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February 15, 2024

Ms. Jeaneanne Gettle
Acting Regional Administrator
U.S. EPA, Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303

RE: Submittal of the Kentucky State Implementation Plan (SIP) revision, satisfying the Base Year Emissions Inventory requirements for the Partial Counties of Henderson and Webster located within the Kentucky 2010 1-Hour Sulfur Dioxide (SO_2) National Ambient Air Quality Standards (NAAQS).

Dear Ms. Gettle:

On behalf of the Commonwealth of Kentucky, the Energy and Environment Cabinet (Cabinet) submits for approval to the United States Environmental Protection Agency (EPA), the following final SIP revision for the Henderson and Webster Counties 2010 1-hour SO_2 partial nonattainment area (hereinafter "the Area"). On March 26, 2021, EPA designated the Area as partial nonattainment for the 2010 1-hour SO_2 NAAQS. Pursuant to Clean Air Act (CAA) Section 172(a)(2)(A), the Area must achieve attainment by April 30, 2026.

This submittal addresses one of three required elements for nonattainment areas under CAA Section 172(c); an accurate base year emissions inventory of current emissions for all SO_2 sources within the nonattainment area (CAA 172(c)(3)). The base year inventory will be used for the modeling analysis, which will be submitted in a subsequent SIP revision containing the attainment demonstration.

In accordance with 40 CFR 51.102, the proposed SIP revision was available for public review and comment from September 19, 2023, until October 25, 2023. A virtual public hearing was scheduled for October 25, 2023; however, it was canceled due to no request to hold one. If you have any questions regarding this matter, please contact Mr. Michael Kennedy, Director of the Division for Air Quality at (502)782-6997, or michael.kennedy@ky.gov.

Sincerely,

Rebecca W. Goodman
Secretary

Base Year Emissions Inventory for the Partial Counties of Henderson and Webster Located within the Kentucky 2010 1-Hour Sulfur Dioxide Nonattainment Area

Prepared by:
Kentucky Energy and Environment Cabinet
Division for Air Quality
February 2024

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EXECUTIVE SUMMARY

The Kentucky Energy and Environment Cabinet (Cabinet) is proposing a revision to the Commonwealth of Kentucky's State Implementation Plan (SIP) under the federal Clean Air Act (CAA). In the fourth and final set of actions to designate areas of the U.S. for the 2010 sulfur dioxide (SO_2) National Ambient Air Quality Standard (NAAQS), the U.S. Environmental Protection Agency (EPA) formally designated a small portion of Henderson and Webster counties as a single nonattainment area based on relevant quality-assured monitoring data that indicated violations of the 1-hour SO_2 standard. The final area designations were published on March 26, 2021, and became effective April 30, 2021.[1] The designation of the Henderson-Webster nonattainment area (hereinafter "the Area") was included in this action.

Pursuant to Section 172(a)(2)(A) of the CAA, the attainment date for an area designated nonattainment with respect to a national primary ambient air quality standard shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment. Thus, the attainment date for the Area is April 30, 2026.

Kentucky is submitting three separate SIP revisions to address the nonattainment planning requirements for the Area. These SIP revisions will address three separate requirements of the CAA: 1) nonattainment new source review (NNSR) requirements (172(c)(5)); 2) an accurate base year emissions inventory of current emissions for all sources of SO_2 within the nonattainment area (172(c)(3)); and 3) an attainment demonstration that includes a modeling analysis showing that the enforceable emissions limitations and other control measures taken by the Division for Air Quality (Division) will provide for expeditious attainment of the NAAQS for SO_2 (172(c)).

As described below, this SIP revision addresses the base year emissions inventory requirements.

[1] 86 FR 16055

1. Base Year Emissions Inventory

Section 172(c)(3) of the CAA requires that nonattainment plan provisions include a comprehensive, accurate base year inventory of actual emissions from all sources of SO_2 in the nonattainment area. According to the EPA's *Guidance for 1-Hour SO_2 Nonattainment Area SIP Submissions*[2]:

> Emissions inventory and source emission rate data serve as the foundation for modeling and other analyses that enable air agencies to: 1) estimate the degree to which different sources within a nonattainment area contribute to violations within the affected area; and 2) assess the expected improvement in air quality within the nonattainment area due to the adoption and implementation of control measures. The air agency should develop a comprehensive, accurate and current inventory of actual emissions from all sources of SO_2 emissions in each nonattainment area, as well as any sources located outside the nonattainment area which may affect attainment in the area.

The base year emissions inventory is divided into four source categories: point, nonpoint, onroad and nonroad. The Division evaluated what year would most accurately represent the base year of these four emission categories within the Area and narrowed the scope to the years 2017 – 2019, which are the years in which design values were used to initially designate the Area as nonattainment.

The Division chose to use 2017 NEI (National Emissions Inventory) data to represent base year emission levels within the Area for the nonpoint, onroad, and nonroad categories for emissions inventory purposes. The Division chose the year 2018 to represent baseline emissions for the point source category, and relied upon data from the Kentucky Emissions Inventory System (KYEIS) to develop this inventory.

