Maryland
Department of
the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Horacio Tablada, Secretary
Suzanne E. Dorsey, Deputy Secretary

Mr. Kara Hawkins, Environmental Specialist
AES WR Limited Partnership LP
11600 Mexico Farms Road, S.E.
Cumberland, MD 21502

Dear Ms. Hawkins:

Re. Renewal Part 70/Title V Operating Permit 24-001-0203

Enclosed, please find the renewal Part 70/Title V Operating Permit and Fact Sheet for the AES WR Limited Partnership LP, located in Allegany County, MD. The Permit will expire on August 31, 2027.

The Code of Maryland Regulations (COMAR) 26.11.03.11 states the following:

> If the Department denies a Part 70 permit or issues it with terms and conditions that are objectionable to the applicant, the applicant may request that a contested case hearing be held regarding the permit. This request shall be made to the Department in writing not later than 15 days after the applicant receives notice that the permit has been denied or of the objectionable terms and conditions. The request shall include the basis for the request and refer to any objectionable terms and conditions.

Please note the following revised condition in the Permit under Section II, General Conditions, Number 5, Permit Renewal:

> The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit 12 months before the expiration of the permit. Upon submitting a complete application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

If you have any questions, please feel free to contact Mr. Schuyler Fearins, the permit manager for this facility, at schuyler.fearins@maryland.gov or (410) 537-3764.

Sincerely,

Suna Yi Sariscak, Manager
Air Quality Permits Program
Air & Radiation Administration

SYS/jm

Enclosures

cc: EPA Region III (w/encl)

AES WR LIMITED PARTNERSHIP
11600 MEXICO FARMS ROAD S.E.
CUMBERLAND MARYLAND
PERMIT NO. 24-001-0203
PART 70 OPERATING PERMIT FACT SHEET

Background

AES WR Limited Partnership (AES) is a coal fired electric generating station located at 11600 Mexico Farms Road, S.E in Cumberland in Allegany County in Maryland. The facility operates a 180-megawatt coal-fired steam electric plant. The facility consists of an ABB CE coal-fired atmospheric circulating fluidized bed (ACFB) boiler with a designed rated capacity of 2070 million Btu/hour heat input when burning bituminous coal. No. 2 fuel oil is burned as a start-up fuel.

A Selective non-catalytic reduction (SNCR) system provides primary control of nitrogen oxides (NOx) to the ACFB design. Sulfur dioxide (SO_2) emissions are controlled by the introduction of limestone into the fluidized bed of the boiler. A bag house controls particulate emissions in the ACFB boiler flue gas. Support equipment includes two (2) eclipse natural gas and Number 2 oil-fired limestone dryers, each rated at five (5) million Btu per hour with particulate emissions controlled by a bag house, and SO_2 emissions controlled using low sulfur fuel oil of 0.05% by weight or less.

The facility supplies process steam and a slip-stream of exhaust gas to an on-site carbon dioxide (CO_2) recovery plant, owned and operated by AES-WR Limited Partnership, for the production of food grade liquid CO_2.

Other equipment includes one (1) Caterpillar 562 kW (753 brake horsepower) diesel fuel-fired emergency boiler feed water pump (EBFP) using low sulfur diesel fuel (0.05 weight percent sulfur or less); coal, limestone and ash receiving, processing, storage, and loadout facilities using wet suppression, baghouses, covers, and enclosures to control particulate emissions; and two (2) temp-heat models THP-4500 natural gas fired space heaters, each rated at 4.5 million Btu/hour located in the boiler building.

In 2013, AES-WR added two installations to the facility: one (1) automated coal blending system comprising of a 45-ton feed hopper and a 30-in drag-chain conveyor constructed under Permit to Construct No. 001-6-0304; and a modification to an existing emissions unit – addition of two rolls (the equipment associated with a Gundlach Model 3080S single-stage, two-roll pre-crusher) to the existing Gundlach roll crusher under Permit to Construct No. 001-3-0127. The permits were issued in March 2013.

On August 18th, 2015, AES was-WR issued a Permit to Construct for one (1) Refined Coal system equipped with a Torit dust collector and bin vent filters. The unit will be used for the treatment of process coal using Chem-mod as a chemical additive. However, the facility was unable to comply with COMAR

26.11.02.04B, "Duration of Permits" as the unit was not built within 18 months of issuance. The Permit was reissued on June 8th, 2017 under a different MDE registration number. This project was never constructed.

AES-WR construction was completed in August 1999 and commenced commercial operation on February 10, 2000. AES produces electricity for distribution by the Potomac Edison Power Company. The applicable SIC Code for the facility is 4911 - Electric Services

AES-WR did not undergo review under the Certificate of Public Convenience and Necessity (CPCN) process required of most utilities and independent electricity power generators and is not an affected source under the Acid Rain Program because AES had a qualifying power purchase agreement that was signed prior to 1990. The ACFB is subject to the New Source Performance Standards (NSPS) found in 40 CFR Part 60 Subpart Da since the boiler was constructed after the applicability date (September 18, 1978) for fossil fuel-fired utility steam generators. The facility is also subject to 40 CFR Part 60 Subpart Y and 40 CFR Part 60 Subpart OOO. The facility qualifies as a Title V source pursuant to COMAR 26.11.03.01A because its plant-wide actual emissions are greater than the 100-ton major source threshold for NOx, SOx, and CO. AES-WR is located in Allegany County (Air Quality Region 1), which is a part of the ozone transport region. AES-WR submitted a Part 70 Operating Permit renewal application on September 04, 2012. An administrative completeness review was conducted, and the application was found to be complete.

Table 1 summarizes the most recent five years of actual emissions from AES-WR. The primary source of criteria pollutants is the facility's boiler:

TABLE 1: ACTUAL EMISSIONS

Emission Year	NOx (TPY)	SOx (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	HAPs (TPY)
2014	552	1167	12.9	931	2.74	14.2
2015	445	1090	15.4	899	2.46	13.7
2016	358	891	25.1	741	1.37	11.4
2017	454	1023	16.2	838	1.64	12.6
2018	496	1048	15.9	823	1.59	12.3

CROSS-STATE AIR POLLUTION RULE (CSAPR)

The U.S. Environmental Protection Agency (EPA) issued the Cross-State Air Pollution Rule (CSAPR) in July 2011 to address Clean Air Act requirements concerning interstate transport of air pollution and to replace the previous Clean Air Interstate Rule (CAIR) which the D.C. Circuit remanded to the EPA for

replacement. Following the original rulemaking, CSAPR was amended by three further rules known as the Supplemental Rule, the First Revisions Rule, and the Second Revisions Rule. As amended, CSAPR requires 28 states to limit their state-wide emissions of sulfur dioxide (SO_2) and/or nitrogen oxides (NOX) in order to reduce or eliminate the states' contributions to fine particulate matter and/or ground-level ozone pollution in other states. The emissions limitations are defined in terms of maximum state-wide "budgets" for emissions of annual SO2, annual NO_X, and/or ozone season NO_X by each state's large electricity generating units (EGUs). The emissions budgets are implemented in two phases of generally increasing stringency. As the mechanism for achieving compliance with the emissions limitations, CSAPR establishes federal implementation plans (FIPs) that require large EGUs in each affected state to participate in one or more new emission trading programs that supersede the existing CAIR emissions trading programs. On December 30, 2011, in response to petitions challenging CSAPR, the D.C. Circuit granted a stay of the rule, ordering the EPA to continue administering CAIR on an interim basis. In a subsequent decision, the Court vacated CSAPR but on April 29, 2014, the U.S. Supreme Court reversed that decision and remanded the case to the D.C. Circuit Court for further proceedings. In order to allow CSAPR to replace CAIR in an orderly manner, EPA filed a motion asking the D.C. Circuit to lift the stay and to toll, by three years, all CSAPR compliance deadlines that had not yet passed. On October 23, 2014, the Court granted the EPA's motion.

Consistent with the Court's order, compliance with CSAPR's Phase 1 emissions budgets is now required in 2015 and 2016 and compliance with the rule's Phase 2 emissions budgets and assurance provisions is now required in 2017 and beyond.

On September 7, 2016, EPA finalized the CSAPR Update, which further reduced NO_X emissions from EGUs in 22 states during the ozone season, May 1 thru September 30, thereby reducing pollution transport and helping downwind states achieve and maintain the 2008 ozone standard (75 ppb). On October 26, 2016, CSAPR Update was published in the federal register, with an effective date of December 27, 2016.

On March 15, 2021, EPA finalized the Revised Cross-State Air Pollution Rule Update for the 2008 ozone National Ambient Air Quality Standards (NAAQS). Starting in the 2021 ozone season, the rule will require additional emissions reductions of nitrogen oxides (NO_X) from power plants in 12 states, improving air quality for millions of Americans. The final rule was published in the Federal Register on April 30, 2021, with an effective date of June 29, 2021.

This renewal Part 70 permit identifies the applicable regulations of the CSAPR rule as found in 40 CFR Part 97 subparts AAAAA- NO_X Annual Trading Program,

subparts GGGGG- CSAPR NO_X Ozone Season Group 3 Trading Program, and subpart CCCCC SO_2 Group 1 Trading Program.

MATS (MERCURY AND AIR TOXICS) RULE

The US EPA finalized on February 16, 2012, the National Emissions Standards for Hazardous Air Pollutants from coal and oil-fired Electric Utility Steam Generating Units (EGUs) codified under 40 CFR Part 63, Subpart UUUUU, also known as the Mercury and Air Toxics (MATS) rule. The MATS rule established national emission limitations and work practices for certain hazardous air pollutants emitted from coal and oils-fired steam generating units as well as requirements to demonstrate initial and continuous compliance with the emission limitations. Existing units are required to comply with the rule requirements by April 16, 2015 while new or reconstructed units were required to comply by April 16, 2012 or upon start-up.

AES-WR is subject to the requirements of this rule because it meets the applicability requirements for the rule as an existing source. A source is subject to the rule if it is a coal-fired EGU or oil-fired EGU as defined in §63.10042. The section defined a coal-fired electric utility steam generating unit as an electric utility steam generating unit meeting the definition of "fossil fuel-fired" that burns coal for more than 10.0 percent of the average annual heat input during any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year. The section also defined electric utility steam generating unit (EGU) as a fossil fuel-fired combustion unit of more than 25 megawatts electric (MWe) that serves a generator that produces electricity for sale. It further adds that a fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 MWe output to any utility power distribution system for sale is considered an electric utility steam generating unit. Coal-fired EGUs are subcategorized as defined in §63.10042 and as:
(1) EGUs designed for coal with a heating value greater than or equal to 8,300 Btu/lb., and
(2) EGUs designed for low rank virgin coal (Ref: §63.9990) AES falls under existing EGUs designed for coal with a heating value greater than or equal to 8,300 Btu/lb. Specific limitations and requirements, which AES must meet are presented below and in the permit.

COMPLIANCE ASSURANCE MONITORING REQUIREMENTS

Compliance Assurance Monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected.

In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance; have pre-control emissions of at least 100% of the major source amount; and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emissions unit.

AES-WR identified the coal fired ACFB boiler as subject to CAM requirements for particulate matter and provided a CAM Plan for the unit. It also provided a CAM applicability determination for minor sources at the premises - for installations such as limestone dryers rated at 5 MMBtu per hour equipped with a baghouse for particulate matter recovery, and coal, limestone, and ash receiving, processing, storage, and load-out facilities utilizing baghouses, wet suppression systems, covers and enclosures for particulate emissions control and recovery.

The baghouses, as utilized on these units, do not meet the definition of a control device. EPA defines a control device, under 40 CFR 64.2, as a device other than "inherent process equipment" that is used to destroy or remove air pollutants prior to discharge to the atmosphere. The baghouses on these units are more akin to and meet the EPA's definition of "inherent process equipment" defined as equipment that is necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulation. EPA has in effect distinguished a control device from inherent process equipment, and since the baghouses are used primarily for material recovery, and not primarily for the purposes of air pollution control, the units serviced by these baghouses are exempt from CAM applicability determination and CAM Plan.

REGIONAL GREENHOUSE GAS INITIATIVE (RGGI)

The Regional Greenhouse Gas Initiative (RGGI), a **state only enforceable program**, is a market-based carbon dioxide (CO_2) cap and trade program designed to reduce CO_2 emissions from fossil fuel-fired power plants. The Healthy Air Act required Maryland to join RGGI by July 2007. Maryland joined RGGI by signing RGGI's multi-state Memorandum of Understanding (MOU) on April 20, 2007. The MOU required Maryland to adopt regulations by December 31, 2008, implementing the RGGI program. The Maryland CO_2 Budget Trading Program, Code of Maryland Regulations (COMAR) 26.09.01 to .03, became effective on July 17, 2008. COMAR 26.09.04 became effective as an emergency action on April 4, 2008 and as a permanent action on August 25, 2008. The regulations require the following:

1) Implement a cap-and-trade program for CO_2 emissions from fossil fuel-fired electric generating units located in Maryland having a capacity of at least 25 megawatts;
2) Distribute CO_2 allowances to stakeholders through auction, sale and/or allocation;
3) Require each affected source to have a CO_2 budget account representative and a compliance account;
4) Require each budget unit to hold in its source's compliance account at the end of each 3-year control period one allowance for each ton of CO_2 emissions emitted in that period;
5) Require sources to monitor emissions and submit quarterly and annual emission reports;
6) Establish set-aside accounts for voluntary renewable purchase, limited industrial generator exemptions, and long-term contract generators;
7) Establish a consumer benefit or strategic energy purpose fund to support energy efficiency, directly mitigate electricity ratepayer impacts, promote renewable or non-carbon emitting energy technologies, stimulate or reward investment in the development of innovative carbon emissions abatement technologies with significant carbon reduction potential, and fund administration of the program; and
8) Establish procedures to evaluate and award allowances to persons who undertake offset projects that will reduce CO_2 emissions.
9) Require affected sources to submit an application for a CO_2 Budget Permit. When issued, a CO_2 Budget Permit will be added as an attachment to the Part 70 permit.

An initial CO_2 Budget Trading Permit (Attachment 1) will be issued in conjunction with the Part 70 permit renewal. The permit has a term of 5 years. The permit is **state-only enforceable**.

GREENHOUSE GAS (GHG) EMISSIONS

AES-WR emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs are generated from four principal sources, which are the atmospheric circulating fluidized bed boiler, emergency boiler feed water pump, limestone dryers, and space heaters contained within the facility premises.

AES emits greenhouse gases at the major source level (threshold: 100,000 tpy CO_2e) as evidenced by the annual GHG emissions provided in Table 2 below. However, the facility has not triggered the Prevention of Significant Deterioration (PSD) requirements for GHG emissions because the facility has not undergone a major modification. Therefore, there are no applicable GHG Clean Air Act requirements at this time. However, the Permittee is required to continue to quantify its facility-wide GHG emissions and report them in accordance with Section 3 of the Part 70 permit.

Table 2 summarizes the actual emissions from AES-WR based on its Annual Emission Certification Reports:

Table 2: Greenhouse Gases Emissions Summary

GHG	Conversion factor	2016 tpy CO_2e	2017 tpy CO_2e	2018 tpy CO_2e
Carbon dioxide (CO_2)	1	1,193,084	1,348,942	1,324,501
Methane (CH_4)	25	141	160	157
Nitrous Oxide (N_2O)	298	21	23	23
Total GHG CO_{2eq}		**1,202,867**	**1,359,796**	**1,335,280**

AES WR LIMITED PARTNERSHIP
11600 MEXICO FARMS ROAD S.E.
CUMBERLAND MARYLAND
PERMIT NO. 24-001-0203
PART 70 OPERATING PERMIT FACT SHEET

EMISSION UNITS IDENTIFICATION

AES-WR has identified the following emission units shown in Table 3 as subject to the Title V operating permit program:

TABLE 3 - EMISSION UNITS

Emissions Unit Number	MDE - ARA Registration Number	Emission Unit Name	Description	Date of Installation
EU-1	001-3-0127	Fluidized Bed Boiler	Atmospheric Circulating Fluidized Bed Boiler burning bituminous coal and No. 2 diesel fuel during start-up.	August, 1999
EU-2	001-6-0136	Limestone Truck Unloading Operation	Limestone truck unloading operation. PM emissions are controlled by a baghouse.	August, 1999
EU-3 and EU-4	001-6-0136	Two Limestone Crushing and Drying Systems	Each system contains one Raymond Roller Mill rated at 20 tons/hr., one natural gas/#2 oil-fired dryer rated at 5 MMBTU/hr., and a conveyor rated at 30 ton/hr. Each system's PM emissions are controlled by a baghouse.	August, 1999
EU-5	001-6-0136	Limestone Storage Silo	Limestone storage silo. PM emissions controlled by a baghouse	August, 1999
EU-6	001-3-0127	Coal Truck Unloading Operation	Truck unloading operation located in the coal unloading building. PM emissions controlled by a baghouse.	August, 1999
EU-7	001-3-0127	Coal Crushing and Reclaiming System	Contains two crushers, two vibrating feeders, one surge bin, two enclosed reclaim conveyors, one enclosed stockpile conveyor and one enclosed transfer conveyor, each located inside coal crusher building. Emissions are controlled by a baghouse.	August 1999; March, 2013 (Gundlach crusher modification)
EU-8	001-3-0127	Coal Storage System.	Four storage silos connected to one baghouse that controls PM emissions.	August, 1999
EU-9	001-3-0127	Bed Ash Day Bin	Bed Ash Day Bin emissions vent through a baghouse.	August, 1999

EU-10	001-3-0127	Bed ash storage silo	Bed ash storage silo emissions vent through a baghouse.	August, 1999
EU-11	001-3-0127	Fly ash storage silo	Fly ash storage silo emissions vent through a baghouse.	August, 1999
EU-12	001-9-0081	Boiler Feed water Pump	Diesel fueled boiler feed water pump rated at 562 KW (740 HP).	August, 1999
EU-17 and EU-18	001-6-0243 001-6-0244	Space Heaters	Two natural gas fired boilers, each rated at 4.5 MMBTU/hr. used for comfort heating	August, 1999
EU-19	001-6-0304	Fuel Blending Station	One (1) automated coal blending system comprising of a 45-ton feed hopper, and a 30-in drag-chain conveyor.	March, 2013

The gap in the EU numbers (EU-13 – EU-16) represents emission units (storage tanks) that are insignificant installations and are included under the Insignificant Activities Section.

Overview of the Part 70 Permit

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions units, emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis by which the

Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

Regulatory Review/Technical Review/Compliance Methodology

I. **Emissions Unit Number EU-1:** One (1) Atmospheric Circulating Fluidized Bed Boiler (ACFB) with a designed rated capacity of 2070 MMBtu/hr. of heat input.

Particulate emissions in the boiler flue gas are controlled with the use of a bag house. Opacity of the flue gas is measured continuously with a continuous opacity monitoring system (COMS).

Sulfur dioxide (SO_2) emissions in the boiler flue gas are controlled by the introduction of limestone into the fluidized bed of the boiler. SO_2 emissions are measured continuously with a continuous emissions monitoring system (CEMS)

Nitrogen oxide (NOx) emissions in the boiler flue gas are controlled with the use of a selective non-catalytic reduction (SNCR) system. NOx emissions are measured continuously with a CEMS.

The Department issued AES a PSD Approval (No. 94-01) on May 13, 1994 and Permit to Construct Nos. 001-3-0127, 001-6-0136 and 001-4-0067 on November 17, 2005. On July 28, 2005, AES requested administrative changes to two aspects of the PSD Approval and Permit to Construct Nos. 001-3-0127, 001-6-0136 and 001-4-0067. The first was to increase allowable annual operating hours from 8664 while operating at the unit rated capacity of

2070 MMBtu/hour heat input to 8760 with a corresponding reduction in heat input to 2047 MMBtu/hour which is averaged on a 12-month rolling basis. These changes did not create any ambient air impacts. The second was to change operating limits of 12 hours daily and 4380 hours annually per limestone dryer to a combined operating limit of 8760 hours per year for both dryers, as opposed to individual unit limits, to maximize operating flexibility. The PSD Approval No. 94-01 and Permit to Construct Nos. 001-3-0127, 001-6-0136 and 001-4-0067 were reissued on November 17, 2005.

The permit for the ACFB boiler was modified again in March in 2009 to clarify the annual heat input limitation. The boiler is limited to 17,934,480 MMBTU on a 12-month rolling basis. This is equal to the design capacity 2070 MMBtu/hr. multiplied by the original limitation of 8664 hours per year.

Applicable Standards and Limitations

A. Visible Emissions

1. **COMAR 26.11.09.05A (1),** In Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.
   Exceptions: COMAR 26.11.09.05A(1) does not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
   i. The visible emissions are not greater than 40 percent opacity; and
   ii. The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period. **[Authority: COMAR 26.11.09.05A (3)].**

2. **40 CFR 60.42Da(b)** - NSPS Subpart Da, which limits the discharge into the atmosphere of any gases which exhibit greater than 20 percent opacity (6-minute average) except for a 6-minute period per hour of not more than 27% opacity.

   The limit under §60.42Da applies at all times except during periods of startup, shutdown, or malfunction. **[Authority: 40 CFR 60.48 Da (a)].**

Note: Compliance with visible emissions limit will be the basis for demonstrating compliance with the applicable NSPS regulation.

Compliance Demonstration:

The Permittee shall continuously monitor opacity of the stack gases using a continuous opacity monitor that is certified in accordance with 40 CFR Part 60, Appendix B and that meets the quality assurance criteria codified in COMAR 26.11.31 **[Authority: COMAR 26.11.01.10 and PSD Approval #94-01A, and 40 CFR 60.49Da].**

The Permittee shall perform QA/QC procedures on the Continuous Opacity Monitoring (COM) system as required by permit to construct (PTC) 001-3-0127, 001-6-0136 & 001-4-0067 issued on August 10, 1994 and amended on November 17, 2005 and NSPS 40 CFR Part 60 Subpart Da. The Permittee shall provide the Department a notice of intent to audit the CEM system at least 30 day prior to the proposed test date. **[Authority: 40 CFR Part 60, subpart Da and PTC 001-3-0127, 001-6-0136 & 001-4-0067 issued on August 10, 1994 and amended on November 17, 2005].**

The Permittee shall ensure that valid COM data is collected for a minimum of 95 percent of the operating hours in each quarter **[Authority: COMAR 26.11.01.10D (1)C].**

The Permittee shall maintain all COM records necessary to show compliance with the data reporting requirements of COMAR 26.11.01.10 and 40 CFR 60.49Da). **[Authority: COMAR 26.11.01.10 and 40 CFR 60.49Da].**

The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter in accordance with the requirements in COMAR 26.11.01.10D. **[Authority: COMAR 26.11.01.10D and 40 CFR 60.51Da]**

For any period for which opacity 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. Operation of the control system and affected facility during periods of data unavailability are to be compared with operation of the control systems and affected facility before and following the period of unavailability **[Authority: 40 CFR 60.51 Da(f)].**

Discussion
The Permittee has installed and operates a COMS that is certified in accordance with 40 CFR Part 60 Appendix B and that meets the quality assurance criteria codified in COMAR 26.11.31 " Quality Assurance Requirements for Continuous Opacity Monitors (COMs)" The Permittee submits quarterly reports as required and the reports have demonstrated the facility's compliance with the SIP and NSPS opacity standards.

B. Particulate Emissions

1. **40 CFR 60.42Da(a)** – NSPS Subpart Da, which limits particulate matter emissions to 0.03 lbs./MMBtu heat input. The limit under §60.42 Da applies at all times except during periods of startup, shutdown, or malfunction. **[Authority: 40 CFR 60.48Da(a)].**

2. **§60.48Da Compliance provisions**. "(f) For affected facilities for which construction, modification, or reconstruction commenced before May 4, 2011, compliance with the applicable daily average PM emissions limit is determined by calculating the arithmetic average of all hourly emission rates each boiler operating day, except for data obtained during startup, shutdown, or malfunction periods. Daily averages must be calculated for boiler operating days that have out-of-control periods totaling no more than 6 hours of unit operation during which the standard applies."

3. PSD **Approval No. 94-01A**, which limit PM_{10} emissions to 0.015 lbs./MMBtu heat input - 3-hour average and 136 tons per year based on a maximum heat input of 17,934,480 MMBtu averaged on a rolling 12-month period. (See PSD limits in Table IV-1, Section 1.1 Paragraph E below).

   Note: The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.42Da(a) and the PSD limit.

4. **COMAR 26.11.09.06(A)(2)** which limits particulate emissions to be discharged into the atmosphere in excess of the amounts shown in Figure 2. For the ACFB boiler this is 0.1 lb./MMBtu heat input. (Streamlined with PSD limit. Compliance with the PSD BACT limit assures compliance with the RACT limit.)

   Streamlining discussion: COMAR 26.11.11.09.06(A)(2) is a RACT limit promulgated in 1980 for existing sources. As part the PSD BACT case by case determination process in 1994, it was determined that the 1980 RACT limit did not satisfy PSD BACT for the proposed ACFB boiler. BACT in 1994 required significantly greater controls and a lower emission limit. Compliance with the PSD BACT limit assures compliance with the COMAR RACT limit.

PM Compliance demonstration:
The Permittee shall perform a total particulate and PM_{10} emissions test at least once during the life of the permit. The Permittee shall submit a test protocol to the Department for review and approval at least 30 days before any testing is

conducted and a notice of intent to test at least 10 days prior to the scheduled test date to allow representation by the Department's personnel. The Permittee shall maintain the results of emissions testing for total particulate and PM_{10} for a period of at least five years. The Permittee shall submit the results of stack tests in a final report within 45 days from test completion. The Permittee is also required to implement a Compliance Assurance Monitoring (CAM) plan for particulate emissions as required under 40 CFR Part 64. **[Authority for the compliance demonstration - Periodic Monitoring: COMAR 26.11.03.06C].**

Discussion:
The ACFB boiler was stack tested on March 3, 2013 for PM_{10} emission and in 2011 for PM emission. The particulate emissions results were 0.001 lb./MMBtu of heat input on a 3-hour average for both PM_{10} and PM. At this rate, PM_{10} emissions were computed to be 7.64 tons per year. These numbers are significantly less than the PSD standards of 0.015 lb./MMBtu and Federal NSPS standard of 0.03 lbs./MMBtu of heat input on a 3-hour basis and 136 tons per year.

COMPLIANCE ASSURANCE MONITORING PLAN FOR THE ACFB BOILER

I. Background

A. Emissions Unit

Description:	One (1) ABB-CE Atmospheric Fluidized Bed Combustion Boiler
Identification:	Emission Point 1
MARMA Reg. No.:	3-0127

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.:	PSD Approval No. 94-01, Part A, Condition 7	
Emission Limits:	Particulate Matter:	0.015 pounds/MMBtu (3-hour average)
Monitoring Requirements:	Opacity	

C. Control Technology

Reverse air baghouse manufactured by ABB operated under negative pressure.

II. Monitoring Approach

The key elements of the monitoring approach are presented in Tables 1 and

Table 1 - Monitoring Approach – Indicator 1 (Primary)

I.	Indicator Monitoring Approach	Opacity Opacity is measured continuously with a COMS unit
II.	Indicator Range	An internal, non-enforceable trigger level of 10.9% average opacity (three-hour block average).
	Corrective Action	An excursion triggers an inspection, corrective action as necessary, and a reporting requirement.
III.	Performance Criteria	
	A. Data Representativeness	The monitoring system consists of a COMS which monitors the opacity of the exhaust gas stream.
	B. Verification of Operational Status	Continuous opacity data will be collected in accordance with COMAR 26.11.01.10, and COMAR 26.11.31.
	C. QA/QC Practices and Criteria	The COMS will be certified in accordance with 40 CFR Part 60, Appendix B. COMS will be calibrated, maintained, and operated according to manufacturer's recommendations. COM data will be collected and validated in accordance with COMAR 26.11.01.10 and COMAR 26.11.31.
	D. Monitoring Frequency and Data Collection Procedure	Opacity data are automatically reduced to 6-minute block averages calculated from 36 or more equally spaced data points.
	E. Record Keeping	The continuous opacity data collected, and corrective actions taken will be maintained for 5 years.

F. Reporting	Report of excursions and corrective actions will be submitted to the Department in a quarterly report.

Table 2 - Monitoring Approach – Indicator 2 (Secondary)

I. Indicator Monitoring Approach	Opacity trend Opacity is measured continuously with a COMS unit
II. Indicator Range	A clear step change of more than 5% in opacity during isolation of any baghouse module during the normal cleaning sequence.
Corrective Action	An excursion triggers an inspection, corrective action as necessary, and a reporting requirement.
III. Performance Criteria	
A. Data Representativeness	The monitoring system consists of a COMS which monitors the opacity of the exhaust gas stream. The opacity trend is typically monitored in the control room during normal operation and represents a good early warning system to identify potential bag failures within the isolated module.
B. Verification of Operational Status	Continuous opacity data will be collected in accordance with COMAR 26.11.01.10 and COMAR 26.11.31.
C. QA/QC Practices and Criteria	The COMS will be certified in accordance with 40 CFR Part 60, Appendix B. COMS will be calibrated, maintained, and operated according to manufacturer's recommendations. COM data will be collected and validated in accordance with COMAR 26.11.01.10 and COMAR 26.11.31.
D. Monitoring Frequency and Data Collection Procedure	Opacity data are automatically reduced to 6-minute block averages calculated from 36 or more equally spaced data points.

E. Record Keeping	The continuous opacity data collected, and corrective actions taken will be maintained for 5 years.
F. Reporting	Report of excursions and corrective actions will be submitted to the Department in a quarterly report.

CAM PLAN JUSTIFICATION

I. Background

The ACFB boiler, which is identified as the pollutant-specific emission unit, burns bituminous coal and utilizes Number 2 fuel oil as a start-up fuel for the generation of steam and electricity. Particulate emissions are controlled by an ABB reverse air baghouse. The baghouse consists of twelve (12) compartments. Opacity is measured using a continuous opacity monitoring system (COMS).

II. Rationale for Selection of Performance Indicator

Opacity was selected as the performance indicator because it is indicative of good operation and maintenance of the baghouse. The facility is required to utilize a COMS to satisfy the monitoring requirements of 40 CFR Part 60, Subpart Da. An increase in opacity indicates reduced performance of a particulate control device. Therefore, an increase in opacity is used as a performance indicator.

