accordance with Department requirements, will be required. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A (Method 25A and Method 18 with 1-hour test runs) or an alternate method and/or run time approved by the AQD. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1299(2)(b), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**
5. Within 180 days after commencement of initial start-up, verification of lead emission rates from EU-ASCPCBOILER, by testing at owner's expense, in accordance with Department requirements, will be required. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A (Method 29 with 2-hour test runs) or an alternate method and/or run time approved by the AQD. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1901, R 336.2001, R 336.2003, R 336.2004)**
6. Within 180 days after commencement of initial start-up, verification of H₂SO₄ emission rates from EU-ASCPCBOILER, by testing at owner's expense, in accordance with Department requirements, will be required. 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. The Controlled Condensate Method, NCASI Method 8A, and 2-hour tests runs, or an alternate method and/or run time approved by the AQD will be used. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1225(1), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**
7. Within 180 days after commencement of initial start-up, verification of HCl and HF emission rates from EU-ASCPCBOILER, by testing at owner's expense, in accordance with Department requirements, will be required. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A (Method 26A with 2-hour test runs) or an alternate method and/or run time approved by the AQD. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1225(1), R 336.2001, R 336.2003, R 336.2004, R 336.1299(2)(b))**
8. Within 180 days after commencement of initial start-up, verification of total mercury emission rates from EU-ASCPCBOILER, by testing at owner's expense, in accordance with Department requirements, will be required. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A (Method 29 with 2-hour test runs) or an alternate method and/or run time approved by the AQD. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1228, R 336.1229(2)(b), R 336.2001, R 336.2003, R 336.2004, R 336.1299(2)(b))**

- 9 The permittee shall determine the maximum hourly heat input capacity to EU-ASCPCBOILER. The permittee must complete this determination on an annual basis using the heat loss method described in ASME *Power Test Codes 4* or an alternate method approved by the AQD. **(R 336.1205(1)(a), 40 CFR 72.2)**

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 the equipment specified in either (a) or (b) as follows:
 - a. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the visible emissions from EU-ASCPCBOILER on a continuous basis. The permittee shall install and operate the COM system to meet the timelines, requirements and reporting detailed in Appendix A.
 - b. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the PM emissions from EU-ASCPCBOILER on a continuous basis. The permittee shall install and operate the Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix B. The permittee shall also meet the following requirements:
 - 1) During the initial performance test required by SC V.2., the permittee shall conduct visible emission observations using Method 9.
 - 2) The preventative maintenance and malfunction abatement plan (MAP) required in SC III.1. shall include provisions for alternative monitoring in the event that the PM CEMS is out of control based upon the results of quality assurance tests conducted in accordance with Procedure 2 of 40 CFR Part 60, Appendix F. This alternative monitoring shall, unless alternate methods and frequencies are approved in writing by the District Supervisor, require verification of the presence of visible emissions by taking six-minute visible emission readings for EU-ASCPCBOILER a minimum of once per calendar day. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. If the permittee observes any visible emissions, the permittee shall immediately implement the following procedures:
 - a) The permittee shall perform the six-minute visible emission readings at least once every 30 minutes until emissions are no longer visible or until emissions have been observed for more than two hours.
 - b) If visible emissions have been observed for more than two hours, a certified reader shall determine the opacity using Federal Reference Test Method 9 (40 CFR Part 60, Appendix A).

(R 336.1205, R 336.1299(2)(b), R 336.1301, R 336.1303, R 336.1331, R 336.1901, R 336.1911, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)

2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner device(s) to monitor and record the SO₂, NO_x, and CO emissions, and oxygen or carbon dioxide (O₂ or CO₂) content of the exhaust gas from EU-ASCPCBOILER on a continuous basis. The permittee shall install and operate each Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix B. **(R 336.1205, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the mercury emissions from EU-ASCPCBOILER on a continuous basis. The permittee shall install and operate the Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix B. **(R 336.1228, R 336.1229(2)(b), R 336.1299(2)(b))**
4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the exhaust gas volumetric flow rate from EU-ASCPCBOILER on a continuous basis. The monitor

shall be operated in accordance with procedures outlined in Appendix A attached and in 40 CFR 60.49Da(l or m). **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)**

5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the gross energy output from EU-ASCPCBOILER on a continuous basis. The monitor shall be operated in accordance with procedures outlined in 40 CFR 60.49Da(k). **(R 336.1299(2)(b), 40 CFR 60.49Da)**
6. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 12 months after commencement of initial start-up of EU-ASCPCBOILER, the permittee shall keep, in a satisfactory manner, 24-hour rolling average and 30-day rolling average NO_x emission rate records for EU-ASCPCBOILER, as described in Emission Limit SC I.7, and I.8. **(40 CFR 60.49Da, R 336.2810, 40 CFR 52.21(j))**
7. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 12 months after commencement of initial start-up of EU-ASCPCBOILER, the permittee shall keep, in a satisfactory manner, 24-hour rolling average CO emission rate records for EU-ASCPCBOILER, as described in Emission Limit SC I.9 and I.10. **(R 336.2804, R 336.2810, 40 CFR 52.21(d), 40 CFR 52.21(j))**
8. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 12 months after commencement of initial start-up of EU-ASCPCBOILER, the permittee shall keep, in a satisfactory manner, 24-hour rolling average, and 30-day rolling average SO₂ emission rate records for EU-ASCPCBOILER, as described in Emission Limit SC I.5 and I.6. **(40 CFR 60.49Da, R 336.2810, 40 CFR 52.21(j))**
9. Within 90 days of commencing commercial operation, as defined in 40 CFR 72.2, but no later than 12 months after commencement of initial start-up of EU-ASCPCBOILER, the permittee shall keep, in a satisfactory manner, monthly and 12-month rolling average mercury emission rate records, expressed on a basis of Gross Energy Output, for EU-ASCPCBOILER, as described in Emission Limit SC I.18. If the monitoring required by Monitoring/Recordkeeping SC VI.3 is only capable of detecting gaseous mercury, the permittee shall use the testing required by Testing/Sampling SC V.8 to develop a correction factor to adjust the mercury monitoring data to total mercury. Based on the available testing and monitoring data, the correction factor may be adjusted upon review and approval of the AQD District Supervisor. **(R 336.1228, R 336.1229(2)(b), R 336.1299(2)(b))**
10. The permittee shall install, calibrate, maintain and operate in a satisfactory manner device(s) to monitor and record the SO₂ concentration of the exhaust gas from EU-ASCPCBOILER at the inlet to the limestone forced oxidation wet flue gas desulfurization system, on a continuous basis. The permittee shall install and operate a Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix B. **(R 336.1205, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.49Da)**
11. The permittee shall maintain records of 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:
 - a) Initial compliance tests and any testing required under 40 CFR Subpart Da or the special conditions of this permit
 - b) Monitoring data
 - c) Heat input calculations required under SC IV.1
 - d) Identification, type and the amounts of all fuels combusted in EU-ASCPCBOILER on a daily average basis including per cent, based on higher heating value in Btu per pound, of bituminous coal
 - e) All records required by 40 CFR §60.7 and §60.52a
 - f) Total gigawatt-hours of energy produced on a monthly basis

- g) Records of the duration of all times EU-ASPCBOILER is operated under startup or shutdown conditions as defined in SC III.2
- h) All calculations necessary to show compliance with the limits contained in this permit, or the reporting requirements contained in Appendix D 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 336.1912, R 336.2802(4), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(a)(2), 40 CFR 52.21(c),(d), & (j), 40 CFR 60.42Da, 40 CFR 60.7(f))**