The Division decided to use 2018 point source KYEIS data, instead of 2017 point source NEI data, since it is more recent than the 2017 point source NEI data. Despite being the most recent data, the Division chose not to use 2019 KYEIS point source data due to operational changes that occurred at the BREC facilities in 2019. These operational changes led to emissions reductions in the Area, making 2019 unrepresentative of the base year emissions for point sources within the Area.

Table 1 shows a summary of the base year emissions inventory for the Area, categorized by the emission source types.

[2] EPA, Guidance for 1-Hour SO_2 Nonattainment Area SIP Submissions (April 2014), p.7-8, available at: https://www.epa.gov/sites/default/files/2016-06/documents/20140423guidance_nonattainment_sip.pdf.

Table 1: Base Year SO_2 Emissions Inventory for the Henderson-Webster Nonattainment Area (tpy)

	Point	Nonpoint	Onroad	Nonroad
Henderson County				
Emissions Total County	4,240.18	14.13	0.14	0.40
Area Percent Adjustment (8%)	N/A	1.13	0.01	0.03
Nonattainment Area Emissions	**4,240.18**	**1.13**	**0.01**	**0.03**
Webster County				
Emissions Total County	4,962.91	6.43	0.05	0.16
Area Percent Adjustment (25%)	N/A	1.61	0.01	0.04
Nonattainment Area Emissions	**4,962.91**	**1.61**	**0.01**	**0.04**

Point source data: 2018 KYEIS; Nonpoint, Onroad and Nonroad data: 2017 NEI

Partial county emissions were apportioned to the Area by using a percentage derived from the 2010 Census Bureau Population data. The 2010 census year was selected by the Division as it was the most recent completed full census prior to the 2018 base year. Additionally, there was no census tract population data for the 2020 census at the time the emissions inventory was created. Since only a portion of the land area of each county is included in the Area, shown in Figure 1, partial county emissions were determined by multiplying the emissions for the entire county by the percentage of the population that resides inside the Area (8% for Henderson County and 25% for Webster County). The population residing inside the Area was estimated by reviewing the population data for census blocks located inside of the Area, and a ratio of Census Bureau population data for the county and the Area was calculated, as shown in Table 2.