III. Rationale for Selection of Indicator Level

The equation giving a correlation between opacity and particulate mass emissions developed by Robertson et. al., and reported in the Proceedings of the EPRI May 1999 CEM Users Group Meeting, is used to develop a primary opacity indicator range to allow reasonable assurance of compliance. The Robertson et. al. relationship is:

$$PM\ (mg/dscm) = 0.462 \times Opacity\ (\%)^2 - 4.60 \times Opacity\ (\%) + 13.5$$

AES has a few sets of simultaneous measurements of opacity and particulate matter mass emissions from the main boiler stack. The following table summarizes these measurements.

Date	Stack Test PM (mg/dscm)	COMS Opacity (%)
02/21/2005	4.58	3.3

07/21/2010	5.54	2.9
05/22/2012	6.87	2.3
03/07/2013	2.29	3.1
09/22/2015	2.35	-
03/24/2016	2.30	-

The stack test PM concentrations were measured using U.S. EPA Method 5 and are the average of three runs during each of the four stack tests. The corresponding COMS opacity is the average opacity that was measured by the existing COMS during the PM stack test. The measured opacities during these stack tests are very steady and low; the average opacity for the stack tests is 2.9 %. The corresponding PM concentration measurements are more variable, which would be an expected result from Method 5 analyses; the average PM concentration for the stack tests is 4.82 mg/dscm. This level of PM concentration at low opacity is consistent with the Robertson et. al. relationship. Therefore, the Robertson et. al. relationship is used to develop an opacity trigger level for the CAM indicator range.

The PM_{10} emission standard for AES's ACFB is 0.015 lb./MMBtu (3-hour average). Based on the carbon dioxide F-Factor for bituminous coal combustion of 1800 scf/MMBtu (U.S. EPA Method 19), and a carbon dioxide concentration in the ACFB exhaust of 15%, dry, the emission standard for AES is equivalent to 20 mg/dscm, or

0.015 lb/MMBtu X 1 MMBtu/1800 dscf X 0.15 X 453590 mg/lb. X 1 cf/0.02832 cm

For conservatism, AES is using 90% of the emission standard (or 18 mg/dscm) as the basis for an opacity trigger level. Generally solving the Robertson et. al. equation for opacity results in:

$$\text{Opacity (\%)} = [4.6 + SQRT\{(4.6)^2 - (4)(0.462)(13.5\text{-PM})\}]/[(2)(0.462)]$$

Therefore, the opacity level corresponding to 90% of the PM_{10} emission standard (PM = 18 mg/dscm) is 10.9% opacity. This is the proposed primary opacity indicator.

When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. This indicator range was selected because an increase in opacity is indicative of an increase in particulate emissions.

For the secondary indicator, the indicator of a clear step change of more than 5% in opacity during the isolation of any baghouse module during the normal cleaning sequence is a reasonable indicator of anomalous opacity reading and therefore an indicator of potential abnormal performance. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. This indicator range was selected because an increase in opacity is indicative of an increase in particulate emissions.

C. Sulfur Oxide Emissions

1. **40 CFR 60.43Da(a)(1) - (4)** – NSPS Subpart Da, which prohibit the discharge of any gases into the atmosphere which contain sulfur dioxide from the combustion of solid fuel in excess of: (1) 1.20 lbs/MMBtu heat input per hour and 10 percent of the potential combustion concentration (90 percent reduction); (2) 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lbs./MMBtu of heat input; (3) 1.4 lb./MWh gross energy output; or (4) 0.15 lb./MMBtu heat input.

   Note: Compliance with the emissions limitation and percent reduction requirements are determined on a 30-day rolling average **[Authority: 40 CFR 60.43Da(g)].**

2. **PSD Approval No. 94-01A**, which limit sulfur dioxide emissions to 0.21 lbs./MM Btu per 3-hr block average; 0.19 lbs./MM Btu per 24-hr block average and 0.16 lbs./MM Btu per annual average – 1403 tons per year. In addition, the boiler shall be designed to achieve a control efficiency for sulfur dioxide of no less than 95 percent (based on a 30-day block average) based on the design coal specified in the PSD application.

3. **COMAR 26.11.09.07(A)(1)(a)** which limits the oxides of sulfur to 3.5 pounds per million BTU and **COMAR 26.11.09.07(A)(1)(a)** which limits sulfur in distillate fuel oil in excess of 0.3 percent. (Streamlined with PSD limit. Compliance with the PSD BACT limit assures compliance with this RACT limits.)

   Streamlining discussion: COMAR 26.11.11.09.07(A)(1)(a) and .07(A)(1)(c) are RACT limits promulgated in 1980 for existing sources. As part the PSD BACT case by case determination process in 1994, it was determined that the 1980 RACT limit did not satisfy PSD BACT for the proposed ACFB

boiler. BACT in 1994 required significantly greater controls and a lower emission limit. Compliance with the PSD BACT limit assures compliance with the COMAR RACT limits.

Compliance demonstration:
The Permittee shall continuously monitor sulfur dioxide emissions in accordance with the requirements of 40 CFR Part 60, Subpart Da §60.47Da(b) to demonstrate compliance with the PSD limits of 0.21 lbs./MM Btu per 3-hr average; 0.19 lbs./MM Btu per 24-hr average and 0.16 lbs./MM Btu per annual average, and 1403 tons per year. **[Authority: 40 CFR Part 60, Subpart Da, COMAR 26.11.01.11B (1), and PSD Approval #94-01A].**

The Permittee shall conduct performance certification testing as required by 40 CFR Part 60 Appendix F on the sulfur dioxide continuous emissions monitoring system. The Permittee shall provide the Department with a notice of intent to audit the CEM system at least 30 day prior to the proposed test date. **[Authority: 40 CFR Part 60, Subpart Da and PTC Nos. 001-3-0127 issued on August 10, 1994 and amended on November 17, 2005].**

The Permittee shall maintain all CEM records necessary to comply with the data reporting requirements of COMAR 26.11.01.11E for the demonstration of compliance with the PSD standards. **[Authority: COMAR 26.11.01.11E].**

The Permittee shall ensure that valid CEM data are obtained by the SO_x and carbon dioxide monitoring system for a minimum of 90 percent of the operating hours in each quarter. **[Authority: PTC 001-3-0127 issued August 10, 1994 and reissued November 17, 2005].**

The Permittee must obtain at least two valid data hours to calculate a valid three-hour CEM average and at least twelve hours to calculate a valid daily CEM average. **[Authority: PTC 001-3-0127 issued August 10, 1994 and reissued November 17, 2005].**

The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter that contains the information listed in COMAR 26.11.01.11E(2)(c). (See reporting requirement for opacity CEM above) **[Authority: COMAR 26.11.01.11E(2)(c)].**

In addition, the Permittee shall report the NSPS percent reduction of the potential concentration of sulfur dioxide for each 30 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. **[Authority: 40 CFR 60.51Da(b)(3)].**

For any period for which sulfur oxide 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. Operation of the control system and affected facility during periods of data unavailability are to be compared with operation of the control systems and affected facility before and following the period of unavailability **[Authority: 40 CFR 60.51Da(f)].**

Discussion:
The Permittee complies with all CEMS monitoring, notification, recording keeping, reporting, and performance certification testing requirements. The CEM system is required to meet the SO_2 monitoring system requirements of 40 CFR Part 75.

D. NOx Emissions

1. **40 CFR 60.44Da(a)(1), NSPS** Subpart Da which prohibits the discharge of any gases into the atmosphere which contain nitrogen oxides, from the combustion of bituminous coal in excess of 0.6 lbs./MMBtu of heat input based on a 30-day rolling average.

   Note: The limit under §60.44Da applies at all times except during periods of startup, shutdown, or malfunction. **[Authority: 40 CFR 60.48Da(a)].**

2. **PSD Approval No. 94-01A,** which limit nitrogen oxide emissions to 0.10 lbs./MMBtu on a 24-hr block average and 907 tons per year. The PSD approval includes the operation of an SNCR system to achieve these NOx emissions limits.

3. **COMAR 26.11.09.08B(1)(c) –** Emissions Standard for coal (dry Bottom): 0.38 lbs./MMBtu of heat input based on a 30-day rolling average.

4. The Permittee shall install, operate and certify in accordance with 40 CFR Part 75 a continuous monitoring system to demonstrate compliance with NO_x emissions. **[Authority: COMAR 26.11.38B(1)]**

Compliance Demonstration:
The Permittee shall operate a continuous emission monitoring system to continuously monitor the NO_x emissions. The CEM system shall meet the performance specification of 40 CFR Part 75, Subpart H. **[Authority: 40 CFR Part 60 Subpart Da, and PTC No. 001-3-0127 and PSD Approval #94-01A**

issued August 10, 1994, COMAR 26.11.38B(1) and reissued November 17, 2005].

The Permittee shall conduct performance certification testing as required by 40 CFR Part 75, Subpart H on the NOx continuous emissions monitoring system. The Permittee shall provide the Department with a notice of intent to audit the CEM system at least 30 day prior to the proposed test date. **[Authority: 40CFR60 Subpart Da, PTC No. 001-3-0127 and PSD Approval #94-01A issued August 10, 1994, COMAR 26.11.38B(1 and reissued November 17, 2005]**

The Permittee shall ensure that valid CEM data are obtained by the NOx and carbon dioxide monitoring systems for a minimum of 90 percent of the operating hours in each quarter. **[Authority: PTC 001-3-0127 issued August 10, 1994 and re-issued November 17, 2005]**

The Permittee must obtain at least twelve data hours to calculate a valid daily CEM average. **[Authority: 001-3-0127 issued August 10, 1994 and re-issued November 17, 2005]**

The Permittee shall maintain all CEM records necessary to comply with the data reporting requirements of COMAR 26.11.01.11E for the demonstration of compliance with the PSD standards. **[Authority: COMAR 26.11.01.11E]**

The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter that contains the information listed in COMAR 26.11.01.11E.(See reporting requirement for opacity CEM above.) **[Authority: COMAR 26.11.01.11E]**

For any period for which nitrogen oxides 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. Operation of the control system and affected facility during periods of data unavailability are to be compared with operation of the control systems and affected facility before and following the period of unavailability **[Authority: 40 CFR 60.51Da(f)]**

Discussion:
The Permittee complies with all CEMS monitoring notification, recoding keeping, reporting, and performance certification testing requirements. Reviews of the quarterly reports have not found any violations.

E. Other Operating Limits and Standards

1. **PSD Approval # 94-01A**
   The Permittee shall comply with the following emissions standards and allowable annual emissions in Table 1 below:

Table 1 (Limits of PSD Approval No. 94-01A)

Pollutant	Maximum Emissions Std. (lbs./MMBtu)	Maximum Annual Emissions (TPY)
Carbon Monoxide	0.15 per 24-hr average; 0.188 @ 40% load	1360
Hydrocarbons (non-methane as VOC)	0.005 per 3-hr average; 0.007 @ 40% load	45
Sulfuric Acid Mist	0.006 per 3-hr average	54.4
Fluorides (Total)	0.007 per 3-hr average	5.89
Beryllium	7.7×10^{-7} per 3-hr average	7×10^{-3}
Lead	9.9×10^{-6} per 3-hr average	0.09
Mercury	1.7×10^{-5} per 3-hr average	0.16
Ammonia	0.005 per 3-hr average @ full load 0.008 @ 75% load 0.011 @ 40% load	45
The Permittee shall limit the heat input to the ACFB boiler to 17,934,480 MMBtu on a rolling 12-month basis.		

Note: The Permittee shall limit the annual heat input to the ACFB boiler to 17,934,480 MMBtu. on a rolling 12-month basis. This condition replaced the original operational limit of 8664 hours per year on a rolling 12-month basis at the rated capacity of 2070 MMBtu/hr. The 17,934,480 MMBtu is equal to 2070 MMBtu/hr. multiplied by 8664 hours.

Compliance Demonstration:
The Permittee shall properly operate and maintain the ACFB boiler in a manner consistent with the boiler combustion optimal performance and design criteria and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance. The Permittee shall maintain records of maintenance performed on ACFB boiler that relate to combustion performance for at least five years. **[Authority: COMAR 26.11.03.06C].**

The Permittee shall operate CEMS to continually monitor either the oxygen content or carbon dioxide of the ACFB boiler stack gases **[Authority: 40 CFR**

Part 60 subpart Da and PSD Approval # 94-01A issued August 10,1994 and reissued November 17, 2005].

Alternative Flow Monitoring methodology: The Permittee shall:

a. Perform a DAHS verification (recommend annually), to demonstrate that the correct default flow rate value (either 540,000 scfh or 1,080,00 scfh, as appropriate) is being added to the measured stack flow rate when the slip stream is extracted. The results of this demonstration shall be kept on-site in a format suitable for inspection; and
b. For any hour(s) in which the slip stream is being extracted, but the digital signal indicating the number of blowers in operation is either missing, invalid or not interpretable, add 1,080,000 scfh to measured stack flow rate(s) (recommend annual verification); and
c. Perform relative accuracy test audits (RATAs) of the flow monitor as described in (a) or (b), below. That is, either:
    i. Conduct the RATA testing at a time when the CO_2 slipstream is not being extracted; or
    ii. If the slipstream is being extracted at the time of the RATA, compare the *unadjusted* flow rates measure by the monitor (i.e., with no correction factor for the slipstream volume) against the reference method measurements. **[Authority: PSD Approval #94-01A, Part B-Construction, #17 issued August 10,1994 and 2002 Petition approval from EPA dated May 1, 2002].**

The Permittee shall maintain records of the CEMS readings for the oxygen or carbon dioxide content of the ACFB boiler stack gases for at least five years. **[Authority: PSD Approval # 94-01A and COMAR 26.11.03.06C].**

The Permittee shall submit a CEMS summary data for oxygen or carbon dioxide along with the quarterly SOx and NOx CEMs excess emissions report to the Department 30 days following the end of each calendar. **[Authority: COMAR 26.11.01.11E and PTC No. 001-3-0127].**

The Permittee shall maintain records of the daily heat input to the ACFB boiler and the hours of operation of the ACFB boiler for at least five years **[Authority: Periodic monitoring-COMAR 26.11.03.06C]** and Report on the annual emissions certification report, the total hours of operation of the ACFB boiler. **[Authority: PTC No. 001-3-0127]**

Discussion:

The following is an explanation and discussion of the compliance monitoring for the PSD limits for carbon monoxide, hydrocarbons (non-methane and VOC), sulfuric acid mist, fluorides (total), beryllium, lead, mercury and ammonia.

With respect to carbon monoxide (CO) and hydrocarbon (HC) emissions, these pollutants directly correlate with the ACFB combustion efficiency. CO and HC emissions are products of incomplete combustion. There are no emission control devices to reduce these emissions. Combustion efficiency can be determined by measuring excess O_2 and CO_2. Currently, the ACFB boiler stack has CEMS for oxygen (O_2) and carbon dioxide (CO_2). These CEMS input data to boiler process controllers to continuously maintain maximum combustion efficiency as determined during boiler tune ups. The PSD emission limits were established based upon typical boiler efficiency levels. The O_2 and CO_2 CEMS data can be used to demonstrate continuous compliance with the PSD limits for CO and HC.

Sulfuric acid mist and fluorides are acid gases which are controlled along with SO_2 with the limestone injection in the ACFB boiler. In the MATS rule, SO_2 is a surrogate for the acid gas HAPs. The MATS rule allows for use of a SO_2 CEMS to demonstrate compliance with the acid gas emission limits. AES will likewise use this strategy for ensuring continuous compliance with the prescribed PSD limits for acid gases, sulfuric acid mist and fluorides. Based on actual stack test and CEM data, AES has also demonstrated historically there is a significant margin of compliance between the allowable PSD limit and actual emissions (both annual and short term). (See Table at the end of this response)

Beryllium and lead are both particulate matter (PM) and are controlled along with other PM in a fabric filter baghouse. In EPA's MATS rule, PM has been established as a surrogate for toxic non-mercury metals (including PSD metals). The MATS rule allows a demonstration of compliance for beryllium and lead by demonstrating compliance with the rule's PM limit. The Part 70 permit compliance demonstration for beryllium and lead is based on a three-prong approach. (1) performance testing to demonstrate that the specified PM limit is being met; (2) operation and maintenance of the boiler to ensure that it continues to operate properly; and (3) a CAM plan to provide a mechanism for assessing the performance of the baghouse on an ongoing basis.

Stack testing for PM is be based on the requirement for the MATS testing. MATS testing as a Low Emitter (LEE) is once every three years. The MATS emissions limits for beryllium and lead are more stringent than the PSD limits, (beryllium 0.2 lb./TBtu vs 0.77 lb./TBtu and lead 1.2 lb./TBtu vs. 9.9 lb./TBtu). Therefore, compliance with the MATS PM limit will assure compliance with both the MATS and PSD beryllium and lead limits.

By properly operating and maintaining the boiler in a manner consistent with the boiler combustion optimal performance and design criteria assures that the PM emissions from the boiler going into the baghouse will be at a level similar to the quantities measured during compliance stack tests. If the baghouse is properly operated and maintained, the PM emissions including beryllium and lead will be in compliance.

Thirdly, the CAM plan will assure that the baghouse performs at a level of effectiveness as it did during compliance stack testing. In the event performance indicators in the CAM plan to assure proper baghouse operations fall out of range, AES has pre-established corrective action to restore proper operations.

With respect to mercury (Hg) emissions, the MATS rule has an emissions limit of 1.2 lb./TBtu. The PSD limit is less stringent at 17.0 lb./TBtu. AES has qualified as a LEE for Hg, Specifically, the Hg tests require meeting an annual thirty-day sorbent trap emission rate of 0.12 lb./TBtu, (i.e.10% of the regular MATS Hg standard) for three (3) years. The first 30-day sorbent trap results showed Hg levels at 0.014 lb./TBtu. AES will continue to perform annual 30-day sorbent trap monitoring. Although the MATS Hg standard is a 30-day average and the PSD limit the average of three (3) one-hour tests, because the tested Hg results are three orders of magnitude below the PSD limit, there is a reasonable level of confidence of compliance with the PSD limits.

Finally, with respect to ammonia, ammonia emissions (ammonia slip) originate from the SNCR control system. Ammonia slip is unreacted ammonia which results from the incomplete reaction of NOx and the reagent anhydrous ammonia. The AES boiler operators are able to optimize the injection rate of the anhydrous ammonia and thereby minimize ammonia slip based on observed NOx generation trends. The operators use the data from the NOx CEM to optimize the injection rate. Under the normal steady load, the NOx generated from the combustion in the ACFB boiler is low and requires minimal amount of anhydrous ammonia. During ramping of load or operational upsets such as burners out of service, the NOx rate fluctuates so the operators rely on their operational experience along with the NOx CEM data to adjust the anhydrous ammonia injection rates in order to maintain compliance with the NOx PSD emission limit but not over inject anhydrous ammonia which could cause ammonia slip. Use of a NOx CEM system which is required for demonstrating continuous compliance with the NOx emission limits will also be the monitoring strategy for compliance with the ammonia PSD emissions limit. This approach also reduces the cost of the anhydrous ammonia which is the most significant operating cost for an SNCR system.

The following tables present the results of stacks test completed (Table 1.) and annual certified emissions (Table 2.) for carbon monoxide, hydrocarbons (non-methane and VOC), sulfuric acid mist, fluorides (total), beryllium, lead, mercury and ammonia for calendar years 2010 through 2013.

The stack tests results include data from the initial test performed in 2000 and subsequent testing in 2010. The stack testing in 2010 was in response to an EPA Section 114 Information Collection Request to collect information related to HAP emissions from New and Existing Coal and Oil-fired Electric Utility Steam Electric Units. The pollutants which were not tested in 2010 are marked as "n/a".

The Tables below show that the margin of compliance is significant for lead, beryllium, mercury, sulfuric acid mist, fluorides, and ammonia. In addition, the quantity of emissions is extremely low for these pollutants.

Table 1. Stack Test results 2000 and 2010.

Pollutant	2000 Test Results (lbs./MMBtu)	2010 Test Results (lbs./MMBtu)	PSD Limits (lbs./MMBtu)
CO	0.1273 @ full load	n/a	0.15 @ full load 24 hour average
	0.1876 @ 40% load	n/a	0.188 @ 40%
VOC	0.0 @full load	0.00124 @ full load	0.005 @full load 3-hour average
	0.000168@ 40% load	n/a	0.007 @ 40% load
Lead	0.857×10^{-6}	0.345×10^{-6}	9.9×10^{-6}
Beryllium	0.11×10^{-7}	0.149×10^{-7}	7.7×10^{-7}
Mercury	0.015×10^{-5}	0.00234×10^{-5}	1.7×10^{-5}
Sulfuric Acid Mist	0.0010	n/a	0.006
Fluorides	0.00027	0.0000564	0.007
Ammonia	0.00050 @ full load	0.000119 @ full load	0.00500 @ full load

	0.00027 @ 75% load	n/a	0.008 @ 75%
	0.00064 2 40 % load	n/a	0.01100 @ 40% load

Table 2. Annual Certified Emissions (Tons/year)

Pollutant	2015 (tons)	2016 (tons)	2017 (tons)	2018 (tons)	PSD Limit (tons)
CO	899	741	836	823	1360
VOC	2.5	1.37	1.64	1.6	45
Lead	0.0025	0.00212	0.0024	0.002	0.09
Beryllium	0.000154	0.000144	0.00017	0.000121	$7x10^{-3}$
Mercury	0.000133	0.000124	0.000065	0.000039	0.16
Fluorides	0.398	0.328	0.372	0.363	5.89
Sulfuric Acid Mist	NR	NR	NR	NR	54.4

F. MERCURY AND AIR TOXICS (MATS) RULE

40 CFR Part 63, Subpart UUUUU – National Emissions Standards for Hazardous Air Pollutants: Coal and Oil-Fired Electric Utility Steam Generating Units.

The MATS rule, effective 4/16/15, requires coal-fired electric utility steam generating units (EGUs) to reduce toxic emissions. On June 29, 2015, the Supreme Court issued an opinion in Michigan et al v. Environmental Protection Agency. The Supreme Court's decision remands the MATS rule to EPA and returns the matter to the U.S. Court of Appeals for the D.C. Circuit for further proceedings. As of the issuance of this permit, the MATS rule is in effect. The Supreme Court decision in Michigan requires the EPA to undertake additional proceedings for the limited purpose of evaluating costs for its "appropriate and necessary" finding which preceded the MATS rule. Until and unless the MATS rule is stayed and/or vacated by the D.C. Circuit, MATS related conditions in the Title V permit apply. If the MATS rule is stayed and/or vacated or partially stayed and/or vacated, then the affected conditions in the Title V permit will be revised/removed accordingly.

The MATS rule reduces emissions of heavy metals, include mercury (Hg), arsenic, chromium, and nickel and acid gases, including hydrogen chloride (HCL) and hydrogen fluoride (HF).

AES has demonstrated compliance with all aspects of the MATS rule beginning April 15, 2015.

PM (filterable PM) – Standard: 3.0E-2 lb./MMBtu or 3.0E-1 lb./MWh.
Compliance demonstrated by stack testing. PM is a surrogate for non-mercury metals.
AES has qualified as a Low EGU Emitter (LEE) for PM by conducting 12 quarterly stack test and reporting emissions less than 50% of the standard. The LEE status reduces the required stack testing to once every 36 months. The last stack test was June 15, 2017 and the next test is required by June 15, 2020, which will be delayed if not already done. If any future stack test report emissions greater than 50% of the standard, quarterly stack testing would be required.

SO_2: Standard: 2.0E-1 lb./MMBtu or 1.5 lb./MWh.
Compliance demonstrated by SO_2 CEM. 30 boiler operating days – compliance period. AES is required to include the required SO_2 data in quarterly report which have demonstrated continued compliance with the SO_2 standard.

In the rule, PM is a surrogate for toxic non-mercury metals and HCL is a surrogate for toxic acid gases. Sulfur dioxide (SO_2) may also be a surrogate for HCL if the EGU has a scrubber or a fluidized bed. AES Warrior Run has elected to demonstrate compliance with the targeted HAPS in the MATS rule by demonstrating compliance with emission standards for Hg, PM and SO_2.
SO_2 can be a surrogate for HCl, if the EGU has a fluidized bed.

Hg: Standard: 1.2 lb./TBtu or 1.3E-2 lb./GWh.
Compliance demonstrated by a sorbent trap monitoring system once per year (30-day period).
AES has qualified for LEE status by reporting test results fir 3 years less than 10% of the standard. Annual testing is still required. 2019 test was conducted November 21, 2019 thru December 21, 2019. The test result: Hg - 6.0E-3 lbs./TBtu showed less than the standard.

Required Tune-ups
Required at least once every 36 months. Last tune-up was conducted January 22, 2018. Next schedule tune-up is January 2021.

AES Warrior Run is subject to Mercury and Air Toxics (MATS) Rule including: §63.9991, §63.10000, §63.10006, §63.10007, §63.10010, §63.10020, §63.10021, §63.10030, §63.10031, §63.10033, & §63.10040.

G. Cross State Air Pollution Rule (CSAPR)

Applicable Standards and Limitations:
COMAR 26.11.28.02 - Requirements.
A. This chapter incorporates by reference the U.S. EPA CSAPR and the CSAPR Update, including the definitions, criteria, and procedures therein.
B. Trading Program Requirements.
(1) This chapter incorporates by reference provisions of the CSAPR NO_X Annual Trading Program set forth in 40 CFR Part 97, Subpart AAAAA, as published July 1, 2017, and associated reference methods, performance specifications, and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §97.411(b)(2) and (c)(5)(iii), 97.412(b), and 97.421(h) and (j).
(2) This chapter incorporates by reference provisions of the CSAPR NO_X Ozone Season Group 2 Trading Program set forth in 40 CFR Part 97, Subpart EEEEE, as published July 1, 2017, and associated reference methods, performance specifications and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §§97.811(b)(2) and (c)(5)(iii), 97.812(b), and 97.821(h) and (j). (***This is superseded by Group 3 Subpart GGGGG published April 30, 2021, effective June 29, 2021***).
(3) This chapter incorporates by reference provisions of the CSAPR SO_2 Group 1 Trading Program set forth in 40 CFR Part 97, Subpart CCCCC, as published July 1, 2017, and associated reference methods, performance specifications and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §§97.611(b)(2) and (c)(5)(iii), 97.612(b), and 97.621(h) and (j).

A. 40 CFR Part 97 Subpart AAAAA-CSAPR NO_X Annual Trading Program

CSAPR NO_X Annual Trading Program requirements (40 CFR 97.406)
The Permittee shall comply with the provisions and requirements of §97.401 through §97.435
Note: §97.406(c) NO_X emissions requirements. For CSAPR NO_X Annual emissions limitation: As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_X Annual source and each CSAPR NO_X Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_X Annual allowances available for deduction for

such control period under §97.424(a) in an amount not less than the tons of total NOx emissions for such control period from all CSAPR NOx Annual units at the source.

Allowance transfer deadline means, for a control period in a given year, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately after such control period and is the deadline by which a CSAPR NOx Annual allowance transfer must be submitted for recordation in a CSAPR NOx Annual source's compliance account in order to be available for use in complying with the source's CSAPR NOx Annual emissions limitation for such control period in accordance with §§97.406 and 97.424.

B. 40 CFR Part 97 Subpart CCCCC-CSAPR SO_2 Group 1 Trading Program
CSAPR SO_2 Group 1 Trading Program requirements (40 CFR 97.606)
The Permittee shall comply with the provisions and requirements of §97.601 through §97.635

Note: §97.606(c) SO_2 emissions requirements. For CSAPR SO_2 Group 1 emissions limitation: As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO_2 Group 1 allowances available for deduction for such control period under §97.624(a) in an amount not less than the tons of total SO_2 emissions for such control period from all CSAPR SO_2 Group 1 units at the source.

Allowance transfer deadline means, for a control period in a given year, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately after such control period and is the deadline by which a CSAPR SO_2 Group 1 allowance transfer must be submitted for recordation in a CSAPR SO_2 Group 1 source's compliance account in order to be available for use in complying with the source's CSAPR SO_2 Group 1 emissions limitation for such control period in accordance with §§97.606 and 97.624.

C. 40 CFR Part 97 Subpart GGGGG-CSAPR NOx Ozone Season Group 3 Trading Program
CSAPR NOx Ozone Season Group 3 Trading Program Requirements (40 CFR 97.1006)
The Permittee shall comply with the provisions and requirements of §97.1001 through §97.1035.

Note: §97.1006(c) NO_X emissions requirements. For CSAPR NO_X Ozone Season Group 3 emissions limitation: As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_X Ozone Season Group 3 source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NO_X Ozone Season Group 3 allowances available for deduction for such control period under §97.1024(a) in an amount not less than the tons of total NO_X emissions for such control period from all CSAPR NO_X Ozone Season Group 3 units at the source.

Allowance transfer deadline means, for a control period in a given year, midnight of March 1 (if it is a business day), or midnight of the first business day thereafter (if March 1 is not a business day), immediately after such control period and is the deadline by which a CSAPR NO_X Ozone Season Group 3 allowance transfer must be submitted for recordation in a CSAPR NO_X Ozone Season Group 3 source's compliance account in order to be available for use in complying with the source's CSAPR NO_X Ozone Season Group 3 emissions limitation for such control period in accordance with §§97.1006 and 97.1024.

Compliance Demonstration
The Permittee shall comply with the monitoring, record keeping and reporting requirements found in §97.406, §97.430, §97.431, §97.432, and §97.433 for the CSAPR NO_X Annual Trading Program; §97.1006, §97.1030, §97.1031, §97.1032, §97.1033 and §97.1034 for the CSAPR NO_X Ozone Season Group 3 Trading Program; and §97.606, §97.630, §97.631, §97.632, and §97.633 for CSAPR SO_2 Group 1 Trading Program.

The Permittee operates continuous emission monitoring system (CEMS) pursuant to 40 CFR Part 75, Subpart B (for SO_2 monitoring) and 40 CFR Part 75, Subpart H (for NO_X monitoring).