VII. REPORTING

1. The permittee shall comply with the reporting requirements listed in Appendix C-1. **(40 CFR 60.51Da(a) and (b))**
2. 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))**
3. The permittee shall comply with the reporting requirements listed in Appendix C-3 for excess emissions during emergency conditions. **(40 CFR 60.51Da(d))**
4. The permittee shall comply with the reporting requirements listed in Appendix C-4 if fuel pre-treatment will be utilized. **(40 CFR 60.51Da(e))**
5. The permittee shall comply with the reporting requirements listed in Appendix C-5 for unavailability of emissions data. **(40 CFR 60.51Da(f))**
6. The permittee shall comply with the reporting requirements listed in Appendix C-6 for miscellaneous reporting. **(40 CFR 60.51Da(h))**
7. The permittee shall comply with the reporting requirements listed in Appendix C-7 during periods of excess visible emissions. **(40 CFR 60.51Da(i))**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV- New#5Stk	372	600	R 336.1225, R 336.1901, R 336.2803, R 336.2804 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

1. 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-ASPCBOILER. **(40 CFR Part 60, Subparts A and Da)**
2. The permittee shall comply with all of the applicable requirements contained in the Clean Air Interstate Rule, as it applies to EU-ASPCBOILER. **(40 CFR Part 97)**

3. The permittee shall comply with all of the applicable requirements contained in the federal Acid Rain Program, as it applies to EU-ASCPCBOILER. **(40 CFR Parts 72 - 76)**
4. The permittee shall notify the AQD District Supervisor, in writing, of the start of construction or reconstruction of EU-ASCPCBOILER within 30 days after such date. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EU-ASCPCBOILER 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-ASCPCBOILER. **(R 336.1201(7)(a), R 336.1216(1), 40 CFR 60.7(a)(1))**
5. Within 180 days after commencement of initial startup, the permittee shall verify the relative proportions of speciated mercury (vapor phase elemental mercury, vapor phase divalent mercury, particle bound mercury) present in the exhaust gas. No less than 30 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. **(R 336.2001, R 336.2003, Section 5503(p) of Act 451, PA 1994)**

Footnotes:

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

The following conditions apply to: EU-AUXBOILER

DESCRIPTION: Auxiliary Boiler is a 220 MMBtu/hr natural gas-fired boiler used to assist in startup of the ASCPC boiler and to provide heat when EU-ASCPCBOILER is not operating

POLLUTION CONTROL EQUIPMENT: Low-NOx burner

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.018 lb/MMBtu heat input	30-day rolling average as determined each day the boiler operates	EU-AUXBOILER	SC V. 1 SC VI. 1	40CFR60.44(b) R 336.2810 40 CFR 52.21(j)
2. VOC	0.0013 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-AUXBOILER	SC V. 2	R 336.1299(2)(b) R 336.2810 40 CFR 52.21(j)
3. CO	0.035 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-AUXBOILER	SC V. 3	R 336.2810 40 CFR 52.21(j)

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas in EU-AUXBOILER. **(R 336.1301, R 336.1331, R 336.1299(2)(b), R 336.2810, 40 CFR 52.21(j), 40 CFR 60.42b)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-AUXBOILER except during startup of EU-ASCPCBOILER or at times when EU-ASCPCBOILER is shut down and unable to provide power to the facility. As defined in SC III.2. of the conditions for EU-ASCPCBOILER, startup is defined as the period of time from initiation of combustion firing until the unit reaches steady state operation (i.e. minimum of 35 percent of steam generator load). Cold startup is defined as a startup 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 35 percent baseload, until the point at which the combustion process has stopped. **(R 336.1207(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

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

V. TESTING/SAMPLING

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

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial start-up, the permittee shall verify NOx emission rate from EU-AUXBOILER, as

required by federal Standards of Performance for New Stationary Sources and Appendix B of this permit, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and Db. 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. **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.8, 40 CFR 60.46b)**

2. Within 180 days after commencement of initial start-up, verification of VOC emission rates from EU-AUXBOILER, by testing at owner's expense, in accordance with Department requirements, will be required. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A (Method 25A and Method 18 with 1-hour test runs) or an alternate method and/or run time approved by the AQD. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.1299(2)(b), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**
3. Within 180 days after commencement of initial start-up, verification of CO emission rates from EU-AUXBOILER, by testing at owner's expense, in accordance with Department requirements, will be required. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A (Method 10 with 1-hour test runs) or an alternate method and/or run time approved by the AQD. The permittee must complete the test once every 12-months for the first five years of operation and once every five years thereafter. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the NO_x emissions and oxygen or carbon dioxide (O₂ or CO₂) content of the exhaust gas from EU-AUXBOILER on a continuous basis. The permittee shall install and operate the Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements and reporting detailed in Appendix A and shall use the CEMS data for determining compliance with SC I.1. **(R 336.1205, R 336.2810, 40 CFR 52.21(j), 40CFR 60.48b)**
2. The permittee shall keep, in a satisfactory manner, a log of the daily hours of operation of EU-AUXBOILER. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1207(b))**

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
1. SV-NewAUXB	60	320	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall provide written notification of the date construction commences and actual startup of EU-AUXBOILER in accordance with 40 CFR 60.7 and 60.49b. The notification shall include the design heat input, an identification of the fuels to be combusted and the annual capacity factor for EU-AUXBOILER. 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, 40 CFR 60.49b)**

The following conditions apply to: EU-COOLINGTOWERS

DESCRIPTION: Two mechanical induced draft cooling towers with drift eliminators.

Flexible Group ID: FG-Facility

POLLUTION CONTROL EQUIPMENT: Drift eliminators

I. EMISSION LIMIT(S):

NA

II. MATERIAL LIMIT(S):

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-COOLINGTOWERS 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-COOLINGTOWERS 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-ASCPCBOILER, and every five years thereafter, the permittee shall submit a technical feasibility analysis for determination of drift loss from EU-COOLINGTOWERS 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-COOLINGTOWERS 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-COOLINGTOWERS 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-COOLINGTOWERS, the permittee shall maintain a record, for the life of the cooling towers, of the vendor's certification required in Special Condition IV.1. **(R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall monitor and/or keep records of the following for EU-COOLINGTOWERS:
 - 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-COOLINGTOWERS monthly, for the preceding 12-month rolling time period as determined at the end of each calendar month, 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-COOLINGTOWERS, a record of the date the two most recent drift loss determinations were conducted. **(R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING:

1. The permittee shall submit a complete report of the performance test results to the AQD within 60 days following the last date of the test. **(R 336.2001, R 336.2002, R 336.2003)**
2. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EU-COOLINGTOWERS 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-COOLINGTOWERS. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S):

NA

IX. OTHER REQUIREMENT(S):

NA

The following conditions apply to: EU-FIREPUMP

DESCRIPTION: EU-FIREPUMP: 525 hp diesel fueled fire pump

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	3.0 g/hp-hr	Test Protocol will specify averaging time	EU-FIREPUMP	40 CFR 60.4211 General Condition (GC) 13	40 CFR 60.4205(c) 40 CFR Part 60, Subpart IIII, § Table 4 R 336.2810 40 CFR 52.21(j)
2. CO	2.6 g/hp-hr	Test Protocol will specify averaging time	EU-FIREPUMP	40 CFR 60.4211 GC 13	40 CFR 60.4205(c) 40 CFR Part 60, Subpart IIII, § Table 4 R 336.2810 40 CFR 52.21(j)
3. PM	0.15 g/hp-hr	Test Protocol will specify averaging time	EU-FIREPUMP	40 CFR 60.4211 GC 13	40 CFR 60.4205(c) 40 CFR Part 60, Subpart IIII, § Table 4 R 336.2810 40 CFR 52.21(j)
4. PM10	0.31 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-FIREPUMP	GC 13	R 336.2810 40 CFR 52.21(j)

II. MATERIAL LIMIT(S)

1. The permittee shall only burn diesel fuel with a maximum sulfur content of 15 ppm in EU-FIREPUMP. **(40 CFR 60.4207(b), R 336.2810, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