II **Emissions Unit EU-2:** One (1) limestone truck unloading operation controlled by a baghouse. The unloading occurs randomly over a 12-hour period during a day for about 225 days per year.

A. Visible Emissions

1. **COMAR 26.11.06.02C (1),** which prohibits the discharge of visible emissions from any installation other than water in an uncombined form, which is greater than 20% opacity." [Note: This applies to baghouse discharge].

Exception - COMAR 26.1106.2(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

a. The visible emissions are not greater than 40 percent opacity; and
b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

Note: The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.672 and COMAR 26.11.06.02C (1).

2. **40 CFR §60.672(a),** which prohibits the discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility, any stack emissions which exhibit greater than 7 percent opacity for dry control devices.

3. **40 CFR §60.672(b),** which prohibits the discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility, any fugitive emissions, which exhibit greater than 10 percent opacity, except as provided in paragraphs (d), (e) and (f) of **§60.672**.

4. **40 CFR 60 Part 60.672(e),** which requires any transfer points on a conveyors belt or any other affected facility enclosed in a building to comply with the emissions limits in paragraph (a) and (b) of **§60.672** or the building enclosing the affected facility or facilities must comply with the emission limits of §60.672(e)(1) and (2).

Compliance Demonstration:
The Permittee shall perform a visual observation of the baghouse exhaust and the doors, windows, vents, or other openings in the building for visible emissions once a month for 1 minute. The observations shall be made while affected facilities are operating. If emissions in the exhaust gases are visible, the Permittee shall perform the following:

1. Inspect all process and/or control equipment that may affect visible emissions;
2. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases or fugitive emissions from the building openings are eliminated;
3. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
4. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until

corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]**

The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C].**

Rationale:
Visible emissions from the unloading operations are not likely if equipment including the baghouse is properly maintained. A preventative maintenance plan is required to demonstrate compliance with the particulate standard. The periodic observations for the presence of visible emissions will document that the preventative maintenance plan is sufficient.

Discussion:
AES performs monthly visible emission observations as required, maintains copies of visible emission observations on-site, and reports any incidents of excess emissions to ARA. Compliance with the standards has been observed during inspections by the Department and no violations have been reported in the compliance monitoring and certification reports.

B. Particulate Emissions from confined sources (baghouse)

1. **40 CFR §60.672(a),** which prohibits stack emissions, which contain particulate matter in excess of 0.022 gr/scfd (0.05 g/dscm).

2. **PSD Approval No. 94-01A**, which required the limestone unloading baghouse to be designed to achieve a particulate matter emissions limit of 0.002 grains/actual cubic feet.

   Note: 1 and 2 apply to the baghouse exhaust. For particulate emissions from unconfined sources see Table IV – 10 for requirements relating to fugitive emissions from limestone unloading operations. The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.672 and the PSD limit.

Compliance demonstration:
The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with

records of the dates on which maintenance was performed. The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. **[Authority: Periodic Monitoring-COMAR 26.11.03.06C].**

Rationale:
The baghouse purchased was designed to meet a 0.002 gr/scfd. If preventative maintenance is performed, there is a high likelihood that the baghouse will continue to meet the standards. PM emissions from the limestone unloading operations are certified at about 3 pounds per day.

Discussion:
AES developed a preventive maintenance plan in April of 1999. The plan was reviewed in 2006. Logs of work performed as a result of the maintenance plan are kept on a facility-wide computer system that generates and tracks work orders.

III **Emissions Units EU-3 and EU-4:** Two (2) parallel limestone crushing and drying systems, each comprising of one Raymond roller mill rated at 20 tons per hour, one (1) Eclipse natural gas and No.2 oil–fired limestone dryer rated at 5 MMBtu/hr. heat input, and a conveyor rated at 30 tons per hour capacity. Emissions are controlled with a bag house.

A. Visible Emissions

1. **COMAR 26.11.06.02C(1),** which prohibits the discharge of visible emissions from any installation other than water in an uncombined form, which is greater than 20% opacity. [Baghouse exhaust on Raymond mill and conveyor].

   Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
   a. The visible emissions are not greater than 40 percent opacity; and
   b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

2. **40 CFR §60.672(a) – NSPS Subpart OOO,** which prohibits the discharge into the atmosphere from any transfer point on belt conveyors or from any

other affected facility, any stack emissions which exhibit greater than 7 percent opacity. [Raymond mill controlled with a baghouse].

3. **40 CFR 60 Part 60.672(e) - NSPS Subpart OOO,** which requires any transfer point on a conveyer belt or any other affected facility in an enclosed building to comply with the emissions limits of paragraph (a) and (b) of **§60.672** or the building enclosing the affected facility or facilities must comply with the emission limits of §60.672(e)(1) and (2).

   Note: The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.672 and COMAR 26.11.06.02C.

Compliance Demonstration:
The Permittee shall visually inspect the exhaust gases from each baghouse stack when the drying and crushing system is operating for visible emissions once a month for 1 minute and shall record the results of each observation. If visible emissions are observed, the Permittee shall perform the following:

a. Inspect all process and/or control equipment that may affect visible emissions;
b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;
c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
d. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06]**

The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C(7)].**

Rationale:
Visible emissions from the unloading operations are not likely if the equipment including the baghouse is properly maintained. A preventative maintenance plan is required to demonstrate compliance with the particulate standard. The periodic observations for the presence of visible emissions will document that the preventative maintenance plan is sufficient.

Discussion:

AES performs monthly visible emission observations as required, maintains copies of visible emission observations on-site, and reports any incidents of excess emissions to ARA. Compliance with the standards has been observed during inspections by the Department and no violations have been reported in the compliance monitoring and certification reports.

B. Particulate Emissions

1. **40 CFR §60.672(a) - NSPS Subpart OOO,** which prohibits stack emissions which contain particulate matter in excess of 0.022 gr/scfd (0.05 g/dscm).

2. **PSD No. 94-01A,** which requires the Raymond mill/dryer system to be designed to meet a particulate emissions limit of 0.055 lbs./MMBtu heat input.

3. **PSD No. 94-01A,** which requires the fabric filter baghouse on the mill/dryer system to be designed to meet a limit of 0.002 grains/actual cubic feet.

   Note: The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.672 and the PSD limit.

Compliance demonstration:
The Permittee shall develop and maintain a preventative maintenance plan, for each baghouse, that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates on which maintenance was performed. The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. The Permittee shall submit maintenance records when requested by the Department. **[Authority: Periodic Monitoring: COMAR 26.11.03.06C].**

Rationale:
PSD compliance testing that was performed in February of 2000. The results showed a particulate emissions concentration of 0.032 lb./MMBtu or 0.0022 gr/scfd on a 3hr. average for dryer 1 and 0.051 lb./MMBtu or 0.0019 gr/scfd for dryer 2. It is expected that with continued good operating practices and a viable preventative maintenance plan, the units will continue to meet the standard. Certified PM emissions are about 3 pounds per day or 1100 pounds per year.

Discussion:
AES developed a preventive maintenance plan in April of 1999. Logs of work performed as a result of the maintenance plan are kept on a facility-wide computer system that generates and tracks work orders.

C. Sulfur Dioxide Emissions

1. **PSD Approval No. 94-01A,** which requires the Raymond mill/limestone dryers to be designed to achieve an SO_2 emissions limit of 0.052 lbs./MMBtu of heat input.

2. **PSD Approval No. 94-01A,** which limit the maximum sulfur content of the fuel to 0.05% by weight.

   Note: The SO_2 limit of 0.052 lbs./MMBtu is equivalent to 0.05% sulfur content by weight.

Compliance Demonstration:
The Permittee shall obtain fuel supplier certification indicating that the fuel oil complies with the limitation on sulfur content of the fuel oil. The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation. The Permittee shall report the results of sulfur in fuel certification to the Department upon request. **[Authority: Periodic Monitoring-COMAR 26.11.03.06C]**

Rationale:
The use of fuel supplier certifications to demonstrate compliance with sulfur content in fuel limit for distillate fuel oils has been found to be a sufficient strategy. The annual certified emissions of SO_2 from the limestone dryers are about 45 pounds (0.14 lbs./day).

Discussion:
AES obtains a certification of the sulfur content of the fuel oil from its supplier, maintains records of certification of the sulfur content, and reports the results of sulfur in fuel certification to the Department upon request. Inspections of records by the Department have always found compliance.

D. NOx Emissions

1. **PSD Approval # 94-01A,** which requires the Raymond mill and limestone dryers to be designed to achieve a NOx emissions limit of 0.24 lbs./MMBtu of heat input.

2. **COMAR 26.11.09.08B (1) (c),** which sets emission standards in pounds of NOx per MMBtu of heat input. For Gas/Oil-fired units the limit is 0.25 lbs./MMBtu.

Compliance Demonstration:
The Permittee shall perform a combustion analysis for each Eclipse dryer at least once each calendar year and optimize combustion based on analysis. The Permittee shall maintain records of the annual combustion analyses. The Permittee shall report the results of combustion analyses to the Department upon request. **[Authority: Periodic Monitoring- COMAR 26.11.03.06C]**

Rationale:
The initial performance test results reported NOx emissions of 0.13 lb./MMBtu for mill/dryer #1 and 0.14 lb./MMBtu for mill/dryer #2. If the units are maintained and the combustion performance of the burners on the dryer checked annually, the units are likely to continue to comply. The actual certified emissions of NOx from the two-mill/dryer systems are about 800 pounds per year (2 lbs./day).

Discussion:
The Permittee performs a combustion analysis for each Eclipse dryer at least once each calendar year, optimizes combustion based the analysis, and maintains records of the annual combustion analysis. The Permittee performed combustion analysis and optimization on the Eclipse dryers on September 13, 2007.

E. CO and VOC Emissions

PSD Approval No. 94-01A, which requires the Raymond mill/ limestone dryers to be designed to achieve emissions as follows:

CO: 0.068 lbs./MMBtu of heat input
VOC: 0.002 lbs./MMBtu of heat input

These BACT limits are based on a BACT analysis for the two-**parallel** limestone-drying systems. The ACFB boiler is a PSD source subject to PSD review and hence a BACT analysis was required. Since CO and VOC emissions are emitted from the ACFB at greater than the significant emissions level, all

ancillary equipment, which emits these pollutants, were subject to a BACT review.

For the two parallel limestone drying systems, the BACT determination for CO and VOC is the dryer's designed combustion control system, hence the CO and VOC limit is simply the unit's designed emissions rate.

Compliance Demonstration:
The Permittee shall properly operate and maintain the Raymond mill/ limestone dryers; and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance. The Permittee shall maintain log of maintenance performed on the Raymond mill/ limestone dryer systems that relate to combustion performance. [**Authority: Periodic monitoring- COMAR 26.11.03.06]**

Rationale:
The initial performance test results in 2000 reported CO emissions of 0.47 lbs./MMBtu for mill/dryer #1 and 0.26 lbs./MMBtu for mill/dryer #2. The initial performance test results reported VOC emissions of 0.001 lbs./MMBtu for both mill/dryer #1 and #2. It is expected that with proper operations and good preventative maintenance, the units will continue to meet the standard. The annual certified emissions for these pollutants are as follows: CO - 430 pounds (0.53 lbs./day) and VOC - 32 pounds (0.01 lbs./day).

Discussion:
AES developed a preventive maintenance plan in April of 1999. The plan was most recently reviewed in 2012 as part of the June 2012 full compliance evaluation. Logs of work performed as a result of the maintenance plan are kept on a facility-wide computer system that generates and tracks work orders.

F. Operating Limits

PSD Approval # 94-01A, which limits the combined annual operating hours for both to 8760 hours on a rolling basis.

Compliance demonstration:
The Permittee shall keep track of the hours of operation for each limestone dryer so as to determine compliance with the limitation of PSD Approval # 94-01A. The Permittee shall keep monthly records, which show the daily operating hours of each dryer. The Permittee shall submit the hours of operation of the two limestone dyers as an attachment to the annual emissions certification report **[Authority: Periodic Monitoring- COMAR 26.11.03.06C]**

Discussion:
The Permittee tracks and maintains records of the hours of operation for each limestone dryer. Permittee submits records along with the facility's annual emission certification report.

IV Emissions Unit : EU-5: Limestone Storage Silo.

The particulate matter emissions from the silo are controlled with a baghouse.

A. Visible Emissions

1. **COMAR 26.11.06.02C (1)** which limits the discharge of visible emissions from any installation other than water in an uncombined form, which is greater than 20% opacity.

   Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
   a. The visible emissions are not greater than 40 percent opacity; and
   b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

2. **40 CFR §60.672(a) and (f) –** which prohibits stack emissions which exhibit greater than 7 percent opacity from a baghouse that controls emissions from a single enclosed storage bin.

Note: The monitoring, record keeping, and reporting strategy to demonstrate compliance with the NSPS opacity standard will be used for the compliance demonstration of the COMAR opacity standard.

Compliance Demonstration:
The Permittee shall visually inspect the exhaust gases from each baghouse stack when a silo is being filled to look for visible emissions once a month for 1 minute and shall record the results of each observation.
If emissions in the exhaust gases are visible, the Permittee shall perform the following:
a. Inspect all process and/or control equipment that may affect visible emissions;

b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;
c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
d. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C].**

The Permittee shall maintain a record of the results of all visual emission observations **[Authority: Periodic Monitoring-COMAR 26.11.03.06C].**

The Permittee shall report incidents of excess visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations". **[Authority: COMAR 26.11.03.06C].**

Rationale:
Baghouses that are properly maintained rarely have visible emissions in the exhaust gases. The Permittee is required to implement a preventative maintenance plan.

Discussion:
AES performs monthly visible emission observations as required, maintains copies of visible emission observations on-site, and reports any incidents of excess emissions to ARA. Compliance with the standards has been observed during inspections by the Department and no violations have been reported in the Permittee's compliance monitoring and compliance certification reports.

B. Particulate Emissions

1. **PSD Approval No. 94-01A** – which required the fabric filter baghouse to be designed to achieve a particulate matter emissions limit of 0.003 grains/actual cubic feet.

2. **40 CFR §60.672(a) (1) –** NSPS Subpart OOO, which prohibits stack emissions that contain particulate matter in excess of 0.022 gr/dscf (0.05 g/dscm).

Note: The monitoring, record keeping and reporting strategy to demonstrate compliance with the PSD BACT limit will be used for the compliance demonstration of the NSPS standard.

Compliance Demonstration:
The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates on which maintenance was performed. The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. The Permittee shall submit maintenance records when requested by the Department. **[Authority: Periodic Monitoring - COMAR 26.11.03.06C].**

Rationale:
The baghouse purchased was designed to meet a 0.003 gr/acf. If preventative maintenance is performed, there is a high likelihood that the baghouse will continue to meet the standards. The annual certified emissions from the limestone storage silo baghouse are about 580 pounds (1.8 lbs./day).

Discussion:
AES developed a preventive maintenance plan in April of 1999. The plan was most recently reviewed in 2012 as part of the June 2012 full compliance evaluation. Logs of work performed as a result of the maintenance plan are kept on a facility-wide computer system that generates and tracks work orders.

V. Emissions Unit Number(s): EU-6, EU-7, & EU-8

EU-6: Coal truck unloading operation controlled by a baghouse.

EU-7: Coal processing operation comprising of two crushers, two vibrating feeders, one surge bin, two enclosed reclaim conveyors, one enclosed stockpile conveyor and one enclosed transfer conveyor, each located inside coal crusher building. Emissions are controlled by a baghouse.

EU-8: Coal storage system consisting of four (4) coal storage silos, controlled by a baghouse.

A. Visible Emissions

1. **COMAR 26.11.06.02C(1),** which limits the discharge of visible emissions from any installations, other than water in an uncombined form, which is greater than 20% opacity

   Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
   a. The visible emissions are not greater than 40 percent opacity; and
   b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

2. **40 CFR §60.254(a) – NSPS Subpart Y,** which prohibits visible emissions from the stack, which exhibit greater than 20 percent opacity.

   Note: The monitoring, record keeping, and reporting strategy to demonstrate compliance with the NSPS opacity standard will be used for the compliance demonstration of the COMAR opacity standard.

Compliance Demonstration:
The Permittee shall visually inspect the exhaust gases from each baghouse stack when coal is being handled or crushed to look for visible emissions once a month for 1 minute and shall record the results of each observation.
If emissions in the exhaust gases are visible, the Permittee shall perform the following:
a. Inspect all process and/or control equipment that may affect visible emissions;
b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;
c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
d. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions.

The Permittee shall maintain a record of the results of all visual emission observations. **[Authority: Periodic Monitoring - COMAR 26.11.03.06C].**

The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C].**

Rationale:
Baghouses that are properly maintained rarely have visible emissions in the exhaust gases. The Permittee is required to implement a preventative maintenance plan.

Discussion:
AES performs monthly visible emission observations as required, maintains copies of visible emission observations on-site, and reports any incidents of excess emissions to ARA. Compliance with the standards has been observed during inspections by the Department and no violations have been reported in the Permittee's compliance monitoring and compliance certification reports.

B. Particulate Emissions from confined sources (baghouses)

PSD # 94-01, which requires the baghouses to be designed to achieve particulate emissions limit of 0.003 gr/acf.

Note: Particulate emissions from unconfined sources. See Table IV-9 of Permit for requirements relating to fugitive emissions from coal unloading and storage operations.

Compliance Demonstration:
The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates maintenance was performed. The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. The Permittee shall submit maintenance records when requested by the Department. **[Authority: Periodic monitoring -COMAR 26.11.03.06C].**

Rationale:
The baghouses purchased were designed to meet a 0.003 gr/acf. If preventative maintenance is performed, there is a high likelihood that the baghouses will continue to meet the standards. The annual certified emissions from the coal truck unloading are about 3000 pounds (9 lbs./day), from the coal crushing and reclaim about 900 pounds (3 lbs./day), and the coal storage silos about 1400 pounds (4 lbs./day). Note that these totals include fugitive emissions as well as the baghouse emissions.

Discussion:

AES developed a preventive maintenance plan in April of 1999. The plan was reviewed in 2006. Logs of work performed as a result of the maintenance plan are kept on a facility-wide computer system that generates and tracks work orders.

VI. Emissions Unit Number(s): EU-9, EU-10, & EU-11

EU-9: Bed ash day bin equipped with a baghouse.

EU-10: Bed ash storage silo equipped with a baghouse.

EU-11: Fly ash storage silo equipped with a baghouse.

A. Visible Emissions Limitations

COMAR 26.11.06.02C (1), which limits the discharge of visible emissions from any installation other than water in an uncombined form, which is greater than 20% opacity.

Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

a. The visible emissions are not greater than 40 percent opacity; and
b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

Compliance Demonstration:

The Permittee shall visually inspect the exhaust gases from each baghouse stack when a bin/silo is being filled to look for visible emissions once a month for 1 minute and shall record the results of each observation.

If emissions in the exhaust gases are visible, the Permittee shall perform the following:

a. Inspect all process and/or control equipment that may affect visible emissions;
b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;
c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
d. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions.

e. The Permittee shall maintain a record of the results of all visual emission observations. **[Authority: Periodic Monitoring - COMAR 26.11.03.06C]**

The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C(7)]**

Rationale:
Baghouses that are properly maintained rarely have visible emissions in the exhaust gases. The Permittee is required to implement a preventative maintenance plan.

Discussion:
AES performs monthly visible emission observations as required, maintains copies of visible emission observations on-site, and reports any incidents of excess emissions to ARA. Compliance with the standards has been observed during inspections by the Department and no violations have been reported in the Permittee's compliance monitoring and compliance certification reports.

B. Particulate Emissions

PSD Approval # 94-01A, which requires the fabric filter baghouses to be designed to achieve a particulate emissions limit of 0.003 grains/actual cubic feet.

Note: Particulate Emissions from unconfined sources. See Table IV – 10 for requirements relating to fugitive emissions from the ash handling and load out operations.

Compliance Demonstration:
The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates on which maintenance was performed. The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. The Permittee shall submit maintenance records when requested by the Department. **[Authority: Periodic Monitoring - COMAR 26.11.03.06C].**

Rationale:
The baghouses purchased were designed to meet a 0.003 gr/acf. If preventative maintenance is performed, there is a high likelihood that the baghouses will

continue to meet the standards. The annual certified emissions from the bed ash day bin with baghouse are about 400 pounds (1.2 lbs./day), from the bed ash storage silo with baghouse about 300 pounds (1.2 lbs./day), and the fly ash storage silo with baghouse silos about 800 pounds (2.5 lbs./day). Note that these totals include fugitive emissions as well as the baghouse emissions.

Discussion
AES developed a preventive maintenance plan in April of 1999. The plan was reviewed in 2006. Logs of work performed as a result of the maintenance plan are kept on a facility-wide computer system that generates and tracks work orders.

VII Emissions Unit Number(s): EU-12

EU-12: One diesel engine driven emergency boiler Feed Water Pump rated at 525 bhp.

A. Visible Emissions :

1. **COMAR 26.11.09.05E (2)** Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

2. **COMAR 26.11.09.05E (3)** Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

3. **COMAR 26.11.09.05E (4)** - Exceptions:
   a. Section E (2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

   b. Section E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
      i. Engines that are idled continuously when not in service: 30 minutes;
      ii. All other engines: 15 minutes.

   c. Section E (2) and (3) does not apply while maintenance, repair, or testing is being performed by qualified mechanics.

Compliance Demonstrations:

The Permittee shall properly operate and maintain the engine; and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance. The Permittee shall maintain log of maintenance performed on the diesel engine pump that relates to combustion performance. **[Authority: Periodic Monitoring – COMAR 26.11.03.06C].**

The Permittee shall report incidents of visible emissions in accordance with condition 4 of Section III "Report of Excess Emissions and Deviation. **[Authority: COMAR 26.11.03.06C].**

Engines that burn distillate oil and are properly maintained will not violate the visible emissions limitations of COMAR. This engine powers the emergency boiler feed water pump and as such it is used only when the main boiler feed water pump is unavailable. Thus far, AES has had no need for it. The only emissions are from times the engine is operated to perform maintenance and reliability testing. The annual certified emissions are about 7 pounds (0.15 lbs./day).

Rationale:
It is expected that with proper operations and good preventative maintenance, the units will continue to meet the standard.

Discussion:
Preventative maintenance is performed regularly on the engine. The Permittee maintains records of maintenance performed.

B. Particulate Matter Emissions Standard

PSD Approval No. 94-01A which requires the emergency boiler feed water pump to be designed to achieve a particulate emissions limit of 0.341 lb./MMBtu of heat input.

Compliance Demonstrations:
The Permittee shall properly operate and maintain the engine; and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance. The Permittee shall maintain log of maintenance performed on the diesel engine pump that relates to combustion performance. **[Authority: Periodic Monitoring – COMAR 26.11.03.06C].**

Rationale:
The initial performance test in 2000 showed a result of 0.079 lbs./MMBtu. It is expected that with proper operations and good preventative maintenance, the units will continue to meet the standard. Annual certified PM emissions are about 7 pounds (0.15lbs/day).

Discussion:
Preventative maintenance is performed regularly on the engine. The Permittee maintains records of maintenance performed.

C. Sulfur Dioxide Emissions:

1. **PSD Approval N0. 94-01A,** which requires the emergency boiler feed water pump to be designed to achieve a sulfur dioxide emissions limit of 0.052 lbs./MMBtu of heat input.

2. **PSD Approval No. 94-01A**, which limits the maximum sulfur content of the fuel to 0.05% by weight.

Note: The SO_2 limit of 0.052 lbs./MMBtu is equivalent to 0.05% by weight.

This BACT limit is based on a BACT analysis for the emergency boiler feed pump engine. The ACFB boiler is a PSD source subject to PSD review and hence a BACT analysis was required. Since SO_2 is emitted from the ACFB at greater than the significant emissions level, all ancillary equipment, which emits these pollutants, were subject to a BACT review.

For the emergency boiler feed pump engine, the BACT determination for SO_2 is to burn fuel oil with limit in sulfur content of 0.05 weight percent or less. This is equivalent to 0.052lbs/MMBtu of heat input.

Compliance Demonstration:
The Permittee shall obtain fuel supplier certification indicating that the fuel oil complies with the limitation on sulfur content of the fuel oil. The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation for at least five years. The Permittee shall report the results of sulfur in fuel certification to the Department upon request. **[Authority: Periodic Monitoring-COMAR 26.11.03.06C]**

Rationale:
The use of fuel supplier certifications to demonstrate compliance with a sulfur content in fuel limit for distillate fuel oils has been found to be a sufficient strategy. The annual certified emissions of SO_2 from the emergency boiler feed water pump are about 2 pounds (0.04 lbs./day).

Discussion:

AES obtains a certification of the sulfur content of the fuel oil from its supplier, maintains records of certification of the sulfur content, and reports the results of sulfur in fuel certification to the Department upon request. Inspections of records by the Department have always found compliance.

D. NOx Emissions:

1. **COMAR 26.11.09.08G**, which requires a person who owns or operates fuel burning equipment with a capacity factor of 15 percent or less to:
   a. Provide certification of the capacity factor of the equipment to the Department in writing;
   b. For fuel-burning equipment that operates more 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
   c. Maintain the results of the combustion analysis at the site for at least five years and make these results available to the Department and EPA upon request;
   d. Require each operator of an installation except combustion turbine, to attend at least once every three years, operator training program on combustion optimization that are sponsored by the Department, U.S. EPA, or equipment vendors; and
   e. Maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request.

2. **COMAR 26.11.09.08K(3)** which requires the Permittee to maintain annual fuel use records on site for at least five years and make records available to the Department upon request.

3. **PSD Approval No. 94-01A**, which requires the emergency boiler feed water pump engine to be designed to achieve a limit of 3.439 lb./MMBtu.

Compliance Demonstration:
The Permittee shall properly operate and maintain the engine; and maintain an operations manual and preventive maintenance plan that relate to combustion performance. The Permittee shall maintain log of maintenance performed on the diesel engines pump. **[Authority: Periodic Monitoring - COMAR 26.11.03.06C].**

Rationale:
The initial performance test in 2000 showed a result of 2.49 lbs./MMBtu. If the engine is properly maintained, the engine should continue to meet its designed NOx emissions rate. The engine only operates for about 25 hours per year in

order to test its reliability. The annual certified emissions of NOx from the emergency boiler feed water pump engine are about 240 pounds (5 lbs./day).

Discussion
The Permittee maintains records of preventative maintenance performed. Annual fuel use records are maintained.

E. CO and VOC Emissions:

PSD Approval # 94-01A, which requires the emergency boiler feed water pump engine to be designed to achieve emissions as follows:

CO:	0.902 lbs./MMBtu of heat input
VOC:	0.098 lbs./MMBtu of heat input

These BACT limits are based on a BACT analysis for the emergency boiler feed water pump engine. The ACFB boiler is a PSD source subject to PSD review and hence a BACT analysis was required. Since CO and VOC emissions are emitted from the ACFB at greater than the significant emissions level, all ancillary equipment, which emits these pollutants, were subject to a BACT review.

For the emergency boiler feed water pump engine, the BACT determination for CO and VOC is the engine's designed combustion specifications, hence the CO and VOC limit is simply the engine's designed emissions rates of 0.068 lbs./MMBtu of heat input and 0.002 lbs./MMBtu of heat input respectively.

Compliance Demonstration:
The Permittee shall properly operate and maintain the engine; and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance. The Permittee shall maintain log of maintenance performed on the diesel engine that relates to combustion performance. **[Authority: Periodic Monitoring - COMAR 26.11.03.0**

Rationale:
The initial performance test in 2000 showed a result for CO of 0.283 lbs./MMBtu and for VOC of 0.021 lbs./MMBtu. If the diesel feed water pump engine is maintained, the engine should continue to meet its designed CO and VOC emissions rate. The engine has only operated for about 25 hours per year in order to test its reliability. The annual certified emissions of CO from the emergency boiler feed water pump engine are about 25 pounds (0.5 lbs./day). The annual certified emissions of VOC from the emergency boiler feed water pump engine are about 2 pounds (0.04 lbs/day).

Discussion:
The Permittee maintains records of preventative maintenance performed.

F. Operational Limitations:

The operation of the emergency boiler feed water pump during non–emergency operations is limited to one hour per day and 200 hours per 12 months (rolled monthly). **[Authority: PSD Approval No. 94-01A]**

Compliance Demonstration:
The Permittee shall maintain records of the hours of operation of the emergency boiler feed water pump engine for 5 years. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. **[Authority: PTC No. 001-4-0080 N].**

Rationale:
The engine has been operated in the past years for about 25 hours per year in order to test its reliability.

Discussion
AES maintains records of the hours of operation of the diesel engine pump on site and makes the records available to the Department in the annual emissions certification report.

VIII. Emissions Unit Number(s): EU-17 and EU-18

EU-17 and EU-18: Two (2) natural gas-fired space heaters (Temp-Heat Model THP-4500) each rated at 4.5 MMBtu/hr. for providing comfort heat in the boiler room.
These space heaters exhaust directly inside the building. The heaters operate about 25 days per year.

The certified emissions from the heaters are about as follows: PM10- 5 lbs./year, SO_2-0.3 lbs. per year, NOx-324 lbs./year, CO-51 lbs./year, and VOC-3 lbs./year.

There are no COMAR particulate matter or sulfur dioxide standards for fuel burning equipment that burn natural gas. Since the heaters exhaust directly into a building, no opacity standard is applicable.

A. NOx Emissions (NOX RACT)

1. **COMAR 26.11.09.08F(1),** which requires the Permittee or operator of a space heater as defined in regulation .01B of this chapter to:
   a. Submit to the Department a list of each affected installation on the premises and the type of fuel used in each installation;
   b. Develop an operating and maintenance plan to minimize NOx emissions based on the recommendations of equipment vendors and other information including the source's operating and maintenance experience;
   c. Implement the operating and maintenance plans and maintain the plans at the premises for review upon request by the Department;
   d. Require installation operators to attend in-state operators training program once every three years on combustion optimization that are sponsored by the Department, U.S. EPA, or equipment vendors; and
   e. Prepare and maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request.

   Note: COMAR 26.11.09.08 states that "for the purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation."

2. **COMAR 26.11.09.08F(2),** which requires the Permittee or operator who owns or operates an installation that no longer qualifies as a space heater to inform the Department not later than 60 days after the date when the fuel burning equipment did not qualify and shall meet the applicable fuel burning equipment RACT requirement in this regulation.

3. **COMAR 26.11.09.08K(3),** which requires the Permittee to maintain annual fuel use records on site for at least five years and make records available to the Department upon request.

Compliance Demonstration:
The Permittee shall develop and implement the operating and maintenance plan and maintain the plan at the premises for review upon request by the Department **[Authority: COMAR 26.11.09.08F (1)(c)].**

The Permittee shall maintain:
(a) The operating and maintenance plan at the premises for review by the Department upon request. **[Authority: COMAR 26.11.09.08F (1) (c)]**
(b) Records of the quantity of fuel burned each month and calculation of heat input in a manner that the Permittee can determine whether the units no longer qualify as a "Space Heater" **[Authority: COMAR 26.11.03.06C].**

(c) Records of the training program attendance for each operator at the site **[Authority: COMAR 26.11.09.08F (1) (e)].**
(d) Maintain annual fuel use records on site for at least five years and make records available to the Department upon request **[Authority: COMAR 26.11.09.08K(3)]**

The Permittee shall:
(a) Inform the Department no later than 60 days after the date when the units no longer qualify as a space heater and shall identify an alternative NOx RACT requirement under COMAR 26.11.09.08 with which the source will comply **[Authority: COMAR 26.11.09.08F(2)].**
(b) Submit a list of trained operators and training attendance records to the Department upon request. **[Authority: COMAR 26.11.09.08F (1) (e)].**

Discussion
AES has a contractor who performs preventative maintenance on the units. The Permittee complies with the required recordkeeping and reporting requirements.

B. Operational Requirement

The Permittee shall only burn natural gas in the space heaters unless the Permittee applies for and receives an approval or permit from the Department to burn an alternate fuel. **[Authority: COMAR 26.11.09.04]**

Compliance Demonstration:
The Permittee shall maintain records of the type of fuel burned. **[Authority: COMAR 26.11.02.19C(1)(c)].** The Permittee shall submit records of fuel use as an attachment to the annual emissions certification. **[Authority: COMAR 26.11.02.19C(2)].**

Discussion:
These units are programmed to operate (on and off) as needed, can only burn natural gas. The Permittee maintains annual fuel use records for these units and submits records as required.

IX. Emissions Unit Number(s): EU-19

EU-19: One (1) automated coal blending system comprising of a 45-ton feed hopper and a 30-in drag-chain conveyor (Permit No. 011-0203-6-0304).

A. Visible Emissions

1. **COMAR 26.11.06.02C(1),** which limits the discharge of visible emissions from any installations, other than water in an uncombined form, which is greater than 20% opacity

   Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
   a. The visible emissions are not greater than 40 percent opacity; and
   b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

2. **40 CFR §60.254(b)(1)** – On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008 must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.

Note: The monitoring, record keeping, and reporting strategy to demonstrate compliance with the NSPS opacity standard will be used for the compliance demonstration of the COMAR opacity standard.

3. **40 CFR §60.255(h) –** The Permittee, Owner or Operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, must meet the requirements specified in 40 CFR §60.255(h)(1) through (3).

Compliance Demonstration:
The Permittee shall visually inspect the exhaust gases from each baghouse stack when coal is being handled or crushed for visible emissions once a month for 1 minute and shall record the results of each observation.
If emissions in the exhaust gases are visible, the Permittee shall perform the following:
a. Inspect all process and/or control equipment that may affect visible emissions;
b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated;

c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and
d. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C].**

The Permittee shall maintain in a logbook (written or electronic) on-site for at least 5 years and shall be made available to the Department upon request. The logbook shall record the following: (1) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted. (2) The date and time of required periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from these actions shall be noted. (3) The amount and type of coal processed each calendar month. **[Authority: 40 CFR §60.258(a)].**

The Permittee shall maintain a record of the results of all visual emission observations. The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C].**

The Permittee shall conduct the performance tests required in §60.8 using the methods identified in **§60.257** to demonstrate compliance with the applicable emissions standards in this subpart as specified in paragraphs (b)(2) of §60.255 **[Authority: 40 CFR §60.255(b)].**

As an alternative to meeting the requirements in paragraph (b)(2) of §60.255, the Permittee may elect to comply with the requirements in paragraph (f)(1) of §60.255 **[Authority: 40 CFR §60.255(f)].**

The Permittee shall conduct an initial performance test using Method 9 of Appendix A-4 of this part according to the requirements in paragraphs (h)(1)(i) and (ii). **[Authority: 40 CFR §60.255(h)].**
(i)The Permittee shall conduct opacity readings during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position **[Authority: 40 CFR §60.255(h)(1)(i)].**
(ii) Compliance with the opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events **[Authority: 40 CFR §60.255(h)(1)(i)].**

The Permittee shall conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible. [**Authority: 40 CFR §60.255(h)(2].**

The Permittee shall conduct a Performance test using Method 9 of Appendix A-4 of this part at least once every 5 calendar years for each affected facility [**Authority: 40 CFR §60.255(h)(3)].**

The Permittee shall maintain a record of the results of all visual emission observations and corrective actions taken to address exceedance including maintenance performed on each affected facility. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request [**Authority: COMAR 26.11.03.06C and 40 CFR §60.258(a)(2].**

The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" [**Authority: COMAR 26.11.03.06C and 40 CFR §60.258(a)(2].**

Rationale:
Baghouses that are properly maintained rarely have visible emissions in the exhaust gases. The Permittee is required to implement a preventative maintenance plan.

AES developed a preventive maintenance plan in April of 1999. The plan was most recently reviewed in 2012 as part of the June 2012 full compliance evaluation. Logs of work performed as a result of the maintenance plan are kept on a facility-wide computer system that generates and tracks work orders.

Discussion:
AES performs monthly visible emission observations as required, maintains copies of visible emission observations on-site, and reports any incidents of excess emissions to ARA. Compliance with the standards has been observed during inspections by the Department and no violations have been reported in the Permittee's compliance monitoring and compliance certification reports.

AES performs all visible emission observations as required, maintains copies of visible emission observations on-site, and reports any incidents of excess emissions to ARA. Compliance with the standards has been observed during

inspections by the Department and no violations have been reported in the Permittee's compliance monitoring and compliance certification reports.

B. Operating Requirements

The Permittee shall utilize water injection system or other necessary measures as frequently as necessary to prevent fugitive emissions and dust from becoming airborne in accordance with COMAR 26.11.06.03D.

Compliance Demonstration:
The Permittee shall maintain a log of the use of water injection system or other measures to prevent fugitive dust from becoming airborne on site for at least 5 years and shall be made available to the Department upon request **[Authority: COMAR 26.11.03.06C**].
The Permittee shall submit a log of the use of water injection system or other measures to prevent fugitive dust from becoming airborne upon request by the Department **[Authority: COMAR 26.11.03.06C].**

Rationale:
AES fugitive dust management plan was approved by ARA on April 28, 1999. AES has demonstrated that the use of water injection system can adequately address fugitive particulate emissions at the facility.

Discussion
The Permittee maintains records of the use of water injection system at the facility and makes the records available to the Department upon request.

X. Emissions Unit Number(s):

Facility wide - Control of fugitive particulate emissions from storage piles, vehicular traffic at the site, and other sources including limestone unloading and handling operations, coal unloading and handling operations, and ash loading and handling operations.

A. Fugitive Particulate Emissions

1. **COMAR 26.11.06.03D** – "Particulate Matter from Materials Handling and Construction. A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking

reasonable precautions to prevent particulate matter from becoming airborne."

2. The Permittee shall assure that no more than 203 trucks/day, comprised of coal, limestone, and CO_2, shall be permitted on-site for delivery. **[Reference: Permit to Construct No. 001-3-0127, 0136, & 0067A]**

Compliance Demonstration:
The Permittee shall implement the facility's written plan that addresses the management program for controlling fugitive dust from storage piles, vehicular traffic at the site, and other sources. The Permittee shall maintain on site a written plan that addresses the management program for controlling fugitive dust from storage piles, vehicular traffic at the site, and other sources. **[Authority: PTC # 001-3-0127 – Condition C-4.]**

The Permittee shall monitor and count the number of trucks on the site each day. The Permittee shall maintain a record of the number of trucks each day. **[Authority: COMAR 26.11.03.06C]**

Discussion
AES fugitive dust management plan was approved by ARA on April 28, 1999. AES keeps a count of all trucks entering and leaving the facility. The total number of trucks delivering material has not exceeded the 203 trucks/day limit. The Permittee maintains all required records on site.

ASBESTOS PROVISIONS - 40CFR 61, Subpart M – Not applicable

The facility does not have any asbestos materials on site.

Section 112(r), Accidental Releases
The Permittee has submitted a risk management plan as required under 112 (r).

1990 CAAA, Title IV, Acid Rain
The Permittee is not an affected source under the 1990 CAAA, Title IV Acid Rain Program. The Permittee is an independent power producer that had a qualifying power purchase agreement signed
on January 15, 1988 which pre-dates the November 15, 1990 effective date of the 1990 amendments to the CAA.

Title VI, Ozone Depleting Substances

Not applicable, the Facility does not service or repair its window air-conditioning units.

Compliance Schedule

AES is currently in compliance with all applicable air quality regulations.

Permit Shield

AES requested that a permit shield be expressly included in the Permittee's Part 70 Permit. Permit shields are granted on an emission unit by emission unit basis. If an emission unit is covered by a permit shield, a permit shield statement will follow the emission unit table in Section IV - Plant Specific Conditions of the permit. In this case, a permit shield was granted for each emission unit covered by the permit.

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(2) ✓ Water cooling towers and water-cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;

(3) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products;

(4) ✓ Brazing, soldering, or welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals and not directly related to plant maintenance, upkeep and repair or maintenance shop activities;

(5) ✓ Equipment for washing or drying products fabricated from metal or glass, provided that no VOC is used in the process and that no oil or solid fuel is burned;

(6) Containers, reservoirs, or tanks used exclusively for:

(a) No. 4 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(b) No. 1 Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;

(c) No. 1 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(7) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meters) or less;

(8) ✓ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks display, and kerosene fuel use;

(9) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

(10) ✓Laboratory fume hoods and vents;

For the following, attach additional pages as necessary:

(11) Any other emissions unit, not listed in this section, with a potential to emit less than the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe units):

No. 1 Monoethanolamine Storage Tank

No. 1 Wastewater Storage Tank from CO_2 Production

No. 1 Hydrochloric Acid Tank

No. 1 Sulfuric Acid Storage Tank

(12) Any other emissions unit at the facility which is not subject to an applicable requirement of the Clean Air Act (list and describe):

No. 2 Anhydrous Ammonia Storage Tanks

No. 2 Sodium Hydroxide Storage Tanks

SECTION VI STATE ONLY ENFORCEABLE CONDITIONS

This section of the permit contains state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

1. **Applicable Regulations**:

COMAR 26.11.06.08 – Nuisance. "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be consumed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

COMAR 26.11.06.09 - Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."

Emissions Unit Number(s): E-1 Boiler Cont'd

E-1: One (1) Atmospheric Circulating Fluidized Bed Boiler (ACFB) with a designed rated capacity of 2070 MMBtu/hr. of heat input burning bituminous coal and No. 2 diesel fuel during start-up. **[3-0127]**

Applicable Standards/Limits:

COMAR 26.11.09.05. – Visible Emissions.
"**A**. Fuel Burning Equipment.
(**4**) Fuel Burning Equipment Required to Operate a COM. The owner or operator of fuel burning equipment that is subject to the requirement to install and operate a COM shall demonstrate compliance with the applicable visible emissions limitation specified in §A(1) and (2) of this regulation as follows:
(a) For units with a capacity factor greater than 25 percent, until December 31, 2009, compliance is achieved if visible emissions do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4 percent of the unit's operating time in any calendar quarter, during which time visible emissions:
(i) Do not exceed 40.0 percent opacity, except for 5.0 hours or 0.5 percent of the unit's operating time, whichever is greater;
(ii) Do not exceed 70.0 percent opacity for more than four (4) 6-minute periods, except that coal-fired units equipped with electrostatic precipitators may exceed 70.0 percent opacity for no more than 2.2 hours; and
(iii) On any calendar day, do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4.1 hours, during which time visible emissions do not exceed 40.0 percent opacity for more than 1.4 hours and do not exceed 70.0 percent opacity for more than two (2) six-minute periods;
(b) For units with a capacity factor greater than 25 percent, beginning January 1, 2010, compliance is achieved if visible emissions do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 2 percent of the unit's operating time in any calendar quarter, during which time visible emissions:
(i) Do not exceed 40.0 percent opacity, except for 5.0 hours or 0.5 percent of the unit's operating time, whichever is greater;
(ii) Do not exceed 70.0 percent opacity for more than four (4) six-minute periods, except that coal-fired units equipped with electrostatic precipitators may exceed 70.0 percent opacity for no more than 2.2 hours; and
(iii) On any calendar day, do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4.1 hours, during which time visible emissions do not exceed 40.0 percent opacity for more than

1.4 hours and do not exceed 70.0 percent opacity for more than two 6-minute periods;
(c) For units with a capacity factor equal to or less than 25 percent that operate more than 300 hours per quarter, beginning July 1, 2009, compliance with the applicable visible emissions limitation in §A(1) and (2) of this regulation is achieved if, during a calendar quarter, visible emissions do not exceed the applicable standard for more than 20.0 hours, during which time visible emissions:
(i) Do not exceed 40.0 percent opacity for more than 2.2 hours;
(ii) Do not exceed 70 percent for more than four 6-minute periods; and
(iii) On any calendar day, do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4.1 hours, during which time visible emissions do not exceed 40.0 percent opacity for more than 1.4 hours and do not exceed 70.0 percent opacity for more than two 6-minute periods; and
(d) For units with a capacity factor equal to or less than 25 percent that operate 300 hours or less per quarter, beginning July 1, 2009, compliance with the applicable visible emissions limitation in §A(1) and (2) of this regulation is achieved if, during a calendar quarter, visible emissions do not exceed the applicable standard for more than 12.0 hours, during which time visible emissions:
(i) Do not exceed 40.0 percent opacity for more than 2.2 hours;
(ii) Do not exceed 70.0 percent opacity for more than four 6-minute periods; and
(iii) On any calendar day, do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4.1 hours, during which time visible emissions do not exceed 40.0 percent opacity for more than 1.4 hours and do not exceed 70.0 percent opacity for more than two 6-minute periods.
(5) Notwithstanding the requirements in §A(4) of this regulation, the Department may determine compliance and noncompliance with the visible emissions limitations specified in §A(1) and (2) of this regulation by performing EPA reference Method 9 observations.
(6) In no instance shall excess emissions exempted under this regulation cause or contribute to a violation of any ambient air quality standard in 40 CFR Part 50, as amended, or any applicable requirements of 40 CFR Part 60, 61, or 63, as amended. "

"**B**. Determining Violations.
(1) For each unit required to operate a COM pursuant to COMAR 26.11.01.10A(1)(a) and (b), each day during a calendar quarter when the opacity of emissions from that unit during the calendar quarter or calendar day,

as applicable, exceeds the emission limitations in §A(4)(a), (b), (c) and (d) of this regulation shall constitute a separate day of violation.
(2) A violation of §A(4)(a)(i), (ii), or (iii), §A(4)(b)(i), (ii) or (iii), §A(4)(c)(i), (ii) or (iii), or §A(4)(d)(i), (ii) or (iii), of this regulation, as applicable, that occur on the same day shall constitute separate violations.
(3) A daily violation that occurs during the same calendar quarter as a quarterly violation is a separate violation. "

"**C**. Fuel Burning Equipment Subject to Federal COM Requirements.
Except for owners or operators of fuel burning equipment subject to any federal requirement that mandates operation of a COM and as provided in §D of this regulation, the owner or operator of fuel burning equipment required to install and operate a COM may discontinue the operation of the COM on fuel burning equipment that is served by a flue gas desulfurization device:
(1) When emissions from the equipment do not bypass the flue gas desulfurization device serving the equipment;
(2) When the flue gas desulfurization device serving the equipment is in operation;
(3) If the owner or operator has demonstrated to the Department's satisfaction, in accordance with 40 CFR §75.14, as amended, and all other applicable State and federal requirements, that water vapor is present in the flue gas from the equipment and would impede the accuracy of opacity measurements; and
(4) If the owner or operator has fully implemented an alternative plan, approved by the Department, for monitoring opacity levels and particulate matter emissions from the stack that includes:
(a) A schedule for monthly observations of visible emissions from the stack by a person trained to perform Method 9 observations; and
(b) Installation and operation of a particulate matter CEM that complies with all applicable State and federal requirements for particulate matter CEMs. "

"**D**. If, for units equipped with a flue gas desulfurization device, emissions bypass the device and are discharged through a bypass stack, the bypass stack shall be equipped with a COM approved by the Department."

Emissions Unit Number(s): E-1 Boiler Cont'd

E-1: One (1) Atmospheric Circulating Fluidized Bed Boiler (ACFB) with a designed rated capacity of 2070 MMBtu/hr. of heat input burning bituminous coal and No. 2 diesel fuel during start-up. **[3-0127]**

Applicable Regulations:

Management of Coal Combustion Byproducts

COMAR 26.04.10.03B - General Restrictions and Specifically Prohibited Acts.

"(**3**) Air Pollution

A person may not engage in the disposal, storage, transportation, processing, handling, or use of coal combustion byproducts without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, those precautions described in COMAR 26.11.06.03C and D.

(**4**) Transportation.

In addition to the requirements of §B(3) of this regulation, a person may not transport coal combustion byproducts without taking reasonable precautions to control fugitive air emissions relating to the transportation. These reasonable precautions shall include, at a minimum, the following:

(a) Vehicles transporting coal combustion byproducts shall be fully enclosed, or fully enclosed on all sides and covered with a firmly secured canvas or other covering, so as to prevent any coal combustion byproducts from blowing off, falling off, or spilling out of the vehicle, or the coal combustion byproducts shall be handled and transported in sealed containers designed for transportation of powdery solids;

(b) Before leaving a site where coal combustion byproducts are loaded or off-loaded, vehicles transporting coal combustion byproducts shall be rendered clean and free of excess material or debris that could blow off, fall off, or spill during transportation;

(c) Coal combustion byproducts being loaded into or off-loaded from a vehicle shall be sufficiently moistened or otherwise conditioned or contained to prevent particulate coal combustion byproducts from becoming airborne or causing fugitive air emissions;

(d) Following loading but prior to any transportation of coal combustion byproducts, the transporter shall inspect each vehicle that contains coal combustion byproducts to ensure that the requirements of §B(4) of this regulation are met;

(e) A transporter of coal combustion byproducts shall maintain an inspection log for each vehicle that shall be maintained in the vehicle at all times during transport of coal combustion byproducts, and for 30 days thereafter that shall certify compliance with the standards in §B(4) of this regulation; and

(f) An inspection log maintained by a transporter of coal combustion byproducts shall consist of an entry for each inspection of a vehicle that has been conducted by the transporter. An inspection entry shall consist of the following information:

(i) The date the inspection occurred;

(ii) The time of day the inspection occurred;

(iii) The name of the person conducting the inspection;

(iv) The condition of the vehicle and any corrective action required to ensure compliance with this subsection, for example, "truck cleaned and covered" for a vehicle that meets the requirements, or "cover OK, right side wheels hosed off again" for a vehicle that was properly covered but which required re-cleaning of wheels on the right side; and
(v) The signature of the individual certifying compliance with §B(4) of this regulation.

2. Record Keeping and Reporting:

The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

(a) A statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

(b) A revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

KEEP PERMIT AT SITE

CONTROL NO. B - 07162

Larry Hogan
Governor

State of Maryland

Horacio Tablada
Secretary

DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

[ ] Construction Permit

[X] Part 70 Operating Permit

PERMIT NO. 24-001-0203

DATE ISSUED September 1, 2022

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE August 31, 2027

LEGAL OWNER & ADDRESS
AES WR Limited Partnership
11600 Mexico Farms Road, S.E.
Cumberland, MD 21502
Attn: Ms. Kara Hawkins
Environmental Specialist

SITE
AES WR Limited Partnership
11600 Mexico Farms Road, S.E.
Cumberland, MD 21502
AI # 11339

SOURCE DESCRIPTION

Electric Generation Plant.

This source is subject to the conditions described on the attached pages.

Program Manager

Director, Air and Radiation Administration

AES WR LIMITED PARTNERSHIP
11600 MEXICO FARMS ROAD S.E.
CUMBERLAND MARYLAND
PART 70 OPERATING PERMIT NO. 24-001-0203

AES WR LIMITED PARTNERSHIP
11600 MEXICO FARMS ROAD S.E.
CUMBERLAND MARYLAND
PART 70 OPERATING PERMIT NO. 24-001-0203

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

AES WR Limited Partnership (AES) is a coal fired electric generating station located at 11600 Mexico Farms Road, S.E in Cumberland in Allegany County in Maryland. The facility operates a 180-megawatt coal-fired steam electric plant. The facility consists of an ABB CE coal-fired atmospheric circulating fluidized bed (ACFB) boiler with a designed rated capacity of 2070 million Btu/hour heat input when burning bituminous coal and the associated equipment for process coal treatment and storage.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE - ARA Registration Number	Emission Unit Name	Description	Date of Installation
EU-1	001-3-0127	Fluidized Bed Boiler	Atmospheric Circulating Fluidized Bed Boiler burning bituminous coal and No. 2 diesel fuel during start-up.	August, 1999
EU-2	001-6-0136	Limestone Truck Unloading Operation	Limestone truck unloading operation. PM emissions are controlled by a baghouse.	August, 1999
EU-3 and EU-4	001-6-0136	Two Limestone Crushing and Drying Systems	Each system contains one Raymond Roller Mill rated at 20 tons/hr., one natural gas/#2 oil-fired dryer rated at 5 MMBTU/hr., and a conveyor rated at 30 ton/hr. Each system's PM emissions are controlled by a baghouse.	August, 1999
EU-5	001-6-0136	Limestone Storage Silo	Limestone storage silo. PM emissions controlled by a baghouse	August, 1999
EU-6	001-3-0127	Coal Truck Unloading Operation	Truck unloading operation located in the coal unloading building. PM emissions controlled by a baghouse.	August, 1999
EU-7	001-3-0127	Coal Crushing and Reclaiming System	Contains two crushers, two vibrating feeders, one surge bin, two enclosed reclaim conveyors, one enclosed stockpile conveyor and one enclosed transfer conveyor, each located inside coal crusher building.	August 1999; March 2013 (Gundlach crusher modification)

			Emissions are controlled by a baghouse.	
EU-8	001-3-0127	Coal Storage System.	Four storage silos connected to one baghouse that controls PM emissions.	August, 1999
EU-9	001-3-0127	Bed Ash Day Bin	Bed Ash Day Bin emissions vent through a baghouse.	August, 1999
EU-10	001-3-0127	Bed ash storage silo	Bed ash storage silo emissions vent through a baghouse.	August, 1999
EU-11	001-3-0127	Fly ash storage silo	Fly ash storage silo emissions vent through a baghouse.	August, 1999
EU-12	001-9-0081	Boiler Feed water Pump	Diesel fueled boiler feed water pump rated at 562 KW (740 HP).	August, 1999
EU-17 and EU-18	001-6-0243 001-6-0244	Space Heaters	Two natural gas fired boilers, each rated at 4.5 MMBTU/hr used for comfort heating	August, 1999
EU-19	001-6-0304	Fuel Blending Station	One (1) automated coal blending system comprising of a 45-ton feed hopper, and a 30-in drag-chain conveyor.	March, 2013

* The gap in the EU numbers (EU-13 – EU-16) represents emission units (storage tanks) that are insignificant installations and are included under the Insignificant Activities Section.

SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARA	Air and Radiation Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification
SO_2	Sulfur Dioxide

TAP	Toxic Air Pollutant
tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;

b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or

d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.

b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to

the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.

d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.

b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.

c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:

(1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any

new applicable requirements of the Clean Air Act that will apply if the change occurs;

(2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.

d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).

e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.

f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.

g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

a. A minor permit modification is a Part 70 permit revision that:

(1) Does not result in a violation of any applicable requirement of the Clean Air Act;

(2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

(a) Adding new requirements,

(b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or

(c) Changing from one approved test method for a pollutant and source category to another;

(3) Does not require or modify a:

(a) Case-by-case determination of a federally enforceable emissions standard,

(b) Source specific determination for temporary sources of ambient impacts, or

(c) Visibility or increment analysis;

(4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:

(a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and

(b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act

(5) Is not a Title I modification; and

(6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.

b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

(1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;

(2) The proposed minor permit modification;

(3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:

(a) The proposed change meets the criteria for a minor permit modification, and

(b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;

(4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.

c. Permittee's Ability to Make Change

(1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.

(2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):

(a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.

(b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.

e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

a. An application for an administrative permit amendment shall:

(1) Be in writing;

(2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and

(3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

(2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;

(3) requires more frequent monitoring or reporting by the Permittee;

(4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);

(5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);

(6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);

(7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or

(8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.

c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.

d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.

e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:

(1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(2) The change is not subject to any requirements under Title IV of the Clean Air Act;

(3) The change is not a Title I modification; and

(4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.

b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.

c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.

d. The Permittee shall keep a record describing:

(1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act , but not otherwise regulated under this permit; and

(2) The emissions resulting from those changes.

e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.

f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.

g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.

h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:

(1) The change is not a Title I modification;

(2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;

(3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(4) The change does not violate an applicable requirement of the Clean Air Act;

(5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

(6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;

(7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and

(8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.

b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:

(1) A description of the proposed change;

(2) The date on which the change is proposed to be made;

(3) Any change in emissions resulting from the change, including the pollutants emitted;

(4) Any new applicable requirement of the Clean Air Act; and

(5) Any permit term or condition that would no longer apply.

c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.

d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.

e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.

f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.

h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.

b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.

c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;

f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;

g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.

h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required b y (c.— g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;

b. Have access to and make copies of records required by the permit;

c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and

d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not disclosable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

a. Enforcement action,

b. Permit revocation or revision,

c. Denial of the renewal of a Part 70 permit, or

d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;

c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;

d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or

e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;

c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;

d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.

e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

The Permittee shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

a. 40 CFR 60, appendix A

b. 40 CFR 51, appendix M

c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and [COMAR 26.11.02.19D]

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;

b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:

(1) Familiar with each source for which the certifications forms are submitted, and

(2) Responsible for the accuracy of the emissions information;

c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:

(1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;

(2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;

(3) Amounts, types and analyses of all fuels used;

(4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;

(5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:

(a) Significant maintenance performed,
(b) Malfunctions and downtime, and
(c) Episodes of reduced efficiency of all equipment;

(6) Limitations on source operation or any work practice standards that significantly affect emissions; and

(7) Other relevant information as required by the Department.

9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

a. The compliance certification shall include:

(1) The identification of each term or condition of this permit which is the basis of the certification;

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of each source, currently and over the reporting period; and

(5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.

b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons

who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

a. The location as specified in this permit, and the date and time that samples and measurements are taken;

b. All pertinent operating conditions existing at the time that samples and measurements are taken;

c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;

d. The identity of the Permittee, individual, or other entity that performed the analysis;

e. The analytical techniques and methods used; and

f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.155.

e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

Not applicable

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping, and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. [**Authority: COMAR 26.11.03.06C(5)(g)**]

Table IV – 1	
1.0	**Emissions Unit Number: EU-1** EU-1: One (1) Atmospheric Circulating Fluidized Bed (ACFB) boiler with a designed rated capacity of 2070 MMBtu/hr. of heat input that combusts coal as its primary fuel and diesel oil as a backup fuel.
1.1	**Applicable Standards/Limits:** **A. Visible Emissions** 1. **COMAR 26.11.09.05A (1),** In Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity. **Exceptions:** COMAR 26.11.09.05A(1) does not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if: a. The visible emissions are not greater than 40 percent opacity; and b. The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period. **[Authority: COMAR 26.11.09.05A (3)].**

Table IV – 1

2. **40 CFR 60.42Da(b)** - NSPS Subpart Da, which limits the discharge into the atmosphere of any gases which exhibit greater than 20 percent opacity (6-minute average) except for a 6-minute period per hour of not more than 27% opacity.

   The limit under §60.42Da applies at all times except during periods of startup, shutdown, or malfunction. **[Authority: 40 CFR 60.48 Da (a)].**

   Note: Compliance with visible emissions limit will be the basis for demonstrating compliance with the applicable NSPS regulation.

B. Particulate Matter Emissions

1. **40 CFR 60.42Da(a)** – NSPS Subpart Da, which limits particulate matter emissions to 0.03 lbs./MMBtu heat input. The limit under §60.42 Da applies at all times except during periods of startup, shutdown, or malfunction. **[Authority: 40 CFR 60.48Da(a)].**

2. **§60.48Da Compliance provisions**. "(f) For affected facilities for which construction, modification, or reconstruction commenced before May 4, 2011, compliance with the applicable daily average PM emissions limit is determined by calculating the arithmetic average of all hourly emission rates each boiler operating day, except for data obtained during startup, shutdown, or malfunction periods. Daily averages must be calculated for boiler operating days that have out-of-control periods totaling no more than 6 hours of unit operation during which the standard applies."

3. PSD **Approval No. 94-01A**, which limit PM_{10} emissions to 0.015 lbs./MMBtu heat input - 3-hour average and 136 tons per year based on a maximum heat input of 17,934,480 MMBtu averaged on a rolling 12-month period. (See PSD limits in Table IV-1, Section 1.1 Paragraph E below).

   Note: The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.42Da(a) and the PSD limit.

4. **COMAR 26.11.09.06(A)(2)** which limits particulate emissions to be discharged into the atmosphere in excess of the amounts shown in Figure 2. For the ACFB boiler this is 0.1 lb./MMBtu heat input.

Table IV – 1

(Streamlined with PSD limit. Compliance with the PSD BACT limit assures compliance with the RACT limit.)