2. The permittee shall not operate EU-FIREPUMP for more than 500 hours at full load equivalent rate per 12-month rolling time period as determined at the end of each calendar month. **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4211(e))**
3. The permittee shall not change or revise the operating instructions, procedures or settings for EU-FIREPUMP unless permitted by the manufacturer in writing. **(40 CFR 60.4211)**
4. The permittee shall not operate EU-FIREPUMP for more than one hour per day unless EU-ASCPCBOILER is shut down. Shutdown is defined as that period of time from the initial lowering of the EU-ASCPCBOILER boiler output below 35 percent baseload, until the point at which the combustion process has stopped. **(R 336.1207(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUFIREPUMP with a non-resettable hour meter to track the number of hours the engine operates. **(R 336.2810, 40 CFR 60.4209(a), 40 CFR 52.21(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 monitor and record in a satisfactory manner, a log of the daily hours of operation of EU-FIREPUMP. The log shall include the time of operation and the reason the engine was in operation. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1207(b), R 336.2810, 40 CFR 60.4214(b), 40 CFR 52.21(j))**
2. The permittee shall submit an initial notification which includes the following information:
 - a) A statement that EU-FIREPUMP operates as an emergency engine, as defined in 40 CFR 63.6675; **(40 CFR 63.6645(f))**
 - b) The name and address of the owner or operator; **(40 CFR 63.9(b)(2)(i), 40 CFR 63.6645(f))**
 - c) The physical location of the affected source; **(40 CFR 63.9(b)(2)(ii), 40 CFR 63.6645(f))**
 - d) A statement that the initial notification is required under 40 CFR Part 63, Subpart ZZZZ, 63.6645(d); **(40 CFR 63.9(b)(2)(iii), 40 CFR 63.6645(f))**
 - e) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant; **(40 CFR 63.9(b)(2)(iv), 40 CFR 63.6645(f))** and
 - f) A statement of whether the affected source is a major source or an area source. **(40 CFR 63.9(b)(2)(v), 40 CFR 63.6645(f))**
3. The permittee shall keep, in a satisfactory manner, fuel supplier certification records for each delivery of the diesel fuel oil. **(R 336.2810, 40 CFR 52.21(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 Diameter (inches)	Minimum Height Above Ground(feet)	Underlying Applicable Requirements
1. SV-FIREPUMP	12	35	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

The following conditions apply to: EU-EMERG_GEN

DESCRIPTION: EU-EMERG_GEN: Emergency Generator, 2,000 kW (2,980 hp) diesel fired emergency engine generator with a 10,000 gallon above ground storage tank.

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	6.4 g/kW-hr	Test Protocol will specify averaging time	EU-EMERG_GEN	40 CFR 60.4211 GC 13	40 CFR 60.4205(b) R 336.2810 40 CFR 52.21(j)
2. CO	3.5 g/kW-hr	Test Protocol will specify averaging time	EU-EMERG_GEN	40 CFR 60.4211 GC 13	40 CFR 60.4205(b) R 336.2810 40 CFR 52.21(j)
3. PM	0.20 g/kW-hr	Test Protocol will specify averaging time	EU-EMERG_GEN	40 CFR 60.4211 GC 13	40 CFR 60.4205(b) R 336.2810 40 CFR 52.21(j)
4. PM10	0.0573 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-EMERG_GEN	GC 13	R 336.2810 40 CFR 52.21(j)

II. MATERIAL LIMIT(S)

1. The permittee shall only burn diesel fuel with a maximum sulfur content of 15 ppm in EU-EMERG_GEN. **(R 336.2810, 40 CFR 60.4207(b), 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain EU-EMERG_GEN according to the manufacturer's written instructions or procedures that are approved by the manufacturer to ensure compliance with the applicable emission standards in 40 CFR 60.4205(b). **(R 336.2810, 40 CFR 60.4205(b), 40 CFR 60.4206, 40 CFR 60.4211(c), 40 CFR 52.21(j))**
2. The permittee shall not operate EU-EMERG_GEN for more than 500 hours at full load equivalent rate per 12-month rolling time period as determined at the end of each calendar month. **(R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4211(e))**
3. The permittee shall not change or revise the operating instructions, procedures or settings for EU-EMERG_GEN unless permitted by the manufacturer in writing. **(40 CFR 60.4211)**
4. The permittee shall not operate EU-EMERG_GEN for more than one hour per day unless EU-ASCPCBOILER is shut down. Shutdown is defined as that period of time from the initial lowering of the EU-ASCPCBOILER boiler output below 35 percent baseload, until the point at which the combustion process has stopped. **(R 336.1207(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-EMRG_GEN with a non-resettable hour meter to track the number of hours the engine operates. **(R 336.2810, 40 CFR 60.4209(a), 40 CFR 52.21(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 monitor and record in a satisfactory manner, a log of the daily hours of operation of EU-EMRG_GEN. The log shall include the time of operation and the reason the engine was in operation. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1207(b), R 336.2810, 40 CFR 60.4214(b), 40 CFR 52.21(j))**
2. The permittee shall submit an initial notification which includes the following information:
 - a) A statement that EU-EMRG_GEN operates as an emergency engine, as defined in 40 CFR 63.6675; **(40 CFR 63.6645(f))**
 - b) The name and address of the owner or operator; **(40 CFR 63.9(b)(2)(i), 40 CFR 63.6645(f))**
 - c) The physical location of the affected source; **(40 CFR 63.9(b)(2)(ii), 40 CFR 63.6645(f))**
 - d) A statement that the initial notification is required under 40 CFR Part 63, Subpart ZZZZ, 63.6645(d); **(40 CFR 63.9(b)(2)(iii), 40 CFR 63.6645(f))**
 - e) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant; **(40 CFR 63.9(b)(2)(iv), 40 CFR 63.6645(f))** and
 - f) A statement of whether the affected source is a major source or an area source. **(40 CFR 63.9(b)(2)(v), 40 CFR 63.6645(f))**
3. The permittee shall keep, in a satisfactory manner, fuel supplier certification records for each delivery of the diesel fuel oil. **(R 336.2810, 40 CFR 52.21(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 Diameter (inches)	Minimum Height Above Ground(feet)	Underlying Applicable Requirements
1. SV-EMRG_GEN	24	18	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

The following conditions apply to: EU-FIREBSTR

DESCRIPTION: EU-FIREBSTR: 60 hp (40 kW) diesel fueled fire booster pump

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	4.7 g/kW-hr	Test Protocol will specify averaging time	EU-FIREBSTR	40 CFR 60.4211 GC 13	40 CFR 60.4205(c) R 336.2810 40 CFR 52.21(j)
2. CO	5.0 g/kW-hr	Test Protocol will specify averaging time	EU-FIREBSTR	40 CFR 60.4211 GC 13	40 CFR 60.4205(c) R 336.2810 40 CFR 52.21(j)
3. PM	0.40 g/kW-hr	Test Protocol will specify averaging time	EU-FIREBSTR	40 CFR 60.4211 GC 13	40 CFR 60.4205(c) R 336.2810 40 CFR 52.21(j)
4. PM10	0.31 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-FIREBSTR	GC 13	R 336.2810 40 CFR 52.21(j)

II. MATERIAL LIMIT(S)

1. The permittee shall only burn diesel fuel with a maximum sulfur content of 15 ppm in EU-FIREBSTR. **(R 336.2810, 40 CFR 60.4207, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain EU-FIREBSTR according to the manufacturer's written instructions or procedures that are approved by the manufacturer to ensure compliance with the applicable emission standards in 40 CFR 60.4205(c). **(R 336.2810, 40 CFR 60.4205(c), 40 CFR 60.4206, 40 CFR 60.4211, 40 CFR 52.21(j))**
2. The permittee shall not operate EU-FIREBSTR for more than 500 hours at full load equivalent rate per 12-month rolling time period as determined at the end of each calendar month. **(R 336.2810, 40 CFR 60.4211(e), 40 CFR 52.21(j))**
3. The permittee shall not change or revise the operating instructions, procedures or settings for EU-FIREBSTR unless permitted by the manufacturer in writing. **(40 CFR 60.4211)**
4. The permittee shall not operate EU-FIREBSTR for more than one hour per day unless EU-ASPCBOILER is shut down. Shutdown is defined as that period of time from the initial lowering of the EU-ASPCBOILER boiler output below 35 percent baseload, until the point at which the combustion process has stopped. **(R 336.1207(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-FIREBSTR with a non-resettable hour meter to track the number of hours the engine operates. **(R 336.2810, 40 CFR 60.4209(a), 40 CFR 52.21(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 monitor and record in a satisfactory manner, a log of the daily hours of operation of EU-FIREBSTR. The log shall include the time of operation and the reason the engine was in operation. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1207(b), R 336.2810, 40 CFR 60.4214(b), 40 CFR 52.21(j))**
2. The permittee shall keep, in a satisfactory manner, fuel supplier certification records for each delivery of the diesel fuel oil. **(R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