C. Sulfur Oxides Emissions

1. **40 CFR 60.43Da(a)(1) - (4)** – NSPS Subpart Da, which prohibit the discharge of any gases into the atmosphere which contain sulfur dioxide from the combustion of solid fuel in excess of: (1) 1.20 lbs./MMBtu heat input per hour and 10 percent of the potential combustion concentration (90 percent reduction); (2) 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lbs./MMBtu of heat input; (3) 1.4 lb./MWh gross energy output; or (4) 0.15 lb./MMBtu heat input.

   Note: Compliance with the emissions limitation and percent reduction requirements are determined on a 30-day rolling average **[Authority: 40 CFR 60.43Da(g)].**

2. **PSD Approval No. 94-01A**, which limit sulfur dioxide emissions to 0.21 lbs./MM Btu per 3-hr block average; 0.19 lbs./MM Btu per 24-hr block average and 0.16 lbs./MM Btu per annual average – 1403 tons per year. In addition, the boiler shall be designed to achieve a control efficiency for sulfur dioxide of no less than 95 percent (based on a 30-day block average) based on the design coal specified in the PSD application.

3. **COMAR 26.11.09.07(A)(1)(a)** which limits the oxides of sulfur to 3.5 pounds per million BTU and **COMAR 26.11.09.07(A)(1)(a)** which limits sulfur in distillate fuel oil in excess of 0.3 percent. (Streamlined with PSD limit. Compliance with the PSD BACT limit assures compliance with this RACT limits.)

D. NOx Emissions

1. **40 CFR 60.44Da(a)(1), NSPS** Subpart Da which prohibits the discharge of any gases into the atmosphere which contain nitrogen oxides, from the combustion of bituminous coal in excess of 0.6 lbs./MMBtu of heat input based on a 30-day rolling average.

   Note: The limit under §60.44Da applies at all times except during periods of startup, shutdown, or malfunction. **[Authority: 40 CFR 60.48Da(a)].**

Table IV – 1

2. **PSD Approval No. 94-01A,** which limit nitrogen oxide emissions to 0.10 lbs./MMBtu on a 24-hr block average and 907 tons per year. The PSD approval includes the operation of an SNCR system to achieve these NOx emissions limits.

3. **COMAR 26.11.09.08B(1)(c) –** Emissions Standard for coal (dry Bottom): 0.38 lbs./MMBtu of heat input based on a 30-day rolling average.

4. **COMAR 26.11.38D(2)** which states that an electric generating equipped with a fluidized bed combustor shall not exceed a NO_x 24-hour block average emission rate of 0.10 lbs./MMBtu.

E. Other Operating Limits and Standards

1. **PSD Approval # 94-01A**
The Permittee shall comply with the following emissions standards and allowable annual emissions in Table 1 below:

Table 1 (Limits of PSD Approval No. 94-01A)

Pollutant	Maximum Emissions Std. (lbs./MMBtu)	Maximum Annual Emissions (TPY)
Carbon Monoxide	0.15 per 24-hr average; 0.188 @ 40% load	1360
Hydrocarbons (non-methane as VOC)	0.005 per 3-hr average; 0.007 @ 40% load	45
Sulfuric Acid Mist	0.006 per 3-hr average	54.4
Fluorides (Total)	0.007 per 3-hr average	5.89
Beryllium	7.7×10^{-7} per 3-hr average	7×10^{-3}
Lead	9.9×10^{-6} per 3-hr average	0.09
Mercury	1.7×10^{-5} per 3-hr average	0.16
Ammonia	0.005 per 3-hr average @ full load 0.008 @ 75% load 0.011 @ 40% load	45
The Permittee shall limit the heat input to the ACFB boiler to 17,934,480 MMBtu on a rolling 12-month basis.		

Table IV – 1

1.2 Testing Requirements:

A. Visible Emissions

The Permittee shall perform QA/QC procedures on the Continuous Opacity Monitoring (COM) system as required by permit to construct (PTC) 001-3-0127, 0136 & 0067 issued on August 10, 1994 and amended on November 17, 2005 and NSPS 40 CFR Part 60 Subpart Da. The Permittee shall provide the Department a notice of intent to audit the CEM system at least 30 days prior to the proposed test date. **[Authority: 40 CFR Part 60, subpart Da and PTC Nos. 001-3-0127, 001-6-0136 & 001-4-0067 issued on August 10, 1994 and amended on November 17, 2005].**

B. Particulate Matter Emissions

The Permittee shall perform a total particulate and PM_{10} emissions test once during the life of the permit. A test protocol shall be submitted to the Department for review and approval at least 30 days before any testing is conducted. Furthermore, all testing shall be conducted at reasonable time and with 10 days' notice to the Department to allow representation by Department's personnel. **[Authority: COMAR 26.11.03.06C].**

C. Sulfur Oxides Emissions

The Permittee shall conduct performance certification testing, as required by 40 CFR Part 60, Appendix F, on the sulfur dioxide continuous emissions monitoring (CEM) system. The Permittee shall provide the Department with a notice of intent to audit the CEM system at least 30 days prior to the proposed test date. **[Authority: 40 CFR Part 60, subpart Da and PTC No. 001-3-0127 issued on August 10, 1994 and amended on November 17, 2005].**

D. NOx Emissions

Conduct performance certification testing as required by 40 CFR Part 75, Subpart H on the NOx continuous emissions monitoring system. The Permittee shall provide the Department a notice of intent to audit the CEM system at least 30 days prior to the proposed test date. **[Authority: 40 CFR 60 Subpart Da, and PTC No. 001-3-0127 issued on August 10, 1994 and amended on November 17, 2005].**

Table IV – 1	
	E. Other Operation Limits and Standards Once during the life of the permit, the Permittee shall conduct testing for the other PSD pollutants. **[Authority: COMAR 26.11.03.06C & COMAR 26.11.01.04A]** Last tested in 2010 – Beryllium, Pb, etc. See PTC testing requirements
1.3	**Monitoring Requirements:** **A. Visible Emissions** 1. The Permittee shall continuously monitor opacity of the stack gases using a continuous opacity monitor (COM) that is certified in accordance with 40 CFR Part 60, Appendix B and that meets the quality assurance criteria of COMAR 26.11.31.**[Authority: COMAR 26.11.01.10, PSD Approval No. 94-01A, and 40 CFR 60.49Da].** 2. The Permittee shall ensure that valid COM data are obtained for a minimum of 95 percent of the operating hours in each quarter. **[Authority: COMAR 26.11.01.10D(1)C].** **B. Particulate Matter Emissions** The Permittee shall perform requirements of the CAM plan submitted with the renewal application. See Tables IV-1.1 and IV-1.2 that follows this table. **[Authority: COMAR 26.11.03.06C].** **C. Sulfur Oxides Emissions** 1. The Permittee shall continuously monitor sulfur dioxide emissions in accordance with the requirements of 40 CFR Part 60, Subpart Da §60.47Da(b) to demonstrate compliance with the PSD limits for SO_2 specified in Table IV-1 Section 1.1 Paragraph E **[Authority: 40 CFR Part 60, subpart Da, COMAR 26.11.01.11B(1), and PSD Approval #94-01A].** 2. The Permittee shall ensure that valid CEM data are obtained for SO_x and CO_2 monitoring systems for a minimum of 90 percent of the operating hours in each quarter. **[Authority: PTC No. 001-3-0127 issued August 10, 1994 and reissued November 17, 2005].**

Table IV – 1

3. The Permittee must obtain at least two valid data hours to calculate a valid three-hour CEM average and at least twelve hours to calculate a valid daily CEM average. **[Authority: PTC No. 001-3-0127 issued August 10, 1994 and reissued November 17, 2005].**

D. NOx Emissions

1. The Permittee shall operate a continuous emission monitoring system to continuously monitor the NO_x emissions. The CEM system shall meet the performance specification of 40 CFR Part 75, Subpart H. **[Authority: 40 CFR Part 60 subpart Da, PTC No. 001-3-0127 and PSD Approval #94-01A issued August 10, 1994 and reissued November 17, 2005].**

2. The Permittee shall ensure that valid CEM data are obtained by the NOx and CO_2 monitoring systems for a minimum of 90 percent of the operating hours in each quarter. **[Authority: PTC No. 001-3-0127 issued August 10, 1994 and re-issued November 17, 2005].**

3. The Permittee must obtain at least twelve data hours to calculate a valid daily CEM average. **[Authority: 001-3-0127 issued August 10, 1994 and re-issued November 17, 2005].**

4. The Permittee shall install, operate and certify in accordance with 40 CFR Part 75 a continuous monitoring system to demonstrate compliance with NO_x emissions. **[Authority: COMAR 26.11.38B(1)]**

E. Other Operation Limits and Standards

1. The Permittee shall properly operate and maintain the ACFB boiler in a manner consistent with the boiler combustion optimal performance and design criteria and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance. **[Authority: COMAR 26.11.03.06C].**

2. The Permittee shall operate CEMs to continually monitor either the oxygen content or carbon dioxide of the ACFB boiler stack gases **[Authority: 40 CFR Part 60 subpart Da and PSD Approval # 94-01A issued August 10,1994 and reissued November 17, 2005].**

3. Alternative Flow Monitoring methodology: The Permittee shall:
   a. Perform a DAHS verification (recommend annually), to demonstrate that the correct default flow rate value (either

Table IV – 1	
	540,000 scfh or 1,080,00 scfh, as appropriate) is being added to the measured stack flow rate when the slip stream is extracted. The results of this demonstration shall be kept on-site in a format suitable for inspection; and b. For any hour(s) in which the slip stream is being extracted, but the digital signal indicating the number of blowers in operation is either missing, invalid or not interpretable, add 1,080,000 scfh to measured stack flow rate(s) (recommend annual verification); and c. Perform relative accuracy test audits (RATAs) of the flow monitor as described in (a) or (b), below. That is, either: i. Conduct the RATA testing at a time when the CO_2 slipstream is not being extracted; or ii. If the slipstream is being extracted at the time of the RATA, compare the *unadjusted* flow rates measure by the monitor (i.e., with no correction factor for the slipstream volume) against the reference method measurements. **[Authority: PSD Approval #94-01A, Part B-Construction, #17 issued August 10,1994 and 2002 Petition approval from EPA dated May 1, 2002].**
1.4	**Record Keeping Requirements:** **A. Visible Emissions** The Permittee shall maintain all COM records necessary to comply with the data reporting requirements of COMAR 26.11.01.10 and 40 CFR 60.49Da **[Authority: COMAR 26.11.01.10 and 40 CFR 60.49Da].** **B. Particulate Matter Emissions** The Permittee shall maintain a record of the results of emissions testing for total particulate matter and PM_{10} for at least five years. **[Authority: COMAR 26.11.03.06C].** **C. Sulfur Oxides Emissions** The Permittee shall maintain all CEM records necessary to comply with the data reporting requirements of COMAR 26.11.01.11E for the demonstration of compliance with the PSD standards. **[Authority: COMAR 26.11.01.11E].**

Table IV – 1	
	D. NOx Emissions The Permittee shall maintain all CEM records necessary to comply with the data reporting requirements of COMAR 26.11.01.11E for the demonstration of compliance with the NO_x emissions standard. **[Authority: COMAR 26.11.01.11E].** **E. Other Operation Limits and Standards** The Permittee shall: 1. Maintain records of the heat input to the ACFB on a daily basis. 2. Maintain records of maintenance performed on ACFB boiler that relate to combustion performance for at least five years **[Authority: COMAR 26.11.03.06C].** 3. Maintain records of the CEMS readings for the oxygen or carbon dioxide content of the AFBC boiler stack gases for at least five years. **[Authority: PSD Approval # 94-01A and COMAR 26.11.03.06C].**
1.5	**Reporting Requirements:** **A. Visible Emissions** 1. The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter in accordance with the requirements in COMAR 26.11.01.10D. **[Authority: COMAR 26.11.01.10D and 40 CFR 60.51Da]** 2. For any period for which opacity 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. Operation of the control system and affected facility during periods of data unavailability are to be compared with operation of the control systems and affected facility before and following the period of unavailability **[Authority: 40 CFR 60.51Da(f)].** **B. Particulate Matter Emissions** The Permittee shall submit the results of stack tests in a final report within 45 days from test completion. **[Authority: COMAR 26.11.01.04A].** **C. Sulfur Oxides Emissions**

Table IV – 1

1. The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter that contains the information listed in COMAR 26.11.01.11E(2)(c)). See Record keeping Condition A above. **[Authority: COMAR 26.11.01.11E(2)(c)].**

2. The Permittee shall report the NSPS percent reduction of the potential concentration of sulfur dioxide for each 30 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. **[Authority: 40 CFR 60.51Da(b)(3)].**

3. For any period for which sulfur dioxide 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. Operation of the control system and affected facility during periods of data unavailability are to be compared with operation of the control systems and affected facility before and following the period of unavailability **[Authority: 40 CFR 60.51Da(f)].**

D. NOx Emissions

1. The Permittee shall submit a quarterly summary report to the Department not later than 30 days following each calendar quarter that contains the information listed in COMAR 26.11.01.11E. See Record keeping Condition A above. **[Authority: COMAR 26.11.01.11E].**

2. For any period for which nitrogen oxides 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. Operation of the control system and affected facility during periods of data unavailability are to be compared with operation of the control systems and affected facility before and following the period of unavailability **[Authority: 40 CFR 60.51Da(f)].**

E. Other Operation Limits and Standards

Table IV – 1	
	1. The Permittee shall report on the quarterly CEM report the rolling 12-month heat input of the ACFB boiler during the quarter. **[Authority: PSD Approval # 94-01A and PTC No. 001-3-0127 A].** 2. The Permittee shall submit a CEMS summary data for oxygen or carbon dioxide along with the quarterly SOx and NOx CEMs excess emissions report to the Department 30 days following the end of each calendar. **[Authority: COMAR 26.11.01.11E and PTC No. 001-3-0127A].**

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

CAM Plan for the Fabric Filter baghouse that controls particulate matter emissions from the ACFB boiler. **[Authority: 40 CFR Part 64].**

The Permittee shall comply with the requirements of the CAM plan that are summarized in the following tables:

Table IV - 1.1 CAM Plan Monitoring Approach – Indicator 1 (Primary)

I. Indicator Monitoring Approach	Opacity Opacity is measured continuously with a COMS unit.
II. Indicator Range	An internal, non-enforceable trigger level of 10.9% average opacity (three-hour block average).
Corrective Action	An excursion triggers an inspection, corrective action as necessary, and a reporting requirement.
III. Performance Criteria	
A. Data Representativeness	The monitoring system consists of a COMS which monitors the opacity of the exhaust gas stream.

B. Verification of Operational Status	Continuous opacity data will be collected in accordance with COMAR 26.11.01.10 and COMAR 26.11.31.
C. QA/QC Practices and Criteria	The COMS will be certified in accordance with 40 CFR Part 60, Appendix B. COMS will be calibrated, maintained, and operated according to manufacturer's recommendations. COM data will be collected and validated in accordance with COMAR 26.11.01.10 and COMAR 26.11.31.
D. Monitoring Frequency and Data Collection Procedure	Opacity data are automatically reduced to 6-minute block averages calculated from 36 or more equally spaced data points.
E. Record Keeping	The continuous opacity data collected and corrective actions taken will be maintained for 5 years.
F. Reporting	Report of excursions and corrective actions will be submitted to the Department in a quarterly report.

AES WR LIMITED PARTNERSHIP
11600 MEXICO FARMS ROAD S.E.
CUMBERLAND MARYLAND
PART 70 OPERATING PERMIT NO. 24-001-0203

Table IV - 1.2 CAM Plan Monitoring Approach – Indicator 2 (Secondary)

I. Indicator Monitoring Approach	Opacity trend Opacity is measured continuously with a COMS unit
II. Indicator Range	A clear step change of more than 5% in opacity during isolation of any baghouse module during the normal cleaning sequence.
Corrective Action	An excursion triggers an inspection, corrective action as necessary, and a reporting requirement.
III. Performance Criteria A. Data Representativeness	The monitoring system consists of a COMS which monitors the opacity of the exhaust gas stream. The opacity trend is typically monitored in the control room during normal operation and represents a good early warning system to identify potential bag failures within the isolated module.
B. Verification of Operational Status	Continuous opacity data will be collected in accordance with COMAR 26.11.01.10 and COMAR 26.11.31.
C. QA/QC Practices and Criteria	The COMS will be certified in accordance with 40 CFR Part 60, Appendix B. COMS will be calibrated, maintained, and operated according to manufacturer's recommendations. COM data will be collected and validated in accordance with COMAR 26.11.01.10 and COMAR 26.11.31.
D. Monitoring Frequency and Data Collection Procedure	Opacity data are automatically reduced to 6-minute block averages calculated from 36 or more equally spaced data points.
E. Record Keeping	The continuous opacity data collected and corrective actions taken will be maintained for 5 years.
F. Reporting	Report of excursions and corrective actions will be submitted to the Department in a quarterly report.

Mercury and Air Toxics (MATS) Rule

Facility subject to the National Emissions Standards for Hazardous Air Pollutants from coal and oil-fired Electric Utility Steam Generating Units (EGUs), 40 CFR Part 60, Subpart UUUUU including the requirements listed.

Note: On June 29, 2015, the Supreme Court issued an opinion in Michigan et al v. Environmental Protection Agency. The Supreme Court's decision remands the MATS rule to EPA and returns the matter to the U.S. Court of Appeals for the D.C. Circuit for further proceedings. As of the issuance of this permit, the MATS rule is in effect. The Supreme Court decision in Michigan requires the EPA to undertake additional proceedings for the limited purpose of evaluating costs for its "appropriate and necessary" finding which preceded the MATS rule. Until and unless the MATS rule is stayed and/or vacated by the D.C. Circuit, MATS related conditions in the Title V permit apply. If the MATS rule is stayed and/or vacated or partially stayed and/or vacated, then the affected conditions in the Title V permit will be revised/removed accordingly.

Table IV – 1.3	
1.3.0	**Emissions Unit Number(s): EU-1** EU-1: One (1) Atmospheric Circulating Fluidized Bed (ACFB) boiler with a designed rated capacity of 2070 MMBtu/hr. of heat input.
1.3.1	**Applicable Standards/Limits** **40 CFR Part 63, Subpart UUUUU – National Emissions Standards for Hazardous Air Pollutants : Coal and Oil-Fired Electric Utility Steam Generating Units.** **§63.9984** - When do I have to comply with this subpart? "(**b**) If you have an existing EGU, you must comply with this subpart no later than **April 16, 2015**." **§63.9991** - What emission limitations, work practice standards, and operating limits must I meet? A. Particulate Matter (PM) Emissions **§63.9991** – limits filterable particulate matter emissions to 3.0^{E-2} lb./MMBtu or 3.0^{E-1} lb./MWh Compliance is determined by Method 5 stack test (front half temperature shall be 320° ± 25°F) PM is a surrogate for non-mercury metals. **[Authority : §63.9991]**

Table IV – 1.3	
	B. Sulfur Dioxide (SO_2) Emissions **§63.9991** – limits SO_2 to 2.0^E-1 lb./MMBtu or 1.5 lb/MWh. Compliance is determined by SO_2 CEMs: arithmetric average of 30 boiler operating days. **[Authority : §63.9991]** AES Warrior Run qualifies to use SO_2 as a surrogate for HCl because they operate a fluidized bed. **[Authority : §63.10000]** C. Mercury (Hg) Emissions **§63.9991** – limits mercury emissions to 1.2 lb./TBtu or 1.3^E-2 lb./GWh. Compliance is determined by sorbent trap monitoring for30 days (Method 30B). **[Authority : §63.9991]**
1.3.2	**Testing Requirements:** A. Particulate Matter (PM) Emissions AES Warrior Run has qualified as a LEE (low emitting EGU) for PM by conducting 12 quarterly stack test and reporting emissions less than 50% of the standard. **[Authority : §63.10005(h), §63.10007 and Table 4 & 5]** After demonstrating LEE compliance, you must conduct a performance test at least once every 36 months to demonstrate continued LEE status. **[Authority : §63.10000(c)(1)(iii) & §63.10006]** B. Sulfur Dioxide (SO_2) Emissions See Monitoring Requirements. C. Mercury (Hg) Emissions AES Warrior Run has qualified as a LEE (low emitting EGU) for Hg by conducting annual tests and reporting emissions less than 10% of the standard. The testing was conducted by 30-day sorbent trap monitoring (Method 30B). To continue to qualify for LEE status, you must conduct a 30-day performance test using Method 30B at least once every 12 calendar months. **[Authority : §63.10000(c)(1)(iii) & §63.10004(h)(i)]** D. Work Practice Standards Must conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months. **[Authority: 63.9991 – Table 3]**
1.3.3	**Monitoring Requirements:** A. Particulate Matter (PM) Emissions See Testing Requirements

Table IV – 1.3	
	B. Sulfur Dioxide (SO_2) Emissions SO_2 CEM System: must collect quality assured CEM data for all operating conditions. **[Authority: §63.10007];** must certify, operate and maintain CEMS according to Part 75. **[Authority: §63.10010];** must operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating except for certain approved periods. **[Authority: §63.10020]**; must demonstrate continuous compliance with each emission limit, operating limit and work practice standard. **[Authority: §63.10021]** C. Mercury (Hg) Emissions See Testing Requirements
1.3.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]** The Permittee must keep records in accordance with §63.10032. **[Authority: §63.10032]**
1.3.5	**Reporting Requirements:** The Permittee: Must submit all notifications required by 60.10030. **[Authority: §63.10030]** Must submit all reports required by 63.10031. **[Authority: §63.10031]** Must comply with all requirements for reports required by 63.10031-Table 8. **[Authority: §63.10031]**

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
1.4.0	**Emissions Unit Number(s): EU-1** EU-1: One (1) Atmospheric Circulating Fluidized Bed (ACFB) boiler with a designed rated capacity of 2070 MMBtu/hr. of heat input.
1.4.1	**Applicable Standards/Limits:** **COMAR 26.11.28.02** - Requirements. A. This chapter incorporates by reference the U.S. EPA CSAPR and the CSAPR Update, including the definitions, criteria, and procedures therein. B. Trading Program Requirements. (1) This chapter incorporates by reference provisions of the CSAPR NO_X Annual Trading Program set forth in 40 CFR Part 97, Subpart AAAAA, as published July 1, 2017, and associated reference methods, performance specifications, and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §97.411(b)(2) and (c)(5)(iii), 97.412(b), and 97.421(h) and (j). (2) This chapter incorporates by reference provisions of the CSAPR NO_X Ozone Season Group 3 Trading Program set forth in 40 CFR Part 97, Subpart EEEEE, as published July 1, 2017, and associated reference methods, performance specifications and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §§97.811(b)(2) and (c)(5)(iii), 97.812(b), and 97.821(h) and (j). (***This is superseded by Group 3 Subpart GGGGG published April 30, 2021, effective June 29, 2021***). (3) This chapter incorporates by reference provisions of the CSAPR SO_2 Group 1 Trading Program set forth in 40 CFR Part 97, Subpart CCCCC, as published July 1, 2017, and associated reference methods, performance specifications and other test methods referenced by these standards, as applicable to existing and new units in Maryland, except the provisions at 40 CFR §§97.611(b)(2) and (c)(5)(iii), 97.612(b), and 97.621(h) and (j). **A. 40 CFR Part 97 Subpart AAAAA—CSAPR NO_X Annual Trading Program** **§97.406** - Standard requirements. "(a) ***Designated representative requirements***. The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.413 through 97.418. (b) ***Emissions monitoring, reporting, and recordkeeping requirements***.

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	(1) The owners and operators, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.430 through 97.435. (2) The emissions data determined in accordance with §§97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under §§97.411(a)(2) and (b) and 97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. (c) ***NO_x emissions requirements***—(1) *CSAPR NO_x Annual emissions limitation*. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under §97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source. (ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x Annual emissions limitation set forth in paragraph (c)(1)(i) of this section, then: (A) The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under §97.424(d); and (B) The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act. (2) *CSAPR NO_x Annual assurance provisions*. (i) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Annual allowances available for deduction for such control period under §97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level. (ii) The owners and operators shall hold the CSAPR NO_x Annual allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. (iii) Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Annual trading budget under §97.410(a) and the State's variability limit under §97.410(b). (iv) It shall not be a violation of this subpart or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level. (v) To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section,

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	(A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and (B) Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act. (3) *Compliance periods*. (i) A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter. (ii) A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of January 1, 2017, or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter. (4) *Vintage of CSAPR NO_x Annual allowances held for compliance*. (i) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated or auctioned for such control period or a control period in a prior year. (ii) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. (5) *Allowance Management System requirements*. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart. (6) *Limited authorization*. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows: (i) Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and (ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act. (7) *Property right*. A CSAPR NO_x Annual allowance does not constitute a property right.

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	(d) ***Title V permit requirements***. (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with this subpart. (2) A description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.430 through 97.435 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter. (e) ***Additional recordkeeping and reporting requirements***. (1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator. (i) The certificate of representation under §97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.416 changing the designated representative. (ii) All emissions monitoring information, in accordance with this subpart. (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program. (2) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in §97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	requirements under a title V operating permit program in parts 70 and 71 of this chapter. (f) ***Liability***. (1) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source. (2) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit. (g) ***Effect on other authorities***. No provision of the CSAPR NO_x Annual Trading Program or exemption under §97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Annual source or CSAPR NO_x Annual unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act." **B. 40 CFR Part 97 Subpart CCCCC—CSAPR SO_2 Group 1 Trading Program** **§97.606** - Standard requirements. "(a) ***Designated representative requirements***. The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.613 through 97.618. (b) ***Emissions monitoring, reporting, and recordkeeping requirements***. (1) The owners and operators, and the designated representative, of each CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.630 through 97.635. (2) The emissions data determined in accordance with §§97.630 through 97.635 shall be used to calculate allocations of CSAPR SO_2 Group 1 allowances under §§97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO_2 Group 1 emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	(c) ***SO_2 emissions requirements***—(1) *CSAPR SO_2 Group 1 emissions limitation*. (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO_2 Group 1 allowances available for deduction for such control period under §97.624(a) in an amount not less than the tons of total SO_2 emissions for such control period from all CSAPR SO_2 Group 1 units at the source. (ii) If total SO_2 emissions during a control period in a given year from the CSAPR SO_2 Group 1 units at a CSAPR SO_2 Group 1 source are in excess of the CSAPR SO_2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) of this section, then: (A) The owners and operators of the source and each CSAPR SO_2 Group 1 unit at the source shall hold the CSAPR SO_2 Group 1 allowances required for deduction under §97.624(d); and (B) The owners and operators of the source and each CSAPR SO_2 Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act. (2) *CSAPR SO_2 Group 1 assurance provisions*. (i) If total SO_2 emissions during a control period in a given year from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO_2 emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO_2 Group 1 allowances available for deduction for such control period under §97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.625(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such SO_2 emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	representative's share of such SO_2 emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level. (ii) The owners and operators shall hold the CSAPR SO_2 Group 1 allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. (iii) Total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total SO_2 emissions exceed the sum, for such control period, of the State SO_2 Group 1 trading budget under §97.610(a) and the State's variability limit under §97.610(b). (iv) It shall not be a violation of this subpart or of the Clean Air Act if total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total SO_2 emissions from the CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level. (v) To the extent the owners and operators fail to hold CSAPR SO_2 Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section, (A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and (B) Each CSAPR SO_2 Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act. (3) *Compliance periods.* (i) A CSAPR SO_2 Group 1 unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under §97.630(b) and for each control period thereafter. (ii) A CSAPR SO_2 Group 1 unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of January 1, 2017, or the deadline for meeting the unit's monitor

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	certification requirements under §97.630(b) and for each control period thereafter. (4) *Vintage of CSAPR SO_2 Group 1 allowances held for compliance*. (i) A CSAPR SO_2 Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a CSAPR SO_2 Group 1 allowance that was allocated or auctioned for such control period or a control period in a prior year. (ii) A CSAPR SO_2 Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) of this section for a control period in a given year must be a CSAPR SO_2 Group 1 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. (5) *Allowance Management System requirements*. Each CSAPR SO_2 Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart. (6) *Limited authorization*. A CSAPR SO_2 Group 1 allowance is a limited authorization to emit one ton of SO_2 during the control period in one year. Such authorization is limited in its use and duration as follows: (i) Such authorization shall only be used in accordance with the CSAPR SO_2 Group 1 Trading Program; and (ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act. (7) *Property right*. A CSAPR SO_2 Group 1 allowance does not constitute a property right. (**d**) ***Title V permit requirements***. (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO_2 Group 1 allowances in accordance with this subpart. (2) A description of whether a unit is required to monitor and report SO_2 emissions using a continuous emission monitoring system (under subpart B of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.630 through 97.635 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter. (e) ***Additional recordkeeping and reporting requirements***. (1) Unless otherwise provided, the owners and operators of each CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator. (i) The certificate of representation under §97.616 for the designated representative for the source and each CSAPR SO_2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.616 changing the designated representative. (ii) All emissions monitoring information, in accordance with this subpart. (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO_2 Group 1 Trading Program. (2) The designated representative of a CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall make all submissions required under the CSAPR SO_2 Group 1 Trading Program, except as provided in §97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter. (f) ***Liability***. (1) Any provision of the CSAPR SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 source or the designated representative of a CSAPR SO_2 Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO_2 Group 1 units at the source. (2) Any provision of the CSAPR SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 unit or the designated representative of a CSAPR SO_2 Group 1 unit shall also apply to the owners and operators of such unit. (g) ***Effect on other authorities***. No provision of the CSAPR SO_2 Group 1 Trading Program or exemption under §97.605 shall be construed as exempting or excluding the owners and operators, and the designated

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	representative, of a CSAPR SO_2 Group 1 source or CSAPR SO_2 Group 1 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act." **C. 40 CFR Part 97 Subpart GGGGG - CSAPR NOx Ozone Season Group 3 Trading Program** **§97.1006** Standard requirements. (**a**) *Designated representative requirements.* The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.1013 through 97.1018. (**b**) *Emissions monitoring, reporting, and recordkeeping requirements.* (1) The owners and operators, and the designated representative, of each CSAPR NOx Ozone Season Group 3 source and each CSAPR NOx Ozone Season Group 3 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §§97.1030 through 97.1035. (2) The emissions data determined in accordance with §§97.1030 through 97.1035 shall be used to calculate allocations of CSAPR NOx Ozone Season Group 3 allowances under §§97.1011(a)(2) and (b) and 97.1012 and to determine compliance with the CSAPR NOx Ozone Season Group 3 emissions limitation and assurance provisions under paragraph (c) of this section, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.1030 through 97.1035 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. (**c**) ***NOx emissions requirements*** - (1) *CSAPR NOx Ozone Season Group 3 emissions limitation.* (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NOx Ozone Season Group 3 source and each CSAPR NOx Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NOx Ozone Season Group 3 allowances available for deduction for such control period under §97.1024(a) in an amount not less than the tons of total NOx emissions for such control period from all CSAPR NOx Ozone Season Group 3 units at the source. (ii) If total NOx emissions during a control period in a given year from the CSAPR NOx Ozone Season Group 3 units at a CSAPR NOx Ozone Season Group 3 source are in excess of the CSAPR NOx Ozone Season

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	Group 3 emissions limitation set forth in paragraph (c)(1)(i) of this section, then: (A) The owners and operators of the source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall hold the CSAPR NO_X Ozone Season Group 3 allowances required for deduction under §97.1024(d); and (B) The owners and operators of the source and each CSAPR NO_X Ozone Season Group 3 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act. (2) *CSAPR NO_X Ozone Season Group 3 assurance provisions*. (i) If total NO_X emissions during a control period in a given year from all base CSAPR NO_X Ozone Season Group 3 units at base CSAPR NO_X Ozone Season Group 3 sources in a State (and Indian country within the borders of such State) exceed the State assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_X emissions during such control period exceeds the common designated representative's assurance level for the State and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_X Ozone Season Group 3 allowances available for deduction for such control period under §97.1025(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.1025(b), of multiplying - (A) The quotient of the amount by which the common designated representative's share of such NO_X emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the State (and Indian country within the borders of such State) for such control period, by which each common designated representative's share of such NO_X emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NO_X emissions from all base CSAPR NO_X Ozone Season Group 3 units at base CSAPR NO_X Ozone Season Group 3 sources in the State (and Indian country within the borders of such State) for such control period exceed the State assurance level. (ii) The owners and operators shall hold the CSAPR NO_X Ozone Season Group 3 allowances required under paragraph (c)(2)(i) of this section, as of midnight of November 1 (if it is a business day), or midnight of the first

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	business day thereafter (if November 1 is not a business day), immediately after the year of such control period. (iii) Total NO_x emissions from all base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 sources in a State (and Indian country within the borders of such State) during a control period in a given year exceed the State assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season Group 3 trading budget under §97.1010(a), the State's variability limit under §97.1010(b), and, for the control period in 2021 only, the product (rounded to the nearest allowance) of 1.21 multiplied by the supplemental amount of CSAPR NO_x Ozone Season Group 3 allowances determined for the State under §97.1010(d). (iv) It shall not be a violation of this subpart or of the Clean Air Act if total NO_x emissions from all base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 sources in a State (and Indian country within the borders of such State) during a control period exceed the State assurance level or if a common designated representative's share of total NO_x emissions from the base CSAPR NO_x Ozone Season Group 3 units at base CSAPR NO_x Ozone Season Group 3 sources in a State (and Indian country within the borders of such State) during a control period exceeds the common designated representative's assurance level. (v) To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 3 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) of this section: (A) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and (B) Each CSAPR NO_x Ozone Season Group 3 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) of this section and each day of such control period shall constitute a separate violation of this subpart and the Clean Air Act. (3) *Compliance periods*. (i) A CSAPR NO_x Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(1) of this section for the control period starting on the later of May 1, 2021, or the deadline for meeting the unit's monitor certification requirements under §97.1030(b) and for each control period thereafter. (ii) A base CSAPR NO_x Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(2) of this section for the control period starting on the later of May 1, 2021, or the deadline for meeting the unit's monitor certification requirements under §97.1030(b) and for each control period thereafter.

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	(4) *Vintage of CSAPR NO_X Ozone Season Group 3 allowances held for compliance.* (i) A CSAPR NO_X Ozone Season Group 3 allowance held for compliance with the requirements under paragraph (c)(1)(i) of this section for a control period in a given year must be a CSAPR NO_X Ozone Season Group 3 allowance that was allocated or auctioned for such control period or a control period in a prior year. (ii) A CSAPR NO_X Ozone Season Group 3 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) of this section for a control period in a given year must be a CSAPR NO_X Ozone Season Group 3 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. (5) *Allowance Management System requirements.* Each CSAPR NO_X Ozone Season Group 3 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with this subpart. (6) *Limited authorization.* A CSAPR NO_X Ozone Season Group 3 allowance is a limited authorization to emit one ton of NO_X during the control period in one year. Such authorization is limited in its use and duration as follows: (i) Such authorization shall only be used in accordance with the CSAPR NO_X Ozone Season Group 3 Trading Program; and (ii) Notwithstanding any other provision of this subpart, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act. (7) *Property right.* A CSAPR NO_X Ozone Season Group 3 allowance does not constitute a property right. (**d**) ***Title V permit requirements.*** (1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_X Ozone Season Group 3 allowances in accordance with this subpart. (2) A description of whether a unit is required to monitor and report NO_X emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.1030 through 97.1035 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with §§70.7(e)(2) and 71.7(e)(1) of this chapter, provided that the requirements applicable to the described monitoring and

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with §§70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B) of this chapter. (e) ***Additional recordkeeping and reporting requirements.*** (1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator. (i) The certificate of representation under §97.1016 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 3 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.1016 changing the designated representative. (ii) All emissions monitoring information, in accordance with this subpart. (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 3 Trading Program. (2) The designated representative of a CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 3 Trading Program, except as provided in §97.1018. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in parts 70 and 71 of this chapter. (f) ***Liability.*** (1) Any provision of the CSAPR NO_x Ozone Season Group 3 Trading Program that applies to a CSAPR NO_x Ozone Season Group 3 source or the designated representative of a CSAPR NO_x Ozone Season Group 3 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 3 units at the source. (2) Any provision of the CSAPR NO_x Ozone Season Group 3 Trading Program that applies to a CSAPR NO_x Ozone Season Group 3 unit or

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	the designated representative of a CSAPR NO_X Ozone Season Group 3 unit shall also apply to the owners and operators of such unit. (g) ***Effect on other authorities***. No provision of the CSAPR NO_X Ozone Season Group 3 Trading Program or exemption under §97.1005 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_X Ozone Season Group 3 source or CSAPR NO_X Ozone Season Group 3 unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.
1.4.2	**Testing Requirements:** **A. 40 CFR Part 97 Subpart AAAAA—CSAPR NO_X Annual Trading Program** See Monitoring Requirements. **B. 40 CFR Part 97 Subpart CCCCC - CSAPR SO_2 Group 1 Trading Program** See Monitoring Requirements. **C. 40 CFR Part 97 Subpart GGGGG—CSAPR NO_X Ozone Season Group 3 Trading Program** See Monitoring Requirements.
1.4.3	**Monitoring Requirements:** **A. 40 CFR Part 97 Subpart AAAAA - CSAPR NO_X Annual Trading Program** The Permittee shall comply with the monitoring requirements found in §97.406, §97.430, §97.431, §97.432 and §97.433 for the NO_X Annual Trading Program. **B. 40 CFR Part 97 Subpart CCCCC - CSAPR SO_2 Group 1 Trading Program** The Permittee shall comply with the monitoring requirements found in §97.606, §97.630, §97.631, §97.632, and §97.633. The Permittee operates continuous emission monitoring system (CEMS) pursuant to 40 CFR Part 75, Subpart B (for SO_2 monitoring) and 40 CFR Part 75, Subpart H (for NO_X monitoring). **C. 40 CFR Part 97 Subpart GGGGG—CSAPR NO_X Ozone Season Group 3 Trading Program**

Table IV–1.4: Cross State Air Pollution Rule (CSAPR)	
	The Permittee shall comply with the monitoring requirements found in §97.1006; §97.1030; §97.1031, §97.1032, and §97.1033 for the NO_x Ozone Season Group 3 Trading Program.
1.4.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]** **A. 40 CFR Part 97 Subpart AAAAA - CSAPR NO_x Annual Trading Program** The Permittee shall comply with the recordkeeping requirements found in §97.406, §97.430, and §97.434 for the NO_x Annual Trading Program. **B. 40 CFR Part 97 Subpart CCCCC - CSAPR SO_2 Group 1 Trading Program** The Permittee shall comply with the recordkeeping requirements found in §97.606, §97.630, and §97.634. **C. 40 CFR Part 97 Subpart GGGGG—CSAPR NO_x Ozone Season Group 3 Trading Program** The Permittee shall comply with the recordkeeping requirements found in §97.1006; §97.1030 and §97.1034 for the NO_x Ozone Season Group 3 Trading Program.
1.4.5	**Reporting Requirements:** **A. 40 CFR Part 97 Subpart AAAAA - CSAPR NO_x Annual Trading Program** The Permittee shall comply with the reporting requirements found in §97.406, §97.430, §97.433 and §97.434 for the NO_x Annual Trading Program. **B. 40 CFR Part 97 Subpart CCCCC - CSAPR SO_2 Group 1 Trading Program** The Permittee shall comply with the reporting requirements found in §97.606, §97.630, §97.633 and §97.634. **C. 40 CFR Part 97 Subpart GGGGG—CSAPR NO_x Ozone Season Group 3 Trading Program** The Permittee shall comply with the reporting requirements found in §97.1006; §97.1030 and §97.1034 for the NO_x Ozone Season Group 3 Trading Program.

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

Table IV – 2	
2.0	**Emissions Unit Number(s): EU-2** EU-2: One (1) limestone truck unloading operation controlled by a baghouse.
2.1	**Applicable Standards/Limits** **A. Visible Emissions** 1. **COMAR 26.11.06.02C (1),** which prohibits the discharge of visible emissions from any installation other than water in an uncombined form, which is greater than 20% opacity." [Note: This applies to baghouse discharge]. Exception - COMAR 26.1106.2(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: a. The visible emissions are not greater than 40 percent opacity; and b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period. Note: The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.672 and COMAR 26.11.06.02C (1). 2. **40 CFR §60.672(a),** which prohibits the discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility, any stack emissions which exhibit greater than 7 percent opacity for dry control devices. 3. **40 CFR §60.672(b),** which prohibits the discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility, any fugitive emissions, which exhibit greater than 10 percent opacity, except as provided in paragraphs (d), (e) and (f) of **§60.672**.

Table IV – 2	
	4. **40 CFR 60 Part 60.672(e),** which requires any transfer points on a conveyors belt or any other affected facility enclosed in a building to comply with the emissions limits in paragraph (a) and (b) of **§60.672** or the building enclosing the affected facility or facilities must comply with the emission limits of §60.672(e)(1) and (2). **B. Particulate Emissions from confined sources (baghouse)** 1. **40 CFR §60.672(a),** which prohibits stack emissions, which contain particulate matter in excess of 0.022 gr/scfd (0.05 g/dscm). 2. **PSD Approval No. 94-01A**, which required the limestone unloading baghouse to be designed to achieve a particulate matter emissions limit of 0.002 grains/actual cubic feet. Note: 1 and 2 apply to the baghouse exhaust. For particulate emissions from unconfined sources see Table IV – 10 for requirements relating to fugitive emissions from limestone unloading operations. The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.672 and the PSD limit.
2.2	**Testing Requirements:** **A. Visible Emissions** See monitoring requirement **B. Particulate Emissions from confined sources (baghouse)** See monitoring requirement
2.3	**Monitoring Requirements:** **A. Visible Emissions** The Permittee shall perform a visual observation of the baghouse exhaust and the doors, windows, vents, or other openings in the building for visible emissions once a month for 1 minute. The observations shall be made while affected facilities are operating. If emissions in the exhaust gases are visible, the Permittee shall perform the following:

Table IV – 2	
	1. Inspect all process and/or control equipment that may affect visible emissions; 2. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases or fugitive emissions from the building openings are eliminated; 3. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and 4. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]** **B. Particulate Emissions from confined sources (baghouse)** The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates on which maintenance was performed. **[Authority: COMAR 26.11.03.06C]**.
2.4	**Record Keeping Requirements:** **A. Visible Emissions** The Permittee shall maintain a record of the results of all visual emission observations. **[Authority: COMAR 26.11.03.06C]** **B. Particulate Emissions from confined sources (baghouse)** The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**
2.5	**Reporting Requirements:** **A. Visible Emissions** The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C].**

Table IV – 2	
	B. Particulate Emissions from confined sources (baghouse) The Permittee shall submit maintenance records when requested by the Department. **[Authority: COMAR 26.11.03.06C].**

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

Table IV – 3	
3.0	**Emissions Unit Number(s): EU-3 & EU-4** **EU-3 and EU-4:** Two (2) parallel limestone crushing and drying systems, each comprising of one Raymond roller mill rated at 20 tons per hour, one (1) Eclipse natural gas and No. 2 fuel oil–fired limestone dryer rated at 5 MMBtu/hr. heat input, and a conveyor rated at 30 tons per hour capacity. Emissions are controlled with a bag house.
3.1	**Applicable Standards/Limits :** **A. Visible Emissions** 1. **COMAR 26.11.06.02C(1),** which prohibits the discharge of visible emissions from any installation other than water in an uncombined form, which is greater than 20% opacity. [Baghouse exhaust on Raymond mill and conveyor]. Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: a. The visible emissions are not greater than 40 percent opacity; and b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period. 2. **40 CFR §60.672(a) – NSPS Subpart OOO,** which prohibits the discharge into the atmosphere from any transfer point on belt conveyors or from any other affected facility, any stack emissions which exhibit greater than 7 percent opacity. [Raymond mill controlled with a baghouse].

Table IV – 3

3. **40 CFR 60 Part 60.672(e) - NSPS Subpart OOO,** which requires any transfer point on a conveyer belt or any other affected facility in an enclosed building to comply with the emissions limits of paragraph (a) and (b) of **§60.672** or the building enclosing the affected facility or facilities must comply with the emission limits of §60.672(e)(1) and (2).

   Note: The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.672 and COMAR 26.11.06.02C.

B. Particulate Emissions

1. **40 CFR §60.672(a) - NSPS Subpart OOO,** which prohibits stack emissions which contain particulate matter in excess of 0.022 gr/scfd (0.05 g/dscm).

2. **PSD No. 94-01A,** which requires the Raymond mill/dryer system to be designed to meet a particulate emissions limit of 0.055 lbs/MMBtu heat input.

3. **PSD No. 94-01A,** which requires the fabric filter baghouse on the mill/dryer system to be designed to meet a limit of 0.002 grains/actual cubic feet.

   Note: The same monitoring, record keeping, and reporting strategy will be used to demonstrate compliance with the provisions of 40 CFR 60.672 and the PSD limit.

C. Sulfur Dioxide Emissions

1. **PSD Approval No. 94-01A,** which requires the Raymond mill/limestone dryers to be designed to achieve an SO_2 emissions limit of 0.052 lbs./MMBtu of heat input.

2. **PSD Approval No. 94-01A,** which limit the maximum sulfur content of the fuel to 0.05% by weight.

   Note: The SO_2 limit of 0.052 lbs./MMBtu is equivalent to 0.05% sulfur content by weight.

D. NOx Emissions

Table IV – 3

	1. **PSD Approval # 94-01A,** which requires the Raymond mill and limestone dryers to be designed to achieve a NOx emissions limit of 0.24 lbs./MMBtu of heat input. 2. **COMAR 26.11.09.08B (1) (c),** which sets emission standards in pounds of NOx per MMBtu of heat input. For Gas/Oil-fired units the limit is 0.25 lbs./MMBtu. **E. CO and VOC Emissions** **PSD Approval No. 94-01A,** which requires the Raymond mill/ limestone dryers to be designed to achieve emissions as follows: CO: 0.068 lbs./MMBtu of heat input VOC: 0.002 lbs./MMBtu of heat input **F. Operating Limit** **PSD Approval No. 94-01A**, which limits the combined annual operating hours for both dryers to 8760 hours on a rolling basis.
3.2	**Testing Requirements:** **A. Visible Emissions** See monitoring requirements **B. Particulate Emissions** See monitoring requirements **C. Sulfur Dioxide Emissions** See monitoring requirements **D. NOx Emissions** See monitoring requirements **E. CO and VOC Emissions**

Table IV – 3	
	See monitoring requirements **F. Operating Limit** See monitoring requirements
3.3	**Monitoring Requirements:** **A. Visible Emissions** The Permittee shall visually inspect the exhaust gases from each baghouse stack when the drying and crushing system is operating for visible emissions once a month for 1 minute and shall record the results of each observation. If visible emissions are observed, the Permittee shall perform the following: a. Inspect all process and/or control equipment that may affect visible emissions; b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated; c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and d. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]**. **B. Particulate Emissions** The Permittee shall develop and maintain a preventative maintenance plan, for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates on which maintenance was performed. **[Authority: COMAR 26.11.03.06C].**

Table IV – 3	
	C. Sulfur Dioxide Emissions The Permittee shall obtain fuel supplier, certification indicating that the oil complies with the limitation on sulfur content of the fuel oil **[Authority: COMAR 26.11.03.06C].** **D. NOx Emissions** The Permittee shall perform a combustion analysis for each Eclipse dryer at least once each calendar year and optimize combustion based on analysis **[Authority: COMAR 26.11.03.06C].** **E. CO and VOC Emissions** The Permittee shall properly operate and maintain the Raymond mill/ limestone dryers; and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance. **[Authority: COMAR 26.11.03.06]** **F. Operating Limit:** The Permittee shall keep track of the hours of operation for each limestone dryer so as to determine compliance with the limitation of PSD Approval # 94-01A.
3.4	**Record Keeping Requirements:** **A. Visible Emissions** The Permittee shall maintain a record of the results of all visual emission observations. **[Authority: COMAR 26.11.03.06C].** **B. Particulate Emissions** The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**

Table IV – 3	
	C. Sulfur Dioxide Emissions The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation. **[Authority: COMAR 26.11.03.06C]** **D. NOx Emissions** The Permittee shall maintain records of the annual combustion analyses. **[Authority: COMAR 26.11.03.06C]** **E. CO and VOC Emissions** The Permittee shall maintain log of maintenance performed on the Raymond mill/limestone dryer systems that relate to combustion performance. **[Authority: COMAR 26.11.03.06C]** **F. Operating Limit** The Permittee shall keep monthly records of the daily operating hours of each dryer. **[Authority: PTC 001-6-0136A]**
3.5	**Reporting Requirements:** **A. Visible Emissions** The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C]** **B. Particulate Emissions** The Permittee shall submit maintenance records when requested by the Department. **[Authority: COMAR 26.11.03.06C]** **C. Sulfur Dioxide Emissions** The Permittee shall submit records of sulfur in fuel certifications to the Department upon request. **[Authority: COMAR 26.11.03.06C]**

Table IV – 3	
	D. NOx Emissions The Permittee shall report the results of combustion analyses to the Department upon request. **[Authority: COMAR 26.11.03.06C].** **E. CO and VOC Emissions** The Permittee shall submit records of the maintenance performed on the two limestone dryers upon request by the Department **[Authority: COMAR 26.11.03.06C]** **F. Operating Limit** The Permittee shall submit the hours of operation of the two limestone dryers as an attachment to the annual emissions certification report **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

Table IV – 4	
4.0	**Emission Unit Number(s): EU-5** **EU-5**: Limestone Storage Silo
4.1	**Applicable Standards/Limits :** **A. Visible Emissions** 1. **COMAR 26.11.06.02C (1)** which limits the discharge of visible emissions from any installation other than water in an uncombined form, which is greater than 20% opacity. Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: a. The visible emissions are not greater than 40 percent opacity; and b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

Table IV – 4	
	2. **40 CFR §60.672(a) and (f) –** which prohibits stack emissions which exhibit greater than 7 percent opacity from a baghouse that controls emissions from a single enclosed storage bin. **Note:** The monitoring, record keeping, and reporting strategy to demonstrate compliance with the NSPS opacity standard will be used for the compliance demonstration of the COMAR opacity standard. **B. Particulate Emissions** 1. **PSD Approval No. 94-01A –** which required the fabric filter baghouse to be designed to achieve a particulate matter emissions limit of 0.003 grains/actual cubic feet. 2. **40 CFR §60.672(a) (1) –** NSPS Subpart OOO, which prohibits stack emissions that contain particulate matter in excess of 0.022 gr/dscf (0.05 g/dscm). Note: The monitoring, record keeping and reporting strategy to demonstrate compliance with the PSD BACT limit will be used for the compliance demonstration of the NSPS standard.
4.2	**Testing Requirements:** **A. Visible Emissions** See Monitoring Emissions. **B. Particulate Emissions** See Monitoring Emissions.
4.3	**Monitoring Requirements:** **A. Visible Emissions** The Permittee shall visually inspect the exhaust gases from each baghouse stack when a silo is being filled for visible emissions once a month for 1 minute and shall record the results of each observation. If emissions in the exhaust gases are visible, the Permittee shall perform the following: a. Inspect all process and/or control equipment that may affect visible emissions;

Table IV – 4	
	b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated; c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and **d.** If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C].** **B. Particulate Emissions** The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates on which maintenance was performed. **[Authority: COMAR 26.11.03.06C]**
4.4	**Record Keeping Requirements:** **A. Visible Emissions** The Permittee shall maintain a record of the results of all visual emission observations. **[Authority: COMAR 26.11.03.06C].** **B. Particulate Emissions** The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**
4.5	**Reporting Requirements:** **A. Visible Emissions** The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations". **[Authority: COMAR 26.11.03.06C].**

Table IV – 4	
	B. Particulate Emissions The Permittee shall submit maintenance records when requested by the Department. **[Authority: COMAR 26.11.03.06C].**

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

Table IV – 5	
5.0	**Emissions Unit Number(s): EU-6, EU-7, & EU-8** **EU-6:** Coal truck unloading operation controlled by a baghouse. **EU-7:** Coal processing operation comprising of two crushers, two vibrating feeders, one surge bin, two enclosed reclaim conveyors, one enclosed stockpile conveyor and one enclosed transfer conveyor, each located inside coal crusher building. Emissions are controlled by a baghouse. **EU-8:** Coal storage system consisting of four (4) coal storage silos, controlled by a baghouse.
5.1	**Applicable Standards/Limits :** **A. Visible Emissions** 1. **COMAR 26.11.06.02C(1),** which limits the discharge of visible emissions from any installations, other than water in an uncombined form, which is greater than 20% opacity Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: a. The visible emissions are not greater than 40 percent opacity; and b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period. 2. **40 CFR §60.254(a) – NSPS Subpart Y,** which prohibits visible emissions from the stack, which exhibit greater than 20 percent opacity.

Table IV – 5	
	Note: The monitoring, record keeping, and reporting strategy to demonstrate compliance with the NSPS opacity standard will be used for the compliance demonstration of the COMAR opacity standard. **B. Particulate Emissions from confined sources (baghouses)** **PSD Approval # 94-01A:** which requires the baghouses to be designed to achieve particulate emissions limit of 0.003 grains per actual cubic feet.
5.2	**Testing Requirements:** **A. Visible Emissions** See monitoring requirements **B. Particulate Emissions from confined sources (baghouses)** See monitoring requirements
5.3	**Monitoring Requirements:** **A. Visible Emissions** The Permittee shall visually inspect the exhaust gases from each baghouse stack when coal is being handled or crushed for visible emissions once a month for 1 minute and shall record the results of each observation. If emissions in the exhaust gases are visible, the Permittee shall perform the following: a. Inspect all process and/or control equipment that may affect visible emissions; b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated; c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and d. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C]**

Table IV – 5	
	B. Particulate Emissions from confined sources (baghouses) The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates on which maintenance was performed. **[Authority: COMAR 26.11.03.06C.]**
5.4	**Record Keeping Requirements:** **A. Visible Emissions** The Permittee shall maintain a record of the results of all visual emission observations [**Authority: COMAR 26.11.03.06C].** **B. Particulate Emissions from confined sources (baghouses)** The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. **[Authority: COMAR 26.11.03.06C**].
5.5	**Reporting Requirements:** **A. Visible Emissions** The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C].** **B. Particulate Emissions from confined sources (baghouses)** The Permittee shall submit maintenance records when requested by the Department. [Authority: COMAR 26.11.03.06C].

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

Table IV – 6	
6.0	**Emissions Unit Number(s): EU-9, EU-10, & EU-11** **EU-9**: Bed ash day bin equipped with a baghouse. **EU-10**: Bed ash storage silo equipped with a baghouse. **EU-11**: Fly ash storage silo equipped with a baghouse.
6.1	**Applicable Standards/Limits :** **A. Visible Emissions Limitations** **COMAR 26.11.06.02C (1),** which limits the discharge of visible emissions from any installation other than water in an uncombined form, which is greater than 20% opacity. Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: a. The visible emissions are not greater than 40 percent opacity; and b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period **B. Particulate Emissions** **PSD Approval # 94-01A**, which requires the fabric filter baghouses to be designed to achieve a particulate emissions limit of 0.003 grains/actual cubic feet. **Note:** Particulate Emissions from unconfined sources. See Table IV – 10 for requirements relating to fugitive emissions from the ash handling and load out operations.
6.2	**Testing Requirements:** **A. Visible Emissions Limitations** See Monitoring Requirements **B. Particulate Emissions** See Monitoring Requirements

Table IV – 6	
6.3	**Monitoring Requirements:** **A. Visible Emissions Limitations** The Permittee shall visually inspect the exhaust gases from each baghouse stack when a bin/silo is being filled for visible emissions once a month for 1 minute and shall record the results of each observation. If emissions in the exhaust gases are visible, the Permittee shall perform the following: a. Inspect all process and/or control equipment that may affect visible emissions; b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated; c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and d. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C].** **B. Particulate Emissions** The Permittee shall develop and maintain a preventative maintenance plan for each baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates on which maintenance was performed. **[Authority: COMAR 26.11.03.06C]**
6.4	**Record Keeping Requirements:** **A. Visible Emissions Limitations** The Permittee shall maintain a record of the results of all visual emission observations. **[Authority: COMAR 26.11.03.06C].** **B. Particulate Emissions** The Permittee shall maintain a log of maintenance performed on each baghouse. The log shall be kept on site for at least 5 years and shall be

Table IV – 6	
	made available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**.
6.5	**Reporting Requirements:** **A. Visible Emissions Limitations** The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C].** **B. Particulate Emissions** The Permittee shall submit maintenance records when requested by the Department. **[Authority: COMAR 26.11.03.06C].**

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

Table IV – 7	
7.0	**Emissions Unit Number(s): EU-12** **EU-12:** One diesel engine driven emergency boiler Feed Water Pump rated at 525 bhp.
7.1	**Applicable Standards/Limits :** **A. Visible Emissions :** 1. **COMAR 26.11.09.05E (2)** Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity. 2. **COMAR 26.11.09.05E (3)** Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity. 3. **COMAR 26.11.09.05E (4)** - Exceptions: a. Section E (2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

Table IV – 7

b. Section E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
   i. Engines that are idled continuously when not in service: 30 minutes;
   ii. All other engines: 15 minutes.

c. Section E (2) and (3) does not apply while maintenance, repair, or testing is being performed by qualified mechanics.

B. Particulate Matter Emissions:

PSD Approval No. 94-01A which requires the emergency boiler feed water pump to be designed to achieve a particulate emissions limit of 0.341 lb/MMBtu of heat input.

C. Sulfur Dioxide Emissions:

1. **PSD Approval No. 94-01A,** which requires the emergency boiler feed water pump to be designed to achieve a sulfur dioxide emissions limit of 0.052 lbs./MMBtu of heat input.

2. **PSD Approval No. 94-01A**, which limits the maximum sulfur content of the fuel to 0.05% by weight.

Note: The SO_2 limit of 0.052 lbs./MMBtu is equivalent to 0.05% by weight.