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 Diameter (inches)	Minimum Height Above Ground(feet)	Underlying Applicable Requirements
1. SV-FIREBSTR	4	20	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

The following conditions apply to: EU-WFGD_QP

DESCRIPTION: EU-WFGD_QP: 455 hp (305 kW) diesel fueled flue gas desulfurization quench pump

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NMHC + NOx	4.0 g/kW-hr	Test Protocol will specify averaging time	EU-WFGD_QP	40 CFR 60.4211 GC 13	40 CFR 60.4205(b) R 336.2810 40 CFR 52.21(j)
2. CO	3.5 g/kW-hr	Test Protocol will specify averaging time	EU-WFGD_QP	40 CFR 60.4211 GC 13	40 CFR 60.4205(b) R 336.2810 40 CFR 52.21(j)
3. PM	0.20 g/kW-hr	Test Protocol will specify averaging time	EU-WFGD_QP	40 CFR 60.4211 GC 13	40 CFR 60.4205(b) R 336.2810 40 CFR 52.21(j)
4. PM10	0.31 lb/MMBtu heat input	Test Protocol will specify averaging time	EU-FIREPUMP	GC 13	R 336.2810 40 CFR 52.21(j)

II. MATERIAL LIMIT(S)

1. The permittee shall only burn diesel fuel with a maximum sulfur content of 15 ppm in EU-WFGD_QP. **(R 336.2810, 40 CFR 60.4207, 40 CFR 52.21(j))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain EU-WFGD_QP according to the manufacturer's written instructions or procedures that are approved by the manufacturer to ensure compliance with the applicable emission standards in 40 CFR 60.4205(c). **(R 336.2810, 40 CFR 60.4205(b), 40 CFR 60.4206, 40 CFR 60.4211, 40 CFR 52.21(j))**
2. The permittee shall not operate EU-WFGD_QP for more than 500 hours at full load equivalent rate per 12-month rolling time period as determined at the end of each calendar month. **(R 336.2810, 40 CFR 60.4211(e), 40 CFR 52.21(j))**
3. The permittee shall not change or revise the operating instructions, procedures or settings for EU-WFGD_QP unless permitted by the manufacturer in writing. **(40 CFR 60.4211)**
4. The permittee shall not operate EU-WFGD_QP for more than one hour per day unless EU-ASPCBOILER is shut down. Shutdown is defined as that period of time from the initial lowering of the EU-ASPCBOILER boiler output below 35 percent baseload, until the point at which the combustion process has stopped. **(R 336.1207(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-WFGD_QP with a non-resettable hour meter to track the number of hours the engine operates. **(R 336.2810, 40 CFR 60.4209(a), 40 CFR 52.21(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 monitor and record in a satisfactory manner, a log of the daily hours of operation of EU-WFGD_QP. The log shall include the time of operation and the reason the engine was in operation. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **(R 336.1207(b), R 336.2810, 40 CFR 60.4214(b), 40 CFR 52.21(j))**
2. The permittee shall keep, in a satisfactory manner, fuel supplier certification records for each delivery of the diesel fuel oil. **(R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

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 Diameter (inches)	Minimum Height Above Ground(feet)	Underlying Applicable Requirements
1. SV-WFGD_QP	12	35	R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

NA

The following conditions apply to: EU-RAILUNLOAD

DESCRIPTION: Equipment used for handling and transport of coal received by rail. This Emission Unit includes the coal dumper house, the coal barn and transfer towers up to the coal crushing house. The dumper house uses rubber curtains and fabric filters for dust control. All external conveyors are half moon shaped enclosures with a raised trough-belt design. Transfer towers are enclosed and use fabric filters for dust control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: The dumper house utilizes rubber curtains and two 80,000 cfm fabric filters (exhausting through one combined stack) for emissions control. Transfer tower TTK5-1 is equipped with a 12,000 cfm fabric filter for emissions control. Transfer tower TTK5-2 is equipped with a 10,000 cfm fabric filter for emissions control. The coal barn completely encloses the active storage pile. All external conveyors are half moon shaped enclosures with a raised trough-belt design.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test Protocol will specify averaging time	The drop points and transfer points of EU-RAILUNLOAD	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j) 40 CFR 60.254(c)
2. Opacity	5 percent	Test Protocol will specify averaging time	Each individual fabric filter in EU-RAILUNLOAD	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
3. Opacity	5 percent	Test Protocol will specify averaging time	The coal barn vent.	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
3. PM	0.004 gr/dscf calculated on a dry gas basis.	Test Protocol will specify averaging time	Each individual fabric filter in EU-RAILUNLOAD	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
4. PM10	5.49 pph	Test Protocol will specify averaging time	SVDUMPERHOUSE	GC 13	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j)
5. PM10	0.41 pph	Test Protocol will specify averaging time	SVTTK5-1	GC 13	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j)
6. PM10	0.34 pph	Test Protocol will specify averaging time	SVTTK5-2	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 RESTRICTIONS

1. Within 180 days of initial start-up of EU-RAILUNLOAD 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, 40 CFR 52.21 (c) (d), & (j))**
2. The permittee shall not operate EU-RAILUNLOAD 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, 40 CFR 52.21(c), (d), & (j))**
3. The permittee shall not operate the Dumper House portion of EU-RAILUNLOAD for more than 16 hours per calendar day. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**
4. The permittee shall not operate the Transfer Tower TTK5-1 and TTK5-2 portions of EU-RAILUNLOAD for more than 16 hours per calendar day. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any portion of EU-RAILUNLOAD unless the associated rubber curtains and fabric filters are installed, maintained and operated in a satisfactory manner. The permittee shall equip each 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 Active Storage Pile activities contained in EU-RAILUNLOAD shall take place in the Coal Barn. **(R 336.1901, R 336.1910, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d), & (j))**
3. The permittee shall not operate EU-RAILUNLOAD unless the external conveyor hoods are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by Special Condition III.2. **(R 336.1901, R 336.1910, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING

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

1. Within 180 days after initial start-up of EU-RAILUNLOAD, the permittee shall conduct visible emissions tests, at owner's expense, as required by federal Standards of Performance for New Stationary Sources, 40 CFR Subparts A and Y. Visible emission observation procedures must have prior approval by the AQD. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 60 days following the last date of the evaluation. **(40 CFR 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 each fabric filter of EU-RAILUNLOAD. **(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 and SC I.3 on a daily basis when EU-RAILUNLOAD is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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 SC 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-RAILUNLOAD is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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, a log of the daily hours of operation of the Dumper House, Transfer Tower TTK5-1 and Transfer Tower TTK5-2 portions of EU-RAILUNLOAD. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDUMPERHOUSE	84	185	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVTTK5-1	36	90	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. SVTTK5-2	30	100	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Y, as they apply to EU-RAILUNLOAD. **(40 CFR Part 60 Subparts A & Y)**
2. Within 12 months after completion of the installation, construction, reconstruction, relocation, or modification 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 activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-RAILUNLOAD. **(R 336.1201(7)(b))**
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)**

Footnotes:

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

The following conditions apply to: EU-COALCRUSHER

DESCRIPTION: The coal crushing equipment. Coal is reduced in size and sent to the day storage silos. Emissions are controlled by a fabric filter. All external conveyors are half moon shaped enclosures with a raised trough-belt design.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Emissions from the coal crushing operation are controlled by a 17,000 cfm fabric filter. All external conveyors are half moon shaped enclosures with a raised trough-belt design.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test Protocol will specify averaging time	The drop points and transfer points of EU-COALCRUSHER	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.254(c)
2. Opacity	5 percent	Test Protocol will specify averaging time	SVCOALCRUSHER	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
3. PM	0.004 gr/dscf calculated on a dry gas basis	Test Protocol will specify averaging time	SVCOALCRUSHER.	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
4. PM10	0.58 pph	Test Protocol will specify averaging time	SVCOALCRUSHER	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 RESTRICTIONS