D. NOx Emissions:

1. **COMAR 26.11.09.08G**, which requires a person who owns or operates fuel burning equipment with a capacity factor of 15 percent or less to:
   a. Provide certification of the capacity factor of the equipment to the Department in writing;
   b. For fuel-burning equipment that operates more 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;
   c. Maintain the results of the combustion analysis at the site for at least five years and make these results available to the Department and EPA upon request;

Table IV – 7	
	d. Require each operator of an installation except combustion turbine, to attend at least once every three years, operator training program on combustion optimization that are sponsored by the Department, U.S. EPA, or equipment vendors; and e. Maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request. 2. **COMAR 26.11.09.08K(3)** which requires the Permittee to maintain annual fuel use records on site for at least five years and make records available to the Department upon request. 3. **PSD Approval No. 94-01A**, which requires the emergency boiler feed water pump engine to be designed to achieve a limit of 3.439 lb/MMBtu. **E. CO and VOC Emissions:** **PSD Approval # 94-01A,** which requires the emergency boiler feed water pump engine to be designed to achieve emissions as follows: CO: 0.902 lbs./MMBtu of heat input VOC: 0.098 lbs./MMBtu of heat input **F. Operational Limitations:** The operation of the emergency boiler feed water pump during non–emergency operations is limited to one hour per day and 200 hours per 12 months (rolled monthly). **[Authority: PSD Approval No. 94-01A]**
7.2	**Testing Requirements:** **A. Visible Emissions :** See Monitoring Requirements. **B. Particulate Matter Emissions:** See Monitoring Requirements. **C. Sulfur Dioxide Emissions:**

Table IV – 7	
	See Monitoring Requirements. **D. NOx Emissions:** See Monitoring Requirements. **E. CO and VOC Emissions:** See Monitoring Requirements. **F. Operational Limitations:** See Monitoring Requirements.
7.3	**Monitoring Requirements:** **A. Visible Emissions:** The Permittee shall properly operate and maintain the engine and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance [**Authority: COMAR 26.11.03.06].** **B. Particulate Matter Emissions:** The Permittee shall properly operate and maintain the engine and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance [**Authority: COMAR 26.11.03.06].** **C. Sulfur Dioxide Emissions:** The Permittee shall obtain fuel suppliers' certification indicating that the oil complies with the limitation on sulfur content of the fuel **[Authority: COMAR 26.11.03.06C].** **D. NOx Emissions:** The Permittee shall properly operate and maintain the engine; and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance. [**Authority: COMAR 26.11.03.06].** **E. CO and VOC Emissions:**

Table IV – 7	
	The Permittee shall properly operate and maintain the engine; and shall maintain an operations manual and preventive maintenance plan that relate to combustion performance. [**Authority: COMAR 26.11.03.06].** **F. Operational Limitations:** See Record Keeping Requirements.
7.4	**Record Keeping Requirements:** **A. Visible Emissions:** The Permittee shall maintain log of maintenance performed on the diesel engine that relates to combustion performance. **[Authority: COMAR 26.11.03.06C]** **B. Particulate Matter Emissions:** The Permittee shall maintain log of maintenance performed on the diesel engine that relates to combustion performance. **[Authority: COMAR 26.11.03.06C]** **C. Sulfur Dioxide Emissions:** Maintain records of fuel suppliers' certification for 5 years **[Authority: COMAR 26.11.03.06C].** **D. NOx Emissions:** The Permittee shall maintain log of maintenance performed on the diesel engine that relates to combustion performance. **[Authority: COMAR 26.11.03.06C].** **E. CO and VOC Emissions:** The Permittee shall maintain log of maintenance performed on the diesel engine that relates to combustion performance. **[Authority: COMAR 26.11.03.06C].** **F. Operational Limitations:**

Table IV – 7	
	Maintain records of the hours of operation of the diesel engine for 5 years. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request. **[Authority: PTC No. 001-4-0080 A].**
7.5	**Reporting Requirements:** **A. Visible Emissions:** Report incidents of visible emissions in accordance with condition 4 of Section III "Report of Excess Emissions and Deviation. **[Authority: COMAR 26.11.03.06C]** **B. Particulate Matter Emissions:** See Record Keeping Requirements. **C. Sulfur Dioxide Emissions:** See Record Keeping Requirements. **D. NOx Emissions:** See Record Keeping Requirements. **E. CO and VOC Emissions:** See Record Keeping Requirements. **F. Operational Limitations:** See Record Keeping Requirements.

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

Table IV – 8	
8.0	**Emissions Unit Number(s): EU-17 and EU-18** **EU-17 and EU-18:** Two (2) natural gas-fired space heaters (Temp-Heat Model THP-4500) each rated at 4.5 MMBtu/hr. for providing comfort heat in the boiler room.
8.1	**Applicable Standards/Limits:** **A. NOx Emissions (NOX RACT)** 1. **COMAR 26.11.09.08F(1),** which requires the Permittee or operator of a space heater as defined in regulation .01B of this chapter to: a. Submit to the Department a list of each affected installation on the premises and the type of fuel used in each installation; b. Develop an operating and maintenance plan to minimize NOx emissions based on the recommendations of equipment vendors and other information including the source's operating and maintenance experience; c. Implement the operating and maintenance plans and maintain the plans at the premises for review upon request by the Department; d. Require installation operators to attend in-state operators training program once every three years on combustion optimization that are sponsored by the Department, U.S. EPA, or equipment vendors; and e. Prepare and maintain a record of training program attendance for each operator at the site and make these records available to the Department upon request. **Note**: COMAR 26.11.09.08 states that "for the purpose of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation." 2. **COMAR 26.11.09.08F(2),** which requires the Permittee or operator who owns or operates an installation that no longer qualifies as a space heater to inform the Department not later than 60 days after the date when the fuel burning equipment did not qualify and shall meet the applicable fuel burning equipment RACT requirement in this regulation. 3. **COMAR 26.11.09.08K(3),** which requires the Permittee to maintain annual fuel use records on site for at least five years and make records available to the Department upon request.

Table IV – 8	
	B. Operational Requirement The Permittee shall only burn natural gas in the space heaters unless the Permittee applies for and receives an approval or permit from the Department to burn an alternate fuel. **[Authority: COMAR 26.11.09.04]**
8.2	**Testing Requirements:** **A. NOx Emissions (NOX RACT)** See Monitoring Requirements. **B. Operational Requirement** See Record Keeping Requirements.
8.3	**Monitoring Requirements:** **A. NOx Emissions (NOX RACT)** The Permittee shall develop and implement the operating and maintenance plan and maintain the plan at the premises for review upon request by the Department **[Authority: COMAR 26.11.09.08F(1)(c)].** **B. Operational Requirement** See Record Keeping Requirements.
8.4	**Record Keeping Requirements:** **A. NOx Emissions (NOx RACT)** 1. The Permittee shall maintain the operating and maintenance plan at the premises for review by the Department upon request. **[Authority: COMAR 26.11.09.08F(1)(c)]** 2. The Permittee shall maintain records of the quantity of fuel burned each month and calculations of heat input so as to determine whether the units still qualify as a "Space Heater" **[Authority: COMAR 26.11.03.06C].**

Table IV – 8	
	3. The Permittee shall maintain records of the training program attendance for each operator at the site **[Authority: COMAR 26.11.09.08F(1)(e)].** 4. The Permittee shall maintain annual fuel use records on site for at least five years and make records available to the Department upon request. **[Authority COMAR 26.11.09.08K(3)]** **B. Operational Requirement** The Permittee shall maintain records of the type of fuel burned. **[Authority: COMAR 26.11.02.19C(1)(c)].**
8.5	**Reporting Requirements:** **A. NOx Emissions (NOx RACT)** 1. The Permittee shall inform the Department no later than 60 days after the date when the units no longer qualify as a space heater and shall identify an alternative NOx RACT requirement under COMAR 26.11.09.08 with which the source will comply **[Authority: COMAR 26.11.09.08F(2)].** 2. The Permittee shall submit a list of trained operators and training attendance records to the Department upon request. **[Authority: COMAR 26.11.09.08F(1)(e)].** **B. Operational Requirement** The Permittee shall submit records of fuel use as an attachment to the annual emissions certification. **[Authority: COMAR 26.11.02.19C(2)].**

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

Table IV – 9	
9.0	**Emissions Unit Number(s): EU-19** **EU-19**: One (1) automated coal blending system comprising of a 45-ton feed hopper and a 30-in drag-chain conveyor (Permit No. 011-0203-6-0304).

Table IV – 9

9.1 Applicable Standards/Limits :

A. Visible Emissions

1. **COMAR 26.11.06.02C(1),** which limits the discharge of visible emissions from any installations, other than water in an uncombined form, which is greater than 20% opacity

   Exception- COMAR 26.1106.2C(2) - The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:
   a. The visible emissions are not greater than 40 percent opacity; and
   b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

2. **40 CFR §60.254(b)(1)** – On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008 must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.

Note: The monitoring, record keeping, and reporting strategy to demonstrate compliance with the NSPS opacity standard will be used for the compliance demonstration of the COMAR opacity standard.

3. **40 CFR §60.255(h)** – The Permittee, Owner or Operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, must meet the requirements specified in 40 CFR §60.255(h)(1) through (3).

B. Operating Requirements

The Permittee shall utilize water injection system or other necessary measures as frequently as necessary to prevent fugitive emissions and dust from becoming airborne in accordance with COMAR 26.11.06.03D.

Table IV – 9	
9.2	**Testing Requirements:** **A. Visible Emissions** 1. The Permittee shall conduct the performance tests required in §60.8 using the methods identified in **§60.257** to demonstrate compliance with the applicable emissions standards in this subpart as specified in paragraph (b) (2) of §60.255 **[Authority: 40 CFR §60.255(b)].** 2. As an alternative to meeting the requirements in paragraph (b)(2) of §60.255, the Permittee may elect to comply with the requirements in paragraph (f)(1) of §60.255 **[Authority: 40 CFR §60.255(f)].** **B. Operating Requirements** See monitoring requirements.
9.3	**Monitoring Requirements:** **A. Visible Emissions** 1. The Permittee shall visually inspect the exhaust gases from each baghouse stack when coal is being handled or crushed for visible emissions once a month for 1 minute and shall record the results of each observation. If emissions in the exhaust gases are visible, the Permittee shall perform the following: a. Inspect all process and/or control equipment that may affect visible emissions; b. Perform all necessary repairs and/or adjustments to all processes and/or control equipment, within 48 hours, so that visible emissions in the exhaust gases are eliminated; c. Document, in writing, the results of the inspections and the repairs and/or adjustments made to the processes and/or control equipment; and d. If visible emissions have not been eliminated within 48 hours, the Permittee shall perform a Method 9 observation once daily for an 18-minute period until corrective actions have eliminated the visible emissions. **[Authority: COMAR 26.11.03.06C].** 2. The Permittee shall conduct an initial performance test using Method 9 of Appendix A-4 of this part according to the requirements in paragraphs (h)(1)(i) and (ii). **[Authority: 40 CFR §60.255(h)].**

Table IV – 9	
	a. The Permittee shall conduct opacity readings during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position. **[Authority: 40 CFR §60.255(h)(1)(i)].** b. Compliance with the opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events. **[Authority: 40 CFR §60.255(h)(1)(ii)].** 3. The Permittee shall conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible. [**Authority: 40 CFR §60.255(h)(2].** 4. The Permittee shall conduct a Performance test using Method 9 of Appendix A-4 of this part at least once every 5 calendar years for each affected facility [**Authority: 40 CFR §60.255(h)(3)].** **B. Operating Requirements** See record keeping requirements
9.4	**<u>Record Keeping Requirements:</u>** **A. Visible Emissions** 1. The Permittee shall maintain in a logbook (written or electronic) on-site for at least 5 years and shall be made available to the Department upon request. The logbook shall record the following: a. The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted. b. The date and time of required periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from these actions shall be noted. c. The amount and type of coal processed each calendar month. **[Authority: 40 CFR §60.258(a)] and [Authority: COMAR 26.11.03.06C].**

Table IV – 9	
	2. The Permittee shall maintain a record of the results of all visual emission observations and corrective actions taken to address exceedance including maintenance performed on each affected facility. The log shall be kept on site for at least 5 years and shall be made available to the Department upon request [**Authority: COMAR 26.11.03.06C and 40 CFR §60.258(a)(2)].** **B. Operating Requirements** The Permittee shall maintain a log of the use of water injection system or other measures to prevent fugitive dust from becoming airborne on site for at least 5 years and shall be made available to the Department upon request **[Authority: COMAR 26.11.03.06C**].
9.5	**Reporting Requirements:** **A. Visible Emissions** 1. The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations" **[Authority: COMAR 26.11.03.06C].** 2. The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations." **[Authority: COMAR 26.11.03.06C40 CFR §60.258(a)(2]** **B. Operating Requirements** The Permittee shall submit a log of the use of water injection system or other measures to prevent fugitive dust from becoming airborne upon request by the Department **[Authority: COMAR 26.11.03.06C].**

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

Table IV – 10	
10.0	**Emissions Unit Number(s)** **Facility wide - Control of fugitive particulate emissions** from storage piles, vehicular traffic at the site, and other sources including limestone unloading and handling operations, coal unloading and handling operations, and ash loading and handling operations.
10.1	**Applicable Standards/Limits :** **A. Fugitive Particulate Emissions** 1. **COMAR 26.11.06.03D** – "Particulate Matter from Materials Handling and Construction. A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne." 2. The Permittee shall assure that no more than 203 trucks/day, comprised of coal, limestone, and CO_2, shall be permitted on-site for delivery. **[Reference: Permit to Construct No. 001-3-0127, 0136, & 0067A]**
10.2	**Testing Requirements:** **A. Fugitive Particulate Emissions** See Monitoring Requirements
10.3	**Monitoring Requirements:** **A. Fugitive Particulate Emissions** 1. The Permittee shall implement the facility's written plan that addresses the management program for controlling fugitive dust from storage piles, vehicular traffic at the site, and other sources. **[Authority: COMAR 26.11.03.06C and PTC # 001-3-0127, 6-0136, & 0067 A – Condition C-4]** 2. The Permittee shall monitor and count the number of trucks on the site for delivery each day. **[Authority: COMAR 26.11.03.06C]**

Table IV – 10	
10.4	**Record Keeping Requirements:** **A. Fugitive Particulate Emissions** 1. The Permittee shall maintain on site a written plan that addresses the management program for controlling fugitive dust from storage piles, vehicular traffic at the site, and other unconfined sources. **[Authority: PTC # 01-3-0127, 0136, & 0067 A – condition C-4.].** 2. The Permittee shall maintain a record of the number of coal, limestone, and CO_2 trucks on site for delivery each day. **[Authority: COMAR 26.11.03.06C]**
10.5	**Reporting Requirements:** **A. Fugitive Particulate Emissions** 1. The Permittee shall submit the written plan that addresses the management program for controlling fugitive dust from storage piles, vehicular traffic at the site, and other unconfined sources upon request by the Department **[Authority: COMAR 26.11.03.06C].** 2. The Permittee shall submit, upon request by the Department, a record of the number of coal, limestone, and CO_2 trucks on site for delivery each day. **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements identified for the emissions units listed in the above table.

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(2) ✓ Water cooling towers and water-cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;

(3) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products;

(4) ✓ Brazing, soldering, or welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals and not directly related to plant maintenance, upkeep and repair or maintenance shop activities;

(5) ✓ Equipment for washing or drying products fabricated from metal or glass, provided that no VOC is used in the process and that no oil or solid fuel is burned;

(6) Containers, reservoirs, or tanks used exclusively for:

(a) No. 4 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(b) No. 1 Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;

(c) No. 1 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(7) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meters) or less;

(8) ✓ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks display, and kerosene fuel use;

(9) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

(10) ✓ Laboratory fume hoods and vents;

For the following, attach additional pages as necessary:

(11) Any other emissions unit, not listed in this section, with a potential to emit less than the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe units):

No. 1 Amine (MEA or equivalent) Storage Tank

No. 1 Wastewater Storage Tank from CO_2 Production

No. 1 Hydrochloric Acid Tank

No. 1 Sulfuric Acid Storage Tank

(12) Any other emissions unit at the facility which is not subject to an applicable requirement of the Clean Air Act (list and describe):

No. 2 Anhydrous Ammonia Storage Tanks

No. 2 Sodium Hydroxide Storage Tanks

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

COMAR 26.11.06.08 – Nuisance. "An installation or premises may not be operated or maintained in such a manner that a nuisance or air pollution is created. Nothing in this regulation relating to the control of emissions may in any manner be consumed as authorizing or permitting the creation of, or maintenance of, nuisance or air pollution."

COMAR 26.11.06.09 - Odors. "A person may not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created."

Emissions Unit Number(s): E-1 Boiler Cont'd

E-1: One (1) Atmospheric Circulating Fluidized Bed Boiler (ACFB) with a designed rated capacity of 2070 MMBtu/hr. of heat input burning bituminous coal and No. 2 diesel fuel during start-up. **[3-0127]**

Applicable Standards/Limits:

COMAR 26.11.09.05. – Visible Emissions.
"**A**. Fuel Burning Equipment.
(**4**) Fuel Burning Equipment Required to Operate a COM. The owner or operator of fuel burning equipment that is subject to the requirement to install and operate a COM shall demonstrate compliance with the applicable visible emissions limitation specified in §A(1) and (2) of this regulation as follows:
(a) For units with a capacity factor greater than 25 percent, until December 31, 2009, compliance is achieved if visible emissions do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4 percent of the unit's operating time in any calendar quarter, during which time visible emissions:
(i) Do not exceed 40.0 percent opacity, except for 5.0 hours or 0.5 percent of the unit's operating time, whichever is greater;
(ii) Do not exceed 70.0 percent opacity for more than four (4) 6-minute periods, except that coal-fired units equipped with electrostatic precipitators may exceed 70.0 percent opacity for no more than 2.2 hours; and
(iii) On any calendar day, do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4.1 hours, during

which time visible emissions do not exceed 40.0 percent opacity for more than 1.4 hours and do not exceed 70.0 percent opacity for more than two (2) six-minute periods;
(b) For units with a capacity factor greater than 25 percent, beginning January 1, 2010, compliance is achieved if visible emissions do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 2 percent of the unit's operating time in any calendar quarter, during which time visible emissions:
(i) Do not exceed 40.0 percent opacity, except for 5.0 hours or 0.5 percent of the unit's operating time, whichever is greater;
(ii) Do not exceed 70.0 percent opacity for more than four (4) six-minute periods, except that coal-fired units equipped with electrostatic precipitators may exceed 70.0 percent opacity for no more than 2.2 hours; and
(iii) On any calendar day, do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4.1 hours, during which time visible emissions do not exceed 40.0 percent opacity for more than 1.4 hours and do not exceed 70.0 percent opacity for more than two 6-minute periods;
(c) For units with a capacity factor equal to or less than 25 percent that operate more than 300 hours per quarter, beginning July 1, 2009, compliance with the applicable visible emissions limitation in §A(1) and (2) of this regulation is achieved if, during a calendar quarter, visible emissions do not exceed the applicable standard for more than 20.0 hours, during which time visible emissions:
(i) Do not exceed 40.0 percent opacity for more than 2.2 hours;
(ii) Do not exceed 70 percent for more than four 6-minute periods; and
(iii) On any calendar day, do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4.1 hours, during which time visible emissions do not exceed 40.0 percent opacity for more than 1.4 hours and do not exceed 70.0 percent opacity for more than two 6-minute periods; and
(d) For units with a capacity factor equal to or less than 25 percent that operate 300 hours or less per quarter, beginning July 1, 2009, compliance with the applicable visible emissions limitation in §A(1) and (2) of this regulation is achieved if, during a calendar quarter, visible emissions do not exceed the applicable standard for more than 12.0 hours, during which time visible emissions:
(i) Do not exceed 40.0 percent opacity for more than 2.2 hours;
(ii) Do not exceed 70.0 percent opacity for more than four 6-minute periods; and
(iii) On any calendar day, do not exceed the applicable visible emissions limitation in §A(1) and (2) of this regulation for more than 4.1 hours, during which time visible emissions do not exceed 40.0 percent opacity for more than

1.4 hours and do not exceed 70.0 percent opacity for more than two 6-minute periods.
(5) Notwithstanding the requirements in §A(4) of this regulation, the Department may determine compliance and noncompliance with the visible emissions limitations specified in §A(1) and (2) of this regulation by performing EPA reference Method 9 observations.
(6) In no instance shall excess emissions exempted under this regulation cause or contribute to a violation of any ambient air quality standard in 40 CFR Part 50, as amended, or any applicable requirements of 40 CFR Part 60, 61, or 63, as amended. "

"**B**. Determining Violations.
(1) For each unit required to operate a COM pursuant to COMAR 26.11.01.10A(1)(a) and (b), each day during a calendar quarter when the opacity of emissions from that unit during the calendar quarter or calendar day, as applicable, exceeds the emission limitations in §A(4)(a), (b), (c) and (d) of this regulation shall constitute a separate day of violation.
(2) A violation of §A(4)(a)(i), (ii), or (iii), §A(4)(b)(i), (ii) or (iii), §A(4)(c)(i), (ii) or (iii), or §A(4)(d)(i), (ii) or (iii), of this regulation, as applicable, that occur on the same day shall constitute separate violations.
(3) A daily violation that occurs during the same calendar quarter as a quarterly violation is a separate violation. "

"**C**. Fuel Burning Equipment Subject to Federal COM Requirements.
Except for owners or operators of fuel burning equipment subject to any federal requirement that mandates operation of a COM and as provided in §D of this regulation, the owner or operator of fuel burning equipment required to install and operate a COM may discontinue the operation of the COM on fuel burning equipment that is served by a flue gas desulfurization device:
(1) When emissions from the equipment do not bypass the flue gas desulfurization device serving the equipment;
(2) When the flue gas desulfurization device serving the equipment is in operation;
(3) If the owner or operator has demonstrated to the Department's satisfaction, in accordance with 40 CFR §75.14, as amended, and all other applicable State and federal requirements, that water vapor is present in the flue gas from the equipment and would impede the accuracy of opacity measurements; and
(4) If the owner or operator has fully implemented an alternative plan, approved by the Department, for monitoring opacity levels and particulate matter emissions from the stack that includes:
(a) A schedule for monthly observations of visible emissions from the stack by a person trained to perform Method 9 observations; and
(b) Installation and operation of a particulate matter CEM that complies with all applicable State and federal requirements for particulate matter CEMs. "

"**D.** If, for units equipped with a flue gas desulfurization device, emissions bypass the device and are discharged through a bypass stack, the bypass stack shall be equipped with a COM approved by the Department."

Emissions Unit Number(s): E-1 Boiler Cont'd

E-1: One (1) Atmospheric Circulating Fluidized Bed Boiler (ACFB) with a designed rated capacity of 2070 MMBtu/hr. of heat input burning bituminous coal and No. 2 diesel fuel during start-up. **[3-0127]**

Applicable Regulations:

Management of Coal Combustion Byproducts

COMAR 26.04.10.03B - General Restrictions and Specifically Prohibited Acts.
"(**3**) Air Pollution
A person may not engage in the disposal, storage, transportation, processing, handling, or use of coal combustion byproducts without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, those precautions described in COMAR 26.11.06.03C and D.
(**4**) Transportation.
In addition to the requirements of §B(3) of this regulation, a person may not transport coal combustion byproducts without taking reasonable precautions to control fugitive air emissions relating to the transportation. These reasonable precautions shall include, at a minimum, the following:
(a) Vehicles transporting coal combustion byproducts shall be fully enclosed, or fully enclosed on all sides and covered with a firmly secured canvas or other covering, so as to prevent any coal combustion byproducts from blowing off, falling off, or spilling out of the vehicle, or the coal combustion byproducts shall be handled and transported in sealed containers designed for transportation of powdery solids;
(b) Before leaving a site where coal combustion byproducts are loaded or off-loaded, vehicles transporting coal combustion byproducts shall be rendered clean and free of excess material or debris that could blow off, fall off, or spill during transportation;
(c) Coal combustion byproducts being loaded into or off-loaded from a vehicle shall be sufficiently moistened or otherwise conditioned or contained to prevent

particulate coal combustion byproducts from becoming airborne or causing fugitive air emissions;
(d) Following loading but prior to any transportation of coal combustion byproducts, the transporter shall inspect each vehicle that contains coal combustion byproducts to ensure that the requirements of §B(4) of this regulation are met;
(e) A transporter of coal combustion byproducts shall maintain an inspection log for each vehicle that shall be maintained in the vehicle at all times during transport of coal combustion byproducts, and for 30 days thereafter that shall certify compliance with the standards in §B(4) of this regulation; and
(f) An inspection log maintained by a transporter of coal combustion byproducts shall consist of an entry for each inspection of a vehicle that has been conducted by the transporter. An inspection entry shall consist of the following information:
(i) The date the inspection occurred;
(ii) The time of day the inspection occurred;
(iii) The name of the person conducting the inspection;
(iv) The condition of the vehicle and any corrective action required to ensure compliance with this subsection, for example, "truck cleaned and covered" for a vehicle that meets the requirements, or "cover OK, right side wheels hosed off again" for a vehicle that was properly covered but which required re-cleaning of wheels on the right side; and
(v) The signature of the individual certifying compliance with §B(4) of this regulation.

2. Record Keeping and Reporting:

The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

(a) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

(b) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

Maryland Department of the Environment
Air and Radiation Administration

CO_2 BUDGET TRADING PROGRAM PERMIT

Plant Name: AES Warrior Run	
Affected Trading Units: Unit 1	
Owner: AES WR Limited Partnership	**ORIS Code** 10678
Effective Date: September 1, 2020 To: August 31, 2026	

Contents:

---

1. Statement of Basis

Statutory and Regulatory Authorities: In accordance with Environmental Article §2-401, Annotated Code of Maryland, the Maryland Department of the Environment, Air and Radiation Administration issues this permit pursuant to COMAR 26.09.01 thru COMAR 26.09.04.

Renewal Permit Approval

Christopher R. Hoagland, Director
Air and Radiation Administration

Date of Issue

2. Affected Units

Unit ID #	ARA ID #	Unit Description
Unit 1	3-0127	2070 MMBtu/hr. coal fired AFBC boiler

3. Standard Requirements:

A. Selection and Responsibilities of CO_2 Budget Source Compliance Account Authorized Account Representatives.

(1) Each CO_2 budget source shall have a CO_2 authorized account representative and an alternate CO_2 authorized account representative. (COMAR 26.09.01.04B)

(2) Upon receipt of a complete account certificate of representation:

(a) The CO_2 authorized account representative and alternate CO_2 authorized account representative shall represent and, by representations, actions, inactions, or submissions, legally bind each owner or operator of the CO_2 budget source represented and each CO_2 budget unit at the source in all matters pertaining to this subtitle, notwithstanding any agreement between the CO_2 authorized account representative, alternate CO_2 authorized account representative, and the owners or operators; and

(b) The owners or operators shall be bound by any decision or order issued to the CO_2 authorized account representative or alternate CO_2 authorized account representative by the Department or a court regarding the CO_2 budget source or unit.
(COMAR 26.09.01.04E (1) & (2))

(3) A CO_2 budget permit may not be issued, or a compliance account established for a CO_2 budget source until the Department has received a complete account certificate of representation for a CO_2 authorized account representative and alternate CO_2 authorized account representative of the source and the CO_2 budget units at the source. (COMAR 26.09.01.04F)

(4) Each submission shall be signed and certified by the CO_2 authorized account representative or alternate CO_2 authorized account representative on behalf of each CO_2 budget source and shall include the following statement by the CO_2 authorized account representative or alternate CO_2 authorized account representative: "I am authorized to make the submission on behalf of the owners or operators of the CO_2 budget sources or CO_2 budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in the document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(COMAR 26.09.01.04G)

B. Distribution Of CO_2 Allowances And Compliance

(1) Unless otherwise specified in this chapter, a CO_2 budget source shall demonstrate compliance with its CO_2 budget emissions limitation by holding one CO_2 allowance in its compliance account for every ton of CO_2 that it emits in a control period, by the allowance transfer deadline for that control period. (COMAR 26.09.02.03I(1))

(2) As of the CO_2 allowance transfer deadline for an interim control period, the owners and operators of each CO_2 budget source and each CO_2 budget unit at the source shall hold, in the source's compliance account for deduction under §I of this regulation, CO_2 allowances for no less than 50 percent of the total CO_2 emissions for the interim control period from all CO_2 budget units at the source. (COMAR 26.09.02.03I(2))

(3) Allowances Available for Compliance Deduction. The following CO_2 allowances may be deducted from a compliance account for purposes of complying with a budget source's CO_2 budget emissions limitation for a control period or an interim control period:

(a) CO_2 allowances that are not CO_2 offset allowances and are identified as allowances falling within a prior control period, the same control period, or the same interim control period for which the allowances are deducted;

(b) CO_2 allowances that are held or transferred into the CO_2 budget source's compliance account as of the CO_2 allowance transfer deadline for that control period or for the interim control period contained within that control period;

(c) CO_2 offset allowances that are available to be deducted for compliance during a control period or an interim control period where the quantity of allowances is limited to:

(i) 3.3 percent of the CO_2 budget source's CO_2 emissions for that control period; or

(ii) 3.3 percent of the CO_2 budget source's CO_2 emissions for an interim control period multiplied by 0.50.

(COMAR 26.09.02.03I(3)(a)-(c))

(4) Deduction of CO_2 allowances:

(a) The Department shall deduct allowances from the CO_2 budget source's compliance account until:

(i) The number of CO_2 allowances deducted equals 50 percent of the total CO_2 emissions for an interim control period; or

(ii) The number of CO_2 allowances deducted equals the total CO_2 emissions for the control period.

(b) No deduction shall be made for CO_2 emissions attributable to the burning of eligible biomass. (COMAR 26.09.02.03I(4)(a) & (b))

(5) The identification of available CO_2 allowances for compliance deduction by serial number or by default is as follows:

(a) The CO_2 authorized account representative for a source's compliance account may request that specific CO_2 allowances, identified by serial number for a control period or interim control period, be deducted; and

(b) In the absence of an identification or in the case of a partial identification of available CO_2 allowances by serial number, the Department shall deduct CO_2 allowances for a control period or interim control period in the following descending order:

(i) For the first control period, all CO_2 allowances purchased by direct sale from the Department during years 2009, 2010, and 2011 resulting from the occurrence of the $7 auction clearing price;

(ii) All CO_2 allowances for a control period allocated to a CO_2 budget unit from the Long-Term Contract Set-aside Account or the Clean Generation Set-aside Account;

(iii) Subject to the relevant compliance deduction limitations identified in §I(3)(c) of this regulation, any CO_2 offset allowances transferred and recorded in the compliance account, in chronological order; and

(iv) Any CO_2 allowances, other than those identified in §I(5)(b)(i)—(iii) of this regulation, that are available for deduction in the order they were recorded.
(COMAR 26.09.02.03I(5)(a)-(b))

(6) Deductions for Excess Emissions.

(a) If a CO_2 budget source has excess emissions, the Department shall deduct, from the CO_2 budget source's compliance account, CO_2 allowances from allocation years that occur after the control period or interim control period in which the excess emissions or excess interim emissions occurred, equal to three times the excess emissions.

(b) If a source's compliance account holds insufficient CO_2 allowances to cover the excess emissions, the source shall immediately transfer sufficient allowances into its compliance account.

(c) CO_2 offset allowances may not be deducted to account for the source's excess emissions.

(d) No CO_2 allowance deduction shall relieve the owners or operators of the CO_2 budget units at the

source of liability for any fine, penalty, assessment or obligation to comply with any other remedy, for the same violation, as ordered under applicable State law.
(COMAR 26.09.02.03I(6)(a)-(d))

(7) Guidelines.

(a) The following guidelines apply in assessing fines, penalties, or other obligations:

(i) For purposes of determining the number of days of violation, if a CO_2 budget unit has excess emissions for a control period or interim control period, each day in the control period or interim control period, as applicable, constitutes a separate day of violation unless the owners or operators of the unit can demonstrate to the satisfaction of the Department that a lesser number of days should be considered; and

(ii) The Department shall consider the amount of excess emissions in determining the severity of the violation.

(b) Each ton of excess interim emissions is a separate violation.
(COMAR 26.09.02.03I(7)(a)-(b))

(8) If the CO_2 budget source's compliance account no longer exists, the CO_2 allowances shall be deposited in a general account selected by the owner or operator of the CO_2 budget source.
(COMAR 26.09.02.03I(8))

(9) Adjustments and Errors.

(a) The Department may review and conduct independent audits concerning any submission under this subtitle and make appropriate adjustments to the information, if necessary.

(b) The Department may correct any error in any account and, within 10 business days of making any correction, notify the CO_2 authorized account representative for the account.
(COMAR 26.09.02.03I(9)(a)-(b))

C. Applicability and Administration

(1) The requirements of this permit apply to the owner or operator of a CO_2 budget unit. When this permit establishes a requirement such as the submittal of a permit application, a report, a request for allowances or transfer of allowances, or general information, these actions shall be achieved through the authorized account representative on behalf of the owner or operator of the affected CO_2 budget source or unit.
(COMAR 26.09.02.02A)

(2) The requirements of this subtitle are effective on January 1, 2009 or, for new CO_2 budget units, on the day on which the unit commences operation.
(COMAR 26.09.02.02C).

(3) The provisions of this permit do not exempt or otherwise relieve the owners or operators of a CO_2 budget source from achieving compliance with any other provision of applicable State and federal laws and regulations.
(COMAR 26.09.02.02D).

(4) Unless otherwise stated under this subtitle, any time period scheduled to begin:

(a) On the occurrence of an act or event, begins on the day the act or event occurs; and

(b) Before the occurrence of an act or event, is computed so that the period ends the day before the act or event occurs.
(COMAR 26.09.02.02E)

(5) Unless otherwise stated, if the final day of any time period for performing an act required by this subtitle falls on a weekend or on a State or federal holiday, the time period is extended until or to the next business day.
(COMAR 26.09.02.02F)

D. Permit Requirements

(1) The account representative or designate alternate account representative) of each affected unit at a source, (every fossil fuel fired unit with a nameplate capacity of 25 MW or greater) for that source shall comply with the following:

(a) The CO_2 authorized account representative for the source shall submit an initial CO_2 budget permit application by October 1, 2008, or 12 months before the date on which the CO_2 budget source, or a new unit at the source, commences operation.
(COMAR 26.09.02.04A(2));

(b) The CO_2 budget permit application shall include the following in a format prescribed by the Department: 1) the identification of the CO_2 budget source; 2) plant name and the ORIS (Office of Regulatory Information Systems) or facility code assigned to the source by the Energy Information Administration of the U. S. Department of Energy, if applicable; 3) each CO_2 budget unit at the source; and 4) other information required by the Department.
(COMAR 26.09.02.04A(3))

(c) A CO_2 authorized account representative for the source shall submit a complete application for the renewal of an existing CO_2 budget permit on forms provided by the Department not later than 90 days before the expiration of the current CO_2 budget permit and in accordance with this regulation.
(COMAR 26.09.02.04E)

(2) Each CO_2 budget source shall apply for and have in effect a CO_2 budget permit that contains all applicable requirements.

(COMAR 26.09.02.04A(1)).

(3) The CO_2 budget permit issued by the Department shall be separate but attached to the budget source's Part 70 permit.
(COMAR 26.09.02.04B)

(4) A CO_2 budget permit expires 5 years from the date of issuance by the Department, unless an earlier expiration date is specified in the permit.
(COMAR 26.09.02.04D)

E. Monitoring, Initial Certification and Recertification Requirements

(1) For each control period in which a CO_2 budget source is subject to the CO_2 budget emissions limitation, the CO_2 authorized account representative of the source shall submit a compliance certification report by the March 1 following the relevant control period. A compliance certification report is not required as part of the compliance obligation during an interim control period.
(COMAR 26.09.02.05A(1))

(2) The CO_2 authorized account representative shall include in the compliance certification report the following:

(a) Identification of the source and each CO_2 budget unit at the source;

(b) At the CO_2 authorized account representative's option, the serial numbers of the CO_2 allowances that are to be deducted from the source's compliance account for the control period, including the serial numbers of any CO_2 offset allowances that are to be deducted subject to applicable limitations; and

(c) The compliance certification required by §A(3) of COMAR 26.09.02.05.
(COMAR 26.09.02.05A(2))

(3) In the compliance certification report, the CO_2 authorized account representative shall certify whether the source and each CO_2 budget unit at the source for which the compliance certification is submitted was operated during the control period in compliance with the requirements of this subtitle, including:

(a) Whether each CO_2 budget unit at the source was operated in compliance with the CO_2 budget emissions limitation;

(b) Whether the monitoring plan applicable to each unit at the source: (i) has been maintained to reflect the actual operation and monitoring of the unit; and (ii) contains all information necessary to track CO_2 emissions from the unit;

(c) Whether all CO_2 emissions from each unit at the source were monitored or accounted for

through the missing data procedures and reported in the quarterly monitoring reports, including: (i) whether all conditional data was reported in the quarterly reports; or (ii) if conditional data were reported, whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made;

(d) Whether the basis for certification or for using an excepted monitoring method or approved alternative monitoring method has changed; and

(e) If a change is required to be reported, include: (i) the nature and reasons for the change; (ii) when the change occurred; and (iii) how the unit's compliance status was determined after the change, including the method used to determine emissions when a change mandated the need for monitor recertification.
(COMAR 26.09.02.05A (3) (a)-(e))

(4) The Department, at its discretion, may review and conduct independent audits of any compliance certification or other submission required by this permit.
(COMAR 26.09.02.05B(1))

(5) The Department may deduct CO_2 allowances from, or transfer CO_2 allowances to, a compliance account to correct errors in the account or to accurately reflect CO_2 emissions, based on the information in the compliance certification or other submissions.
(COMAR 26.09.02.05B(2))

(6) The owner or operator of a CO_2 budget unit shall:

(a) Install monitoring systems to monitor CO_2 concentration, stack gas flow rate, oxygen concentration, heat input, and fuel flow rate;

(b) Install all monitoring systems in accordance with 40 CFR Part 75, except for equation G-1 in Appendix G (see below); and

$$W_{CO_2} = \frac{\left(MW_C + MW_{O_2}\right) \times W_C}{2,000\, MW_C} \quad (Eq.\ G\text{-}1)$$

Where:
W_{CO_2}=CO_2 emitted from combustion, tons/day.
MW_C=Molecular weight of carbon (12.0).
MW_{O_2}=Molecular weight of oxygen (32.0)
W_C= Carbon burned, lb./day, determined using fuel sampling and analysis and fuel feed rates.

(COMAR 26.09.02.10A(1)(a)-(c))

(7) Install and certify the monitoring system on or before the following dates:

(a) For a CO_2 budget unit that commences commercial operation before July 1, 2008, the owner or operator shall comply on or before January 1, 2009; and

(b) For a CO_2 budget unit that commences commercial operation or constructs a new stack or flue on or after July 1, 2008, the owner or operator shall comply by January 1, 2009, or 90 operating days after the date on which the unit commences commercial operation.
(COMAR 26.09.02.10A(1)(d))

(8) The owner or operator of a CO_2 budget unit that does not meet the applicable compliance date shall, in accordance with the provisions in 40 CFR §75.31(b)(2) or (c)(3), or §2.4 of Appendix D, determine, record, and report maximum potential or, as appropriate, minimum potential for the following:

(a) CO_2 concentration;

(b) CO_2 emissions rate;

(c) Stack gas moisture content;

(d) Fuel flow rate; and

(e) Any other parameter required to determine CO_2 mass emissions.
(COMAR 26.09.02.10A(2)(a)-(e))

(9) The owner or operator of a CO_2 budget unit that does not meet the applicable compliance date for any monitoring system shall determine, record, and report substitute data using the applicable missing data procedures in 40 CFR Part 75 Subpart D, or Appendix D, instead of the maximum potential values or, as appropriate, minimum potential values for a parameter, if the owner or operator demonstrates that there is continuity between the data streams for that parameter before and after the construction or installation.
(COMAR 26.09.02.10A(3))

(10) An owner or operator of a CO_2 budget unit or a non-CO_2 budget unit monitored under 40 CFR §75.72 (b) (2) (ii) may not:

(a) Use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emissions monitoring system without having obtained prior written approval from the Department;

(b) Operate the unit so as to discharge, or allow to be discharged, CO_2 emissions to the atmosphere without accounting for all emissions in accordance with the applicable provisions of this chapter and 40 CFR Part 75;

(c) Disrupt the operation of the CEMS, any portion of the CEMS, or any other approved emissions

monitoring method, and thereby avoid monitoring and recording CO_2 mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed; or

(d) Permanently discontinue use of the approved CEMS unless the owner or operator monitors emissions with a system approved in accordance with this chapter and 40 CFR Part 75. (COMAR 26.09.02.10A(4)(a)-(d))

(11) For purposes of this subtitle only, the owner or operator of a CO_2 budget unit is exempt from demonstrating compliance with the initial certification requirements of 40 CFR §75.20 for a monitoring system if the following conditions are met:

(a) The monitoring system has been previously certified in accordance with 40 CFR §75.20; and

(b) The applicable quality assurance and quality-control requirements of 40 CFR §75.21 and Appendix B and Appendix D of 40 CFR Part 75 are fully met for the certified monitoring system.
(COMAR 26.09.02.10B(1)(a)-(b))

(12) The recertification provisions of this regulation apply to a monitoring system exempt from the initial certification requirements of this regulation.
(COMAR 26.09.02.10B(2))

(13) If the Department has previously approved a petition under 40 CFR §75.72(b)(2)(ii) or 40 CFR §75.16(b)(2)(ii)(B) pursuant to 40 CFR §75.13 for apportioning the CO_2 emissions rate measured in a common stack or a petition under 40 CFR §75.66 for an alternative requirement in 40 CFR Part 75, the CO_2 authorized account representative shall resubmit the petition to the Department to determine whether the approval applies under this chapter.
(COMAR 26.09.02.10B(3))

(14) The owner or operator of a CO_2 budget unit shall comply with the initial certification and recertification procedures for a CEMS and an excepted monitoring system under 40 CFR Part 75, Appendix D.
(COMAR 26.09.02.10B(4))

(15) The owner or operator of a unit that qualifies to use the low mass emissions excepted monitoring methodology in 40 CFR §75.19 or that qualifies to use an alternative monitoring system under 40 CFR Part 75, Subpart E, shall comply with this regulation.
(COMAR 26.09.02.10 B(5))

(16) When the owner or operator replaces, modifies, or changes a CEMS that the Department determines significantly affects the ability of the system to accurately measure or record CO_2 mass emissions or to meet the quality assurance and quality control requirements of 40 CFR §75.21 or Appendix B, the owner or operator shall recertify the monitoring system according to 40 CFR

§75.20(b).
(COMAR 26.09.02.10C(1))

(17) When the owner or operator replaces, modifies, or changes the flue gas handling system or the unit's operation in a manner that the Department determines has significantly changed the flow or concentration profile, the owner or operator shall recertify the CEMS according to 40 CFR §75.20(b).
(COMAR 26.09.02.10C(2))

(18) Approval Process for Initial Certifications and Recertification. The procedures in 40 CFR §75.20(b)(5) and (g)(7) apply for recertification. The CO_2 authorized account representative shall submit to the Department:

(a) A written notice of the dates of certification; and

(b) A recertification application for each monitoring system, including the information specified in 40 CFR §75.63.
(COMAR 26.09.02.10C(3)(a)-(b))

(19) Provisional certification data for a monitor shall be:

(a) Determined in accordance with 40 CFR §75.20(a)(3);

(b) A provisionally certified monitor may be used for a period not to exceed 120 days after receipt of the complete certification application for the monitoring system or component; and

(c) Data measured and recorded by the provisionally certified monitoring system or component is considered valid quality assured data, retroactive to the date and time of provisional certification, if the Department does not issue a notice of disapproval within 120 days of receipt of the complete certification application.
(COMAR 26.09.02.10C(4)(a)-(c))

(20) The Department shall issue a written notice of approval or disapproval of the certification application to the owner or operator within 120 days of receipt of the complete certification application.
(COMAR 26.09.02.10D(1))

(21) If the Department does not issue the notice within the 120-day period, each monitoring system that meets the applicable performance requirements of 40 CFR Part 75 and is included in the certification application shall be deemed certified for use.
(COMAR 26.09.02.10D(2))

(22) If the certification application is complete and shows that each monitoring system meets the applicable performance requirements of 40 CFR Part 75, the Department shall issue a written notice

of approval of the certification application within 120 days of receipt.
(COMAR 26.09.02.10D(3))

(23) If the certification application is not complete, the Department shall issue a written notice of incompleteness that sets a reasonable date by which the CO_2 authorized account representative is to submit the additional information required to complete the certification application.
(COMAR 26.09.02.10D(4))

(24) If the CO_2 authorized account representative does not comply with the notice of incompleteness by the specified date, the Department may issue a notice of disapproval.
(COMAR 26.09.02.10D(5))

(25) If the Department issues a notice of disapproval of a certification application or a notice of disapproval of certification status, the owner or operator shall substitute the following values for each disapproved monitoring system, for each hour of unit operation during the period of invalid data beginning with the date and hour of provisional certification and continuing until the time, date, and hour specified under 40 CFR §75.20(a)(5)(i) or 75.20(g)(7):

(a) For units using or intending to monitor for CO_2 mass emissions using heat input or for units using the low mass emissions excepted methodology under 40 CFR §75.19, the maximum potential hourly heat input of the unit; or

(b) For units intending to monitor for CO_2 mass emissions using a CO_2 pollutant concentration monitor and a flow monitor, the maximum potential concentration of CO_2 and the maximum potential flow rate of the unit under 40 CFR Part 75, Appendix A, §2.1.
(COMAR 26.09.02.10 D(6)(a)-(b))

(26) The CO_2 authorized account representative shall submit a notification of certification retest dates and a new certification application. The owner or operator shall repeat all certification tests or other requirements that were failed by the monitoring system, as indicated in the Department's notice of disapproval, not later than 30 operating days after the date of issuance of the notice of disapproval.
(COMAR 26.09.02.10D(7))

(27) The owner or operator of a unit qualified to use the low mass emissions excepted methodology under 40 CFR §75.19 shall meet the applicable certification and recertification requirements of 40 CFR §§75.19(a) (2) and 75.20(h).
(COMAR 26.09.02.10E(1))

(28) If the owner or operator of this unit elects to certify a fuel flow meter system for heat input determinations, the owner or operator shall also meet the certification and recertification requirements in 40 CFR §75.20(g).
(COMAR 26.09.02.10E(2))

(29) Certification and Recertification Procedures for Alternative Monitoring Systems. For each unit for

which the owner or operator intends to use an alternative monitoring system approved by the Department, 40 CFR Part 75, Subpart E, shall be used to comply with the applicable notification and application procedures of 40 CFR §75.20(f).
(COMAR 26.09.02.10F)

(30) When any monitoring system fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in 40 CFR Part 75, Subpart D, Appendix D.
(COMAR 26.09.02.10G(1))

(31) Audit Decertification.

(a) Whenever both an audit of a monitoring system and a review of the initial certification or recertification application reveal that any monitoring system should not have been certified or recertified because it did not meet a particular performance specification or the applicable provisions of 40 CFR Part 75, both at the time of the initial certification or recertification application submission and at the time of the audit, the Department shall issue a notice of disapproval of the certification status of the monitoring system.

(b) By issuing the notice of disapproval, the certification status of the monitoring system is prospectively revoked.
(COMAR 26.09.02.10G(2))

(32) The data measured and recorded by the monitoring system may not be considered valid quality-assured data from the date of issuance of the notification of the revoked certification status.
(COMAR 26.09.02.10G(3))

F. Record Keeping and Reporting Requirements

(1) The CO_2 authorized account representative shall comply with all record-keeping and reporting requirements in COMAR 26.09.02.10 and the applicable record-keeping and reporting requirements under 40 CFR §75.73.
(COMAR 26.09.02.11A)

(2) The CO_2 authorized account representative shall submit quarterly reports as described below in this section.
(COMAR 26.09.02.11B(1))

(3) The report shall contain the CO_2 mass emissions data for the CO_2 budget unit in an electronic format, unless otherwise required by the Department, for each calendar quarter beginning with:

(a) The calendar quarter covering January 1, 2009 — March 31, 2009, for a unit that commences commercial operation before July 1, 2008; or

(b) For a unit commencing commercial operation on or after July 1, 2008, the calendar quarter corresponding to the earlier of the: (i) date of provisional certification; or (ii) applicable deadline for initial certification.
(COMAR 26.09.02.11B(2)(a)-(b))

(c) If the quarter is the third or fourth quarter of 2008, reporting shall commence in the quarter covering January 1, 2009 through March 31, 2009.
(COMAR 26.09.02.11B(3))

(4) The CO_2 authorized account representative shall submit each quarterly report within 30 days following the end of the calendar quarter covered by the report and in accordance with 40 CFR Part 75, Subpart H, §75.64 and 40 CFR Part 75, Subpart G except for the opacity, NO_x and SO_2 provisions.
(COMAR 26.09.02.11B(4))

(5) The CO_2 authorized account representative shall submit a compliance certification in support of each quarterly report. The certification shall state that:

(a) The monitoring data submitted were recorded in accordance with the applicable requirements of this chapter and 40 CFR Part 75, including the quality assurance procedures and specifications;

(b) For a unit with add-on CO_2 emissions controls and for all hours where data are substituted in accordance with 40 CFR §75.34(a)(1) , the add-on emissions controls were operating within the range of parameters listed in the quality assurance and quality control program under 40 CFR Part 75, Appendix B, and the substitute values do not systematically underestimate CO_2 emissions; and

(c) The CO_2 concentration values substituted for missing data under 40 CFR Part 75, Subpart D, do not systematically underestimate CO_2 emissions.
(COMAR 26.09.02.11B(5)(a)-(c))

(6) The CO_2 authorized account representative of a CO_2 budget unit may submit a petition to the Department under 40 CFR §75.66 requesting approval to apply an alternative to any requirement of this chapter.
(COMAR 26.09.02.11C)

(7) The CO_2 authorized account representative or alternate CO_2 authorized account representative of a CO_2 budget unit that burns eligible biomass as a compliance mechanism under this chapter shall report the following information for each calendar quarter:

(a) For each shipment of solid eligible biomass fuel fired at the CO_2 budget unit:

(i) Total eligible biomass fuel input, on an as-fired basis, in pounds; and

(ii) The moisture content, on an as-fired basis, as a fraction of weight;

(b) For each distinct type of gaseous eligible biomass fuel fired at the CO_2 budget unit:

(i) The density of the biogas, on an as-fired basis, in pounds per standard cubic foot; and

(ii) The moisture content of the biogas, as a fraction by total weight;

(c) For each distinct type of eligible biomass fuel fired at the CO_2 budget unit:

(i) The dry basis carbon content of the fuel type, as a fraction by dry weight;

(ii) The dry basis higher heating value, in MMBtu per dry pound;

(iii) The total dry basis eligible biomass fuel input, in pounds;

(iv) The total eligible biomass fuel heat input; and

(v) Chemical analysis, including heat value and carbon content;

(d) The total amount of CO_2 emitted from the CO_2 budget unit due to firing eligible biomass fuel, in tons, calculated as in §D(2)(b) of this regulation;

(e) The total heat input to the CO_2 budget unit due to firing eligible biomass fuel, in MMBtu, calculated below; and

(f) Description and documentation of monitoring technology and fuel sampling methodology employed, including sampling frequency.
(COMAR 26.09.02.11 D(1)(a)-(f))

(8) An owner or operator of a CO_2 budget unit shall calculate and submit on a quarterly basis the total dry weight for each distinct type of eligible biomass fired by the CO_2 budget unit during the reporting quarter:

(a) For solid eligible biomass fuel, determined as follows:

$$F_j = \sum_{i=1}^{m} (1 - M_i) x F_i$$

where:
(i) F_j = Total eligible biomass dry basis fuel input (pounds) for fuel type j;
(ii) F_i = Eligible biomass as fired fuel input (pounds) for fired shipment i;
(iii) M_i = Moisture content (fraction) for fired shipment i:
(iv) i = fired fuel shipment;
(v) j = fuel type; and

(vi) m = number of shipments.

(b) For gaseous eligible biomass fuel, as determined as follows:

$$F_j = D_j x V_j x (1 - M_j)$$

where:
(i) F_j = Total eligible biomass dry basis fuel input (pounds) for fuel type j;
(ii) D_j = Density of biogas (pounds/scf) for fuel type j;
(iii) Vj = Total volume (scf) for fuel type j;
(iv) Mj = Moisture content (fraction) for fuel type j; and
(v) j = fuel type
(COMAR 26.09.02.11D(2)(a)-(b))

(9) The amount of CO_2 emissions that is produced from the firing of eligible biomass for any full calendar quarter, during which either no fuel other than eligible biomass is combusted or during which fuels other than eligible biomass are combusted, is determined as follows:

$$CO_2 tons = \sum_{j=1}^{n} F_j x C_j x O_j \left(\frac{44\left(\frac{g}{molCO_2}\right)}{12\left(\frac{g}{molC}\right)} \right) (0.0005)$$

where:
(a) CO_2 tons = CO_2 emissions due to firing of eligible biomass for the reporting quarter;
(b) F_j = Total eligible biomass dry basis fuel input (pounds) for fuel type j, as calculated in §D(2)(a) of this regulation;
(c) C_j = Carbon fraction (dry basis) for fuel type j;
(d) Oj = Oxidation factor for eligible biomass fuel type j, derived for solid fuels based on the ash content of the eligible biomass fired and the carbon content of this ash or for gaseous eligible biomass fuels, a default oxidation factor of 0.995 may be used;

(e) $\dfrac{44\left(\frac{g}{molCO_2}\right)}{12\left(\frac{g}{molC}\right)}$

= The number of tons of carbon dioxide that are created when one ton of carbon is combusted;
(f) 0.0005 = The number of short tons which is equal to one pound;
(g) j = Fuel type; and

(h) n = number of distinct fuel types.
(COMAR 26.09.02.11D(3))

(10) Heat input due to firing of eligible biomass for each quarter shall be determined as follows:

(a) For each distinct fuel type:

$$H_j = F_j x HHV_j$$

where:
(i) H_j = Heat input (MMBtu) for fuel type j;
(ii) F_j = Total eligible biomass dry basis fuel input (pounds) for fuel type j;
(iii) HHV_j = Higher heating value (MMBtu/pound), dry basis, for fuel type j, as determined through chemical analysis;
(iv) j = Fuel type.

(b) For all fuel types:

$$HeatInputMMBtu = \sum_{j=1}^{n} H_j$$

where:
(i) H_j = Heat input (MMBtu) for fuel type j;
(ii) j = fuel type; and
(iii) n = number of distinct fuel types.

Fuel sampling methods and fuel sampling technology shall be consistent with the New York State Renewable Portfolio Standard Biomass Guidebook, September 2011.
(COMAR 26.09.02.11D(4) & D(5))

(11) A CO_2 budget unit shall submit to the Department the megawatt-hour value and a statement certifying that the megawatt-hour of electrical output reported reflects the total actual electrical output for all CO_2 budget units at the facility used by the independent system operator (ISO) to determine settlement resources of energy market participants.
(COMAR 26.09.02.11E(1))

(12) A CO_2 budget unit shall report gross hourly megawatts to the Department in the same electronic data report (EDR) for gross output as submitted to the EPA Administrator, for the operating time in the hour, added for all hours in a year.
(COMAR 26.09.02.11E(2))

(13) A CO_2 budget unit shall submit the net electrical output to the Department in accordance with this regulation. A CO_2 budget source whose electrical output is not used in the independent system operator (ISO) energy market settlement determinations shall propose a method for quantification of net electrical output.

(COMAR 26.09.02.11E(3))

(14) Report of net Steam Output.

(a) CO_2 budget sources selling steam shall use billing meters to determine net steam output or an alternative method to measure net steam output approved by the Department.

(b) If data for steam output is not available, the CO_2 budget source may report heat input, substituting useful steam output for steam output.
(COMAR 26.09.02.11E(4)(a)-(b))

(15) Each CO_2 budget source shall submit an output monitoring plan with a description and diagram that include the following:

(a) If the CO_2 budget unit monitors net electric output, the diagram shall contain all CO_2 budget units and all generators served by each CO_2 budget unit and the relationship between CO_2 budget units and generators;

(b) If a generator served by a CO_2 budget unit is also served by a nonaffected unit, the nonaffected unit and its relationship to each generator shall be indicated on the diagram;

(c) The diagram shall indicate where the net electric output is measured and include all electrical inputs and outputs to and from the plant;

(d) If net electric output is determined using a billing meter, the diagram shall show each billing meter used to determine net sales of electricity and show that all electricity measured at the point of sale is generated by the CO_2 budget units;

(e) If the CO_2 budget unit monitors net thermal output, the diagram shall indicate all steam or hot water coming into the net steam system, including steam from CO_2 budget units and nonaffected units, and all exit points of steam or hot water from the net steam system;

(f) Each input and output stream shall have an estimated temperature, pressure and phase indicator, and an enthalpy in Btu per pound;

(g) The diagram of the net steam system shall identify all useful loads, house loads, parasitic loads, any other steam loads, and all boiler feedwater returns;

(h) The diagram shall represent all energy losses in the system as either usable or unusable losses;

(i) The diagram shall indicate all flow meters, temperature or pressure sensors, or other equipment used to calculate gross thermal output; and

(j) If a sales agreement is used to determine net thermal output, the diagram shall show the

monitoring equipment used to determine the sales of steam.
(COMAR 26.09.02.11F(2)(a)-(j))

(16) The description of the output monitoring system shall include:

(a) A written description of the output system and the equations used to calculate output, and, for net thermal output systems, descriptions and justifications of each useful load;

(b) A detailed description of all quality assurance and quality control activities that will be performed to maintain the output system; and

(c) Documentation supporting any output value to be used as a missing data value if there are periods of invalid output data.

(d) The missing data output value shall be either zero or an output value that is likely to be lower than a measured value and approved as part of the required monitoring plan.
(COMAR 26.09.02.11F(3)(a)-(b))

(17) A certification statement shall be submitted by the CO_2 authorized account representative stating that either:

(a) The output monitoring system consists entirely of billing meters; or

(b) The output monitoring system meets one of the accuracy requirements for nonbilling meters.
(COMAR 26.09.02.11G(1)(a)-(b))

(18) The billing meter shall record the electric or thermal output. Any electric or thermal output values reported shall be the same as the values used in billing for the output.
(COMAR 26.09.02.11G(2))

(19) For nonbilling meters, either the output monitoring system shall meet an accuracy of within 10 percent of the reference value, or each component monitor for the output system shall meet an accuracy of within 3 percent of the full-scale value, whichever is less stringent.
(COMAR 26.09.02.11G(3))

(20) The system approach to accuracy shall include:

(a) A determination of how the system accuracy of 10 percent is achieved using the individual components in the system; and

(b) Data loggers and any wattmeters used to calculate the final net electric output data or any flowmeters for steam or condensate, temperature measurement devices, absolute pressure measurement devices, and differential pressure devices used for measuring thermal energy.
(COMAR 26.09.02.11G(4) (a)-(b))

(21) If, upon testing a piece of output measurement equipment, it is determined that the output readings are not accurate to within 3 percent of the full-scale value, then the equipment shall be repaired or replaced to meet that requirement.
(COMAR 26.09.02.11G(5))

(22) Data is invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test.
(COMAR 26.09.02.11G(6))

(23) Ongoing quality assurance and quality control activities shall be performed in order to maintain the output system.
(COMAR 26.09.02.11H(1))

(24) If billing meters are used to determine output, quality assurance and quality control activities are not required beyond what are already performed.
(COMAR 26.09.02.11H(2))

(25) Certain types of equipment such as potential transformers, current transformers, nozzle and venture type meters, and the primary element of an orifice plate only require an initial certification of calibration and do not require periodic recalibration unless the equipment is physically changed.

(a) Pressure and temperature transmitters accompanying an orifice plate will require periodic retesting.

(b) For other types of equipment, the meter accuracy shall be recalibrated or verified at least once every 2 years, unless a consensus standard allows for less frequent calibrations or accuracy tests.

(c) For nonbilling meters, either the output monitoring system shall meet an accuracy of within 10 percent of the reference value, or each component monitor for the output system shall meet an accuracy of within 3 percent of the full-scale value, whichever is less stringent.

(d) If, upon testing a piece of output measurement equipment, it is determined that the output readings are not accurate to within 3 percent of the full-scale value, then the equipment shall be repaired or replaced to meet that requirement.
(COMAR 26.09.02.11 H(3)(a)-(e))

(26) Out-of-Control Periods.

(a) If, upon testing a piece of output measurement equipment, it is determined that the output readings are not accurate to the certification value, data is invalid until the output measurement equipment passes an accuracy test or is replaced with another piece of equipment that passes the accuracy test.

(b) All invalid data shall be replaced by either zero or an output value that is likely to be lower than a measured value and that is approved as part of the required monitoring plan.
(COMAR 26.09.02.11 H(4)(a)-(b))

(27) The CO_2 authorized account representative shall submit annual output reports, as follows:

(a) Data shall be sent both electronically and in hardcopy by March 1 for the immediately preceding calendar year; and
(COMAR 26.09.02.11I 1))

(28) The annual report shall include unit level megawatt hours, all useful steam output, and a certification statement from the CO_2 authorized account representative stating the following, "I am authorized to make this submission on behalf of the owners and operators of the CO_2 budget sources or CO_2 budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
(COMAR 26.09.02.11I(2))

G. CO_2 Emission Offset Projects

(1) In order to qualify for the award of CO_2 offset allowances, the following offset projects shall satisfy all applicable requirements identified in COMAR 26.09.03 and initially commence on or after December 20, 2005:

(a) Landfill methane capture and destruction;

(b) Reduction in emissions of sulfur hexafluoride (SF_6);

(c) Sequestration of carbon due to afforestation;

(d) Reduction or avoidance of CO_2 emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency; and

(e) Avoided methane emissions from agricultural manure management operations.
(COMAR 26.09.03.02A(1)-(5))

4. Permit Application (See Attachment)