1. Within 180 days of initial start-up of EU-COALCRUSHER 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, 40 CFR 52.21 (c) (d), & (j))**

2. The permittee shall not operate EU-COALCRUSHER 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 permittee shall not operate EU-COALCRUSHER for more than 16 hours per calendar day. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETERS

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

V. TESTING/SAMPLING

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

1. Within 180 days after initial start-up of EU-COALCRUSHER, the permittee shall conduct visible emissions tests, at owner's expense, as required by federal Standards of Performance for New Stationary Sources, 40 CFR Subparts A and Y. Visible emission observation procedures must have prior approval by the AQD. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 60 days following the last date of the evaluation. **(40 CFR 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 for the fabric filter associated with EU-COALCRUSHER. **(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-COALCRUSHER is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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-COALCRUSHER is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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, a log of the daily hours of operation of EU-COALCRUSHER. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCOALCRUSHER	36	80	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Y, as they apply to EU-COALCRUSHER. **(40 CFR Part 60 Subparts A & Y)**
2. Within 12 months after completion of the installation, construction, reconstruction, relocation, or modification 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 activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-COALCRUSHER. **(R 336.1201(7)(b))**
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)**

Footnotes:

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

The following conditions apply to: EU-COALSILOS

DESCRIPTION: The day storage silos. Crushed coal is stored here prior to being sent to the pulverizing system. Emissions are controlled by one fabric filter.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Emissions are controlled by a 21,000 cfm fabric filter.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test Protocol will specify averaging time	The drop points and transfer points of EU-COALSILOS.	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.254(c)
2. Opacity	5 percent	Test Protocol will specify averaging time	SVCOALSILOS	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
3. PM	0.004 gr/dscf calculated on a dry gas basis	Test Protocol will specify averaging time	SVCOALSILOS.	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
4. PM10	0.72 pph	Test Protocol will specify averaging time	SVCOALSILOS	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 RESTRICTIONS

1. Within 180 days of initial start-up of EU-COALSILOS 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, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EU-COALSILOS 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 permittee shall not operate EU-COALSILOS for more than 16 hours per calendar day. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETERS

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

V. TESTING/SAMPLING

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

1. Within 180 days after initial start-up of EU-COALSILOS, the permittee shall conduct visible emissions tests, at owner's expense, as required by federal Standards of Performance for New Stationary Sources, 40 CFR Subparts A and Y. Visible emission observation procedures must have prior approval by the AQD. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 60 days following the last date of the evaluation. **(40 CFR 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 each fabric filter of EU-COALSILOS. **(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-COALSILOS is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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 SC 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-COALSILOS is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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, a log of the daily hours of operation of EU-COALSILOS. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCOALSILOS	36	231	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Y, as they apply to EU-COALSILOS. **(40 CFR Part 60 Subparts A & Y)**
2. Within 12 months after completion of the installation, construction, reconstruction, relocation, or modification 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 activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-COALSILOS. **(R 336.1201(7)(b))**
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)**

Footnotes:

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

The following conditions apply to: EU-RESERVE STORAGE

DESCRIPTION: The radial stacker, reserve stockout pile, reserve storage pile and reclaim hoppers. Coal from the rail dumper goes to outdoor storage via the radial stacker. Dust suppressants and crusting agents are used to minimize wind-borne emissions. There are two fabric filters used to control emissions generated by the handling of coal from the reclaim hoppers.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Dust suppressants and crusting agents are used to minimize wind-borne emissions. There are two 4,000 cfm fabric filters used to control emissions generated by the handling of coal from the reclaim hoppers.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test Protocol will specify averaging time	The drop points and transfer points of EU-RESERVE STORAGE	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.254(c)
2. Opacity	5 percent	Test Protocol will specify averaging time	Each fabric filter in EU-RESERVE STORAGE	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
3. PM	0.004 gr/dscf calculated on a dry gas basis	Test Protocol will specify averaging time	Each fabric filter in EU-RESERVE STORAGE	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
4. PM10	0.14 pph	Test Protocol will specify averaging time	SVK5-4	GC 13	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j)
5. PM10	0.14 pph	Test Protocol will specify averaging time	SVK5-5	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 RESTRICTIONS

1. Within 180 days of initial start-up of EU-RESERVE STORAGE 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, 40 CFR 52.21 (c), (d), & (j), 40 CFR 60.454(c)(2))**

2. The permittee shall not operate EU-RESERVE STORAGE 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, 40 CFR 52.21(c), (d), & (j))**
3. The permittee shall not operate the North Hopper portion of EU-RESERVE STORAGE for more than 16 hours per calendar day. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
4. The permittee shall not operate the South Hopper portion of EU-RESERVE STORAGE for more than 8 hours per calendar day. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the underground portions, including the reclaim hoppers, of EU-RESERVE STORAGE unless the associated fabric filters are installed, maintained and operated in a satisfactory manner. The permittee shall equip each 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 the reserve stockout pile or the reserve storage pile portions of EU-RESERVE STORAGE unless dust suppression and/or surface sealant equipment 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))**
3. The permittee shall not operate EU-RESERVE STORAGE unless the external conveyor hoods 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 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING

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

1. Within 180 days after initial start-up of EU-RESERVE STORAGE, the permittee shall conduct visible emissions tests, at owner's expense, as required by federal Standards of Performance for New Stationary Sources, 40 CFR Subparts A and Y. Visible emission observation procedures must have prior approval by the AQD. Verification of visible emissions includes the submittal of a complete report of opacity observations to the AQD within 60 days following the last date of the evaluation. **(40 CFR 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 each fabric filter of EU-RESERVE STORAGE. **(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-RESERVE STORAGE is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**
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-RESERVE STORAGE is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**
4. The permittee shall keep, in a satisfactory manner, a log of the daily hours of operation of the North Hopper and South Hopper portions of EU-RESERVE STORAGE. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVNORTHHOPPER	18	40	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVSOUTHHOPPER	18	40	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Y, as they apply to EU-RESERVE STORAGE. **(40 CFR Part 60 Subparts A & Y)**
2. Within 12 months after completion of the installation, construction, reconstruction, relocation, or modification 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 activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-RESERVE STORAGE. **(R 336.1201(7)(b))**
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)**

Footnotes:

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

The following conditions apply to: EU- LIMESTONE

DESCRIPTION: Equipment used for handling and transport of limestone received by ship. This Emission Unit includes the ship unloading equipment, the limestone dome, and transfer towers. Ships are unloaded by a conveyor which drops limestone through a wet-suppression ring into a hopper. The hopper dust is controlled by a fabric filter. The limestone dome reclaim hoppers are controlled by a fabric filter. All external conveyors are half moon shaped enclosures with a raised trough-belt design. Transfer towers are enclosed and use fabric filters for dust control.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Ship unloading uses a wet suppression ring to minimize emissions. There is also a 8,000 cfm fabric filter to control emissions from ship unloading. The limestone reclaim hoppers are controlled by a 6,000 cfm fabric filter. Transfer tower LS5-1 is controlled by a 3,000 cfm fabric filter. Transfer tower LS5-2 is controlled by a 5,000 cfm fabric filter. Transfer tower LS5-3 is controlled by a 2,000 cfm fabric filter. All external conveyors are half moon shaped with raised trough-belt design.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	7 percent	Test Protocol will specify averaging time	The drop points and transfer points of EU-LIMESTONE.	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.672(b)
2. Opacity	5 percent	Test Protocol will specify averaging time	Each fabric filter in EU-LIMESTONE	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.672(a)(2)
3. Opacity	5 percent	Test Protocol will specify averaging time	The limestone dome vent	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.672(e)
4. Opacity	No visible emissions	Test Protocol will specify averaging time	The limestone dome	SC VI.4	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j) 40 CFR 60.672(e)
5. PM	0.004 gr/dscf calculated on a dry gas basis	Test Protocol will specify averaging time	Each fabric filter in EU-LIMESTONE	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
6. PM10	0.27 pph	Test Protocol will specify averaging time	SVLIMEUNLOAD	GC 13	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j)
7. PM10	0.21 pph	Test Protocol will specify averaging time	SVLIMEDOME RECLAIM	GC 13	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j)
8. PM10	0.10 pph	Test Protocol will specify averaging time	SVTTLS5-1	GC 13	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j)
9. PM10	0.17 pph	Test Protocol will specify averaging time	SVTTLS5-2	GC 13	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j)
10. PM10	0.07 pph	Test Protocol will specify averaging time	SVTTLS5-3	GC 13	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j)

II. MATERIAL LIMITS

1. The permittee shall not process more than 70,000 tons of material per calendar day in the ship unloading portion of EU-LIMESTONE. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall not process more than 12,000 tons of material per calendar day in limestone dome reclaim portion of EU-LIMESTONE. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Within 180 days of initial start-up of EU-LIMESTONE 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, 40 CFR 52.21 (c), (d), & (j))**
2. The permittee shall not operate EU-LIMESTONE 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, 40 CFR 52.21(c), (d), & (j))**
3. The permittee shall not operate the Transfer Towers LSK5-1, LSK5-2, & LSK5-3 portions of EU-LIMESTONE 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))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any portion of EU-LIMESTONE unless the associated fabric filters are installed, maintained and operated in a satisfactory manner. The permittee shall equip each 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 Limestone Storage Pile activities contained in EU-LIMESTONE shall take place in the Limestone Dome Barn. **(R 336.1901, R 336.1910, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**
3. The permittee shall not operate the ship unloading portion of EU-LIMESTONE unless the wet suppression ring is installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating

and maintaining each control device in accordance with a malfunction abatement plan (MAP) as required by 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 EU-LIMESTONE unless the external conveyor hoods are installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP), as required by Special Condition III.2.. **(R 336.1901, R 336.1910, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

V. TESTING/SAMPLING

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

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

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep monitoring records from the broken bag leak detectors, or alternative monitoring measures, as approved by the AQD District Supervisor on each fabric filter of EU-LIMESTONE. **(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-LIMESTONE is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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 SC IV.1, the permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.2 and I.3 on a daily basis when EU-LIMESTONE is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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 perform and document non-certified visible emissions observations as required in Emission Limit SC I.4 on a daily basis when EU-LIMESTONE is operating. If during the observation there are any visible emissions detected from an emission point, the permittee shall do one of the following: (a) an EPA Method 22 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point; (b) Conduct EPA Method 9 observations on each affected unit inside the dome to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 22 and Method 9 observations that are

performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

5. The permittee shall keep, in a satisfactory manner, daily records of the material processed through ship unload portion of EU-LIMESTONE. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
6. The permittee shall keep, in a satisfactory manner, daily records of the material processed through limestone dome reclaim portion of EU-LIMESTONE. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
7. The permittee shall keep, in a satisfactory manner, a log of the daily hours of operation of the Transfer Towers LSK5-1, LSK5-2, & LSK5-3 portions of EU-LIMESTONE. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLIMEUNLOAD	30	80	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVLIMEDOMERECLAIM	30	60	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. SVTTLS5-1	30	60	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
4. SVTTLS5-2	30	70	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
5. SVTTLS5-3	30	50	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and OOO, as they apply to EU-LIMESTONE. **(40 CFR Part 60 Subparts A & OOO)**
2. Within 12 months after completion of the installation, construction, reconstruction, relocation, or modification 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 activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-LIMESTONE. **(R 336.1201(7)(b))**

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)**

Footnotes:

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

The following conditions apply to: EU- LIMESTONEPREP

DESCRIPTION: The limestone preparation building. The limestone preparation building emissions are controlled by an individual fabric filter.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Emissions from the limestone preparation building is controlled by a 4,000 cfm fabric filter.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	7 percent	Test Protocol will specify averaging time	The drop points and transfer points of EU-LIMESTONEPREP	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.672(b)
2. Opacity	7 percent	Test Protocol will specify averaging time	SVLIMESTONEPREP	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.672(a)(2)
3. Opacity	No visible emissions	Test Protocol will specify averaging time	The building where limestone preparation occurs in EU-LIMESTONEPREP	SC VI.4	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j), 40 CFR 60.672(e)
4. PM	0.004 gr/dscf calculated on a dry gas basis	Test Protocol will specify averaging time	The fabric filter in EU-LIMESTONEPREP	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
5. PM10	0.14 pph	Test Protocol will specify averaging time	SVLIMESTONEPREP	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 RESTRICTIONS

1. Within 180 days of initial start-up of EU-LIMESTONEPREP 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, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EU-LIMESTONEPREP 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, 40 CFR 52.21(c), (d), & (j))**
3. The permittee shall not operate EU-LIMESTONEPREP 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))**

IV. DESIGN/EQUIPMENT PARAMETERS

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

V. TESTING/SAMPLING

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

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

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep monitoring records from the broken bag leak detectors, or alternative monitoring measures, as approved by the AQD District Supervisor on each fabric filter of EULIMESTONEPREP. **(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-LIMESTONEPREP is operating. If during the observation

there are any visible emissions detected from an emission point, an EPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 9 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

3. If the permittee does not install a bag leak detection system per the alternative monitoring requirements outlined in SC IV.1, the permittee shall perform and document non-certified visible emissions observations as required in Emission Limit SC I.2 & SC 1.4 on a daily basis when EUIMESTONEPREP is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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 perform and document non-certified visible emissions observations as required in Emission Limit SC I.3 on a daily basis when EUIMESTONEPREP is operating. If during the observation there are any visible emissions detected from an emission point, an EPA Method 22 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, EPA Method 22 observations that are performed, the reason for any visible emissions observed and any corrective actions taken shall be kept on file and in a format acceptable to the AQD. **(R 336.1901, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**
5. The permittee shall keep, in a satisfactory manner, a log of the daily hours of operation of EUIMESTONEPREP. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLIMESTONEPREP	30	50	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

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

2. Within 12 months after completion of the installation, construction, reconstruction, relocation, or modification 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 activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-LIMESTONEPREP. **(R 336.1201(7)(b))**
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)**

Footnotes:

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

The following conditions apply to: EU- ASHHANDLING

DESCRIPTION: Ash removal systems. Fly ash is collected from the economizer, air heater hoppers, and the fabric filter hoppers and stored in a silo. From the silo ash is unloaded into trucks for delivery to the on-site landfill. Emissions from the silo and fly ash removal equipment are controlled by a fabric filter dust collector. Bottom ash is collected from the bottom ash hopper and sent to a concrete bunker prior to loading. The bottom ash handling system is a wet system which suppresses dust.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: The fly ash handling equipment is controlled by a 10,000 cfm fabric filter. Bottom ash handling equipment is controlled by a wet-suppression system.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test Protocol will specify averaging time	The drop points and transfer points of EU-ASHHANDLING	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
2. Opacity	5 percent	Test Protocol will specify averaging time	SVASHHANDLING	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
3. PM	0.004 gr/dscf calculated on a dry gas basis	Test Protocol will specify averaging time	SVASHHANDLING	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
4. PM10	0.34 pph	Test Protocol will specify averaging time	SVASHHANDLING	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 RESTRICTIONS

1. Within 180 days of initial start-up of EU-ASHHANDLING 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, 40 CFR 52.21 (c), (d), & (j))**

2. The permittee shall not operate EU-ASHHANDLING 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, 40 CFR 52.21(c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any portion of EU-ASHHANDLING unless the fabric filters 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 the truck loading portion of EU-ASHHANDLING unless the ash watering equipment is installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with a malfunction abatement plan (MAP) as required by 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 keep monitoring records from the broken bag leak detectors, or alternative monitoring measures, as approved by the AQD District Supervisor on each fabric filter of EU-ASHHANDLING. **(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-ASHHANDLING is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j), 40 CFR 60.252(c))**
3. If the permittee does not install a bag leak detection system per the alternative monitoring requirements outlined in SC 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-ASHHANDLING is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual

opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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 RESTRICTIONS

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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVASHHANDLING	24	145	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. Within 12 months after completion of the installation, construction, reconstruction, relocation, or modification 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 activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-ASHHANDLING. **(R 336.1201(7)(b))**

Footnotes:

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

The following conditions apply to: EU- LIMESTORAGE

DESCRIPTION: Storage and handling of hydrated lime. Hydrated lime is delivered via truck to facility and is stored in a silo. Emissions are controlled by fabric filter.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Emissions are controlled by a 900 cfm fabric filter.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test Protocol will specify averaging time	The drop points and transfer points of EU-LIMESTORAGE.	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
2. Opacity	5 percent	Test Protocol will specify averaging time	SVLIMESTORAGE	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
3. PM	0.004 gr/dscf calculated on a dry gas basis	Test Protocol will specify averaging time	SVLIMESTORAGE	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
4. PM10	0.03 pph	Test Protocol will specify averaging time	SVLIMESTORAGE	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 RESTRICTIONS

1. Within 180 days of initial start-up of EU-LIMESTORAGE 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, 40 CFR 52.21 (c), (d), & (j))**
2. The permittee shall not operate EU-LIMESTORAGE 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, 40 CFR 52.21(c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any portion of EU-LIMESTORAGE unless the fabric filters 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))**

V. TESTING/SAMPLING

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

1. 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 monitoring records from the broken bag leak detectors, or alternative monitoring measures, as approved by the AQD District Supervisor on each fabric filter of EU-LIMESTORAGE. **(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-LIMESTORAGE is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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 SC 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-LIMESTORAGE is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), 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 RESTRICTIONS

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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVLIMESTORAGE	12	66	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. Within 12 months after completion of the installation, construction, reconstruction, relocation, or modification 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 activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-LIMESTORAGE. **(R 336.1201(7)(b))**

Footnotes:

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

The following conditions apply to: EU- SORBENTSTORAGE

DESCRIPTION: Storage and handling of activated carbon. Activated carbon is delivered via truck to facility and is stored in a silo. Emissions are controlled by fabric filter.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT: Emissions are controlled by a 900 cfm fabric filter.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Opacity	10 percent	Test Protocol will specify averaging time	The drop points and transfer points of EU-SORBENTSTORAGE	SC VI.2	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
2. Opacity	5 percent	Test Protocol will specify averaging time	SVSORBENT-STORAGE	SC VI.3	R 336.1301(c), R 336.2810, 40 CFR 52.21 (j)
3. PM	0.004 gr/dscf calculated on a dry gas basis	Test Protocol will specify averaging time	SVSORBENT-STORAGE	GC 13	R 336.1331, R 336.2810, 40 CFR 52.21 (j)
4. PM10	0.03 pph	Test Protocol will specify averaging time	SVSORBENT-STORAGE	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 RESTRICTIONS

1. Within 180 days of initial start-up of EU-SORBENTSTORAGE 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, 40 CFR 52.21 (c), (d), & (j))**
2. The permittee shall not operate EU-SORBENTSTORAGE 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, 40 CFR 52.21(c), (d), & (j))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate any portion of EU-SORBENTSTORAGE unless the fabric filters 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))**

V. TESTING/SAMPLING

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

1. 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 monitoring records from the broken bag leak detectors, or alternative monitoring measures, as approved by the AQD District Supervisor on each fabric filter of EU-SORBENTSTORAGE. **(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-SORBENTSTORAGE is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**
3. If the permittee does not install a bag leak detection system per the alternative monitoring requirements outlined in SC 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-SORBENTSTORAGE is operating. If during the observation there are any visible emissions detected from an emission point, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA 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(c), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c), (d) & (j))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

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 Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSORBENTSTORAGE	12	66	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. Within 12 months after completion of the installation, construction, reconstruction, relocation, or modification 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 activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-SORBENTSTORAGE. **(R 336.1201(7)(b))**

Footnotes:

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

The following conditions apply to: FGFACILITY

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: NA

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)

- The Main Access Road shall be paved, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining the Main Access Road in accordance with a malfunction abatement plan (MAP). (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))

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 FGFACILITY 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)¹. **(Act 451 of 1994 Part 55 324.5503(k), R 336.202)**
2. The permittee shall notify the AQD District Supervisor, in writing, of the start of construction or reconstruction of FGFACILITY within 30 days after such date. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of FGFACILITY 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 FGFACILITY. **(R 336.1201(7)(a), R 336.1216(1), 40 CFR 60.7(a)(1))**
3. This Permit to Install (No 341-07) shall become effective on February 2, 2010, unless a timely request for review is filed with the Administrator of the United States Environmental Protection Agency pursuant to 40 CFR 124.15 and 124.19. **(40 CFR 124.15 and 124.19)**
4. The Permittee shall permanently retire existing coal fired generating capacity in accordance with the Coal Fired Power Plant Retirement Plan and Schedule Agreement ("Plan") attached as Appendix D. The Plan provides for the permanent retirement of up to 958 megawatts. **(Clean Air Act § 165 (a) (2), 42 U.S.C. § 7475(a) (2); R336.2817(e))**

Footnote(s):

¹This 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 after initial startup, 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 after initial startup, the permittee shall submit two copies of a complete test plan for the COMS to the AQD for approval.
3. Within 180 calendar days after initial startup, the permittee shall complete the installation and testing of the COMS.
4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the COMS complies with the requirements of Performance Specification (PS) 1.
5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
6. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 1 of Appendix B, 40 CFR Part 60.
7. Until such time as the US EPA promulgates quality assurance requirements for COMS under Appendix F to 40 CFR Part 60, 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 the AQD. The results of the annual audit shall be submitted to the AQD within the quarterly EER for the quarter in which the annual audit is conducted. Upon promulgation of COMS quality assurance requirements under Appendix F of Part 60, the permittee shall follow such procedures.
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 EU-ASCPCBOILER during the reporting period.
 - d) If no exceedances or COMS downtime occurred during the reporting period, the permittee shall report that fact.

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

APPENDIX B
NO_x, SO₂, CO, PM, CO₂/O₂, Mercury Monitoring
Continuous Emission Monitoring and Continuous Emission Rate Monitoring System
(CEMS/CERMS) Requirements

1. Within 30 calendar days after commencement of initial start-up, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS/CERMS.
2. Within 150 calendar days after commencement of initial start-up, the permittee shall submit two copies of a complete test plan for the CEMS/CERMS to the AQD for approval.
3. Within 180 calendar days after commencement of initial start-up, the permittee shall complete the installation and testing of the CEMS/CERMS.
4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS/CERMS complies with the requirements of the corresponding Performance Specifications (PS) in the following table:

Pollutant	Applicable PS
NO _x /SO ₂	2
CO	4
CO ₂ /O ₂	3
CERMS	6
PM	11
Mercury	12A*
*Or other PS as approved by the AQD	

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
6. The CEMS/CERMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2, 3, 6, 11, and 12A (see No. 4 above) of Appendix B to 40 CFR Part 60 or 40 CFR Part 75, Appendices A and B, as applicable.
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 or 40 CFR Part 75, Appendix B. 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 a mercury CEM is used, and daily calibration and cylinder gas audits are performed using elemental mercury, a single point converter check must be performed weekly using a NIST traceable source of oxidized mercury.
9. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
 - a) A report of each exceedance above the limits specified in the Emission Limits of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.
 - b) A report of all periods of CEMS/CERMS downtime and corrective action.
 - c) A report of the total operating time of each boiler included in FGCFB during the reporting period.

- d) A report of any periods that the CEMS/CERMS exceeds the instrument range.
 - e) If no exceedances or CEMS/CERMS downtime occurred during the reporting period, the permittee shall report that fact.
10. The permittee shall keep all monitoring data on file for a period of at least five years and make them available to the AQD upon request.

APPENDIX C Reporting Requirements

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

1. For sulfur dioxide (SO₂), nitrogen oxide (NO_x), and particulate matter (PM) emissions:
Performance test data from initial and subsequent performance tests and from the performance evaluation of the continuous monitors (including the transmissometer)
2. For sulfur dioxide (SO₂), nitrogen oxide (NO_x), the following information shall be reported for each 24-hour period:
 - a) Calendar date.
 - b) The average sulfur dioxide and nitrogen oxide emission rates (lb/MMBtu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective action dates.
 - c) Percent reduction of the potential combustion concentrations of SO₂ for each successive boiler operating days, ending with the last 30-day period in the quarter: reasons for non-compliance with the standard; and, description of corrective actions taken.
 - d) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 75 percent of the hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.
 - e) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of start-up, shutdown, malfunction (NO_x only), emergency conditions (SO₂ only), or other reasons, and justification for excluding data for reasons other than start-up, shutdown, malfunction, or emergency conditions.
 - f) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
 - g) Identification of times when hourly averages have been obtained based on manual sampling methods.
 - h) Identification of times when the pollutant concentration exceeded full span of the CEMS.
 - i) Description of any modifications to CEMS which could affect the ability of the CEMS to comply with Performance Specifications 2 or 3.
3. The permittee shall submit all of the above information on a calendar quarter basis, no later 30 days after the end of the quarter.

APPENDIX C
Reporting Requirements Continued

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

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

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

1. If the 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 30 days after the end of the quarter.

APPENDIX C
Reporting Requirements Continued

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

1. If fuel pretreatment credit toward the SO₂ 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 name and location of the fuel pretreatment facility and the total quantity and heat content of all fuels received at the affected facility during the previous quarter.
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, SO₂ or NO_x Emissions Data as required by 40 CFR §60.51Da(f)

1. For any periods for which opacity, SO₂, 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.

APPENDIX C
Reporting Requirements Continued

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

1. For purposes of the reports required under 40 CFR §60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable standard under 40 CFR §60.42Da(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses shall be submitted to the Air Quality Division.
2. The permittee shall submit all of the above information on a calendar quarter basis, no later than 30 days after the end of the quarter.

APPENDIX D Coal-Fired Power Plant Retirement Plan and Schedule Agreement

1. The Retirement Plan and Schedule set forth in this Agreement is incorporated into and made an enforceable part of Permit-to-Install No. 341-07 issued by the Michigan Department of Environmental Quality (MDEQ) for the Consumers Energy Advanced Super Critical Pulverized Coal unit (the "Project").
2. By December 31, 2017, or within six (6) months after commencement of commercial operation of the Project, whichever date is earlier, Consumers Energy shall retire and permanently decommission seven (7) coal-fired units accounting for a total of 958 megawatts (MW)¹ in accordance with Paragraphs 2a and 2b. As used in the Agreement, "retire," "retirement" and "decommission" means that Consumers Energy will completely shut down the unit as a coal-fired facility, and no longer use the unit, nor sell or lease the unit to any other party for its use as a coal-fired or other fossil fuel-fired facility.
 - a) Group 1 – Consumers Energy will retire and decommission a minimum of five existing operating coal-fired units accounting for a minimum of 638 megawatts (MW).
 - b) Group 2 – Consumers Energy will retire and decommission two additional operating coal-fired units beyond those chosen pursuant to Paragraph 2a such that the total amount of retired and decommissioned coal-fired capacity is 958 MW, unless the additional unit's capacity factor exceeds the capacity factor threshold value of 41.5 percent continued operation of either of the two units under this paragraph will be determined as follows:
 - i. Whether a Group 2 unit capacity factor exceeds the threshold value will be evaluated in Consumers Energy's annual Power Supply Cost Recovery (PSCR) process; and
 - ii. The capacity factor comparison will be based on the average of two years of historical data (three years if the unit experienced a major equipment failure) and two years of projected data; and
 - iii. Upon Michigan Public Service Commission (MPSC) approval of the applicable PSCR plan case, the unit's retire and decommission date will be extended by one year, and any further extensions will be evaluated on an annual basis.

Consumers Energy will commit to filing a Certificate of Necessity (CON) application and associated Integrated Resource Plan (IRP) for the Project with the MPSC and will not complete construction of the Project if a CON acceptable to the Company is not approved. In addition, Permit-to-Install No. 341-07 and others required for the Project are subject to appeal. If the CON is not approved or for any reason the Project is not constructed and operated, the commitment to retire existing units under this Agreement becomes null and void.

3. For the coal-fired units Consumers Energy will retire in compliance with Paragraph 2a above, an extension will be granted by the MDEQ that shall allow for continued operation of these units beyond January 1, 2015 without increased mercury controls because the large capital commitment for installing mercury controls would be a significant economic hardship due to the planned unit retirements. These units must be retired and permanently decommissioned in compliance with Paragraph 2a.

In addition, for the coal-fired units Consumers Energy will retire in compliance with Paragraph 2a above, if a new air quality regulatory requirement makes it a significant economic hardship for Consumers Energy to make additional capital improvements at these facilities, Consumers Energy may petition the MDEQ to grant other extensions through December 31, 2017. The MDEQ will not unreasonably withhold approval consistent with its authority and jurisdiction.

¹ For purposes of this Agreement only, the parties agree that the following units have the stated capacity: Whiting 1-2 102 MW each; Whiting 3 124 MW; Weadock 7-8 155 MW each; Cobb 4-5 160 MW each.

Any coal-fired power plants continued in operation past December 31, 2017 under Paragraph 2b must meet all applicable environmental requirements and will not be subject to the extensions described in this paragraph.

4. Nothing in this Agreement shall prevent Consumers Energy from retiring and decommissioning any of its coal-fired power plants sooner than the dates specified above (e.g.; to comply with environmental standards such as the Clean Air Interstate Rule (CAIR)). In addition, nothing in this Agreement precludes any pending or future federal requirements. If a federal program becomes available that awards benefits or incentives for retiring coal-fired plants, such that the retirements under Paragraph 2 would qualify for such benefits or incentives, then Consumers Energy shall be deemed to be carrying out such retirements pursuant to the federal program for purposes of claiming any benefits or incentives.
5. Consumers Energy reserves the right to use, maintain or sell any emission allowances, decreases, credits, or offsets related to reduction of criteria pollutant emissions, including nitrogen oxides and sulfur dioxides emissions, and greenhouse gases (GHGs) generated by units retired under this Agreement. Use of these allowances or credits shall be consistent with provisions of state and federal law and regulation.
6. Consumers Energy agrees with the principle that lower-cost supply resources are preferable to higher-cost supply resources. Consumers Energy further agrees that: (i) today's energy efficiency programs that Consumers Energy is implementing generally represent a low-cost resource; and (ii) where additional energy efficiency programs are demonstrated to be a lower-cost supply resource, then, consistent with the MPSC maintaining decoupling and other financial incentives for the utility, these programs generally should be pursued, subject to the need to achieve a balance of supply resources and an appropriate balance of forecast, cost, developmental, and other risks. Consumers Energy will continue to implement and expand its energy efficiency programs in accordance with state and federal law.

More specifically, the MPSC, in its November 2, 2009 order regarding Consumers Energy's electric rates (Case No. U-15645), established a decoupling mechanism that is contingent upon Consumers Energy: (i) exceeding the benchmarks for the energy optimization program established pursuant to Public Act 295; and (ii) committing to provide enhanced energy efficiency programs and demand side resources that enable all customers to effectively manage rising energy costs, including proposals to accomplish this in the next filed rate case.² Consumers Energy has filed a petition for rehearing with the MPSC seeking clarification of the administration of these contingent elements for the decoupling mechanism. Assuming satisfactory resolution of the petition, Consumers Energy expects to be able to comply with the MPSC's order.

In addition, the MPSC CON process contained in Public Act 286 (PA 286) requires Consumers Energy to consider energy efficiency and renewable energy as supply alternatives and the Company will support full consideration of those resources in the CON process (see Paragraph 2 for the Consumers Energy commitment to the CON process).

² MPSC November 2, 2009 order in case No. U-15645, pages 52-53.