Figure 1 – Map of the Henderson-Webster Nonattainment Area Boundary

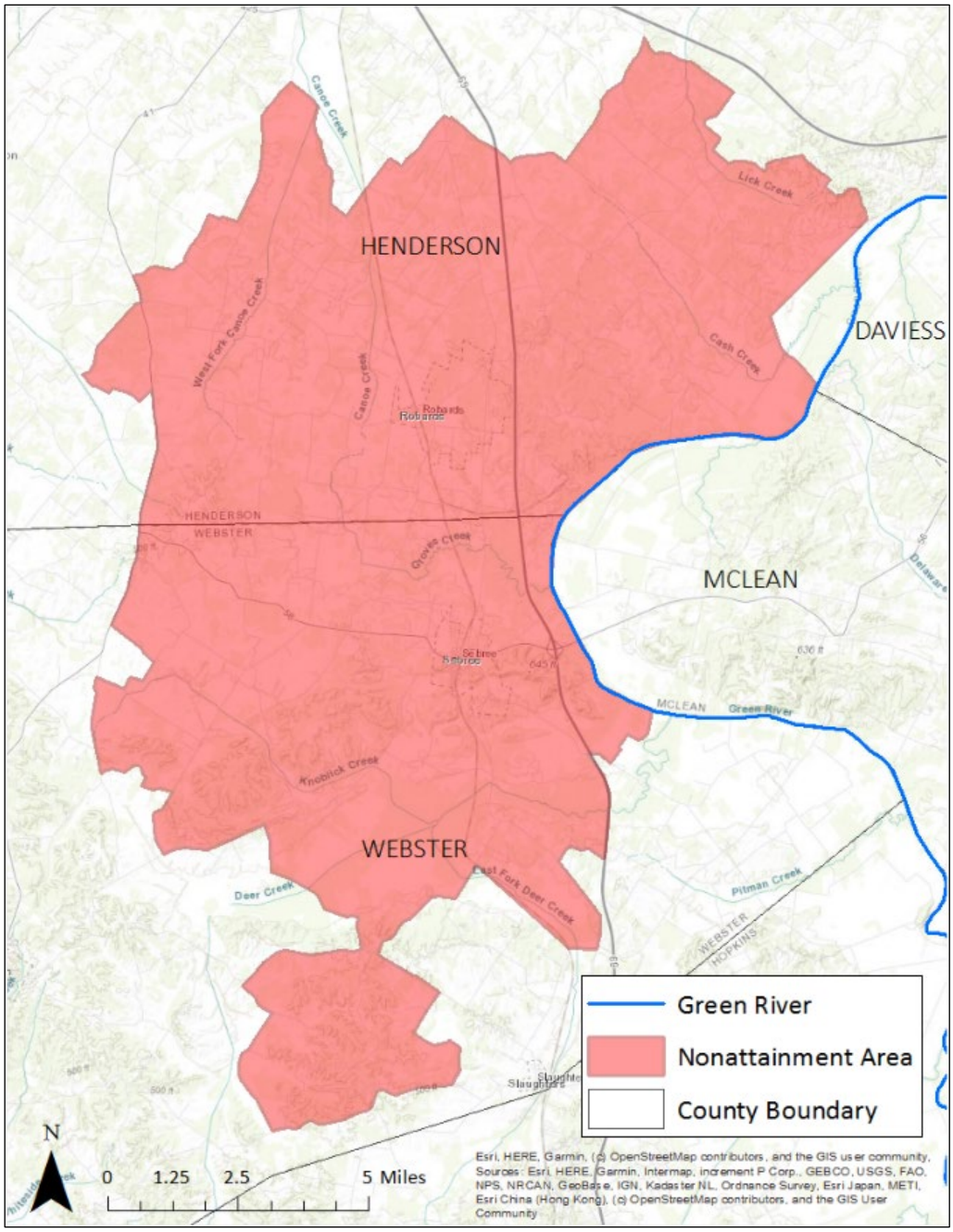


Table 2: County Area Percentages Adjusted by Population for the Henderson-Webster Nonattainment Area

Henderson County
Henderson County population (2010 Census): 46,250 Nonattainment area population (2010 Census): 3,492 (3,492 ÷ 46,250) x 100% = 8%
Webster County
Webster County population (2010 Census): 13,621 Nonattainment area population (2010 Census): 3,438 (3,438 ÷ 13,621) x 100% = 25%

This calculation method for partial counties, which can be found in Appendix A, was applied to nonpoint, onroad, and nonroad source emissions in the Area because the 2017 NEI data for these source categories did not account for partial county emissions.

The Division chose to perform this alternative method to calculate partial county emissions since it is the most reliable and effective method with the resources available at this time. This alternative calculation method has also been used by the Division for estimating nonpoint and nonroad source emissions for prior SIP submittals.

The following sections further describe how data for each emission category was obtained and used. The complete base year emissions inventory can be found in Appendix A.

a. Point Sources

Actual point source electric generating units (EGUs) and non-EGU emissions data for 2018 was obtained from the KYEIS. Since the EGU and non-EGU sources are located specifically within the nonattainment area, calculations to account for partial county emissions were not necessary. Below is a comprehensive analysis of the three largest point sources in the Area, as well as information regarding SO_2 emissions from all point sources in the Area. Overall, this analysis accounts for all point sources in the Area, regardless of the source's SO_2 emission levels.

(i) Century Aluminum Sebree LLC

At the time of EPA's designation of the area as nonattainment, Century Aluminum Sebree LLC (Century Aluminum) operated three primary aluminum potlines and one anode bake furnace (ABF), which are the primary SO_2 emission units of the facility. The emissions from the reduction cells in each potline are captured through hooding systems and are sent to two alumina fluidized bed dry scrubbers, each of which has five reactors. For the three potlines, there are a

total of six alumina fluidized bed dry scrubbers with each one serving half of the pots on a potline.

SO_2 emissions from Century Aluminum are a by-product of the production of primary aluminum. Except for a negligible amount of SO_2 emissions attributable to natural gas combustion, essentially all the SO_2 emitted from the facility comes from the oxidation of sulfur that comes into the plant in the petroleum coke and pitch raw materials. Although dry alumina scrubbers are employed on all the potlines, these air pollution control systems are designed primarily to control gaseous and particulate fluoride emissions. They do not offer any control for SO_2. As a result, to accurately account for the total SO_2 emissions from Century Aluminum, a mass balance basis method has been implemented that uses information known about the total sulfur in the raw materials. To calculate SO_2 emissions each month, Century Aluminum compiles data on the sulfur content contained in the raw petroleum coke and pitch provided from the suppliers. This mass balance approach to determine a facility's SO_2 emissions has historically been termed the "SO_2 Calculation Engine." The SO_2 Calculation Engine has previously been reviewed and approved by the Division and is currently the stipulated method within the facility's Title V permit for calculating actual 12-month rolling average SO_2 emissions.

The Calculation Engine monthly emission estimate is the sum of total anode bake furnace (ABF) emissions and potline emissions. The sulfur input to the ABF is calculated based on (1) the sulfur content and throughput of green anodes (GA) and (2) the sulfur content and usage rate of packing coke (PC). The sulfur output from the furnace is based on the sulfur content and production rate of baked anodes (BA). The difference between the sulfur input to the furnace and sulfur leaving the furnace (in the baked anodes) represents the net sulfur released, which is all assumed to be emitted as SO_2 gas out the A-446 scrubber stacks serving the ABF.

The sulfur that is retained in the baked anodes is assumed to be emitted at the potlines as these anodes are consumed in the pots. The sulfur released is a function of the aluminum production rate, the anode consumption rate (i.e., tons of anode consumed per ton of aluminum produced), and the baked anode sulfur content. A small portion of the sulfur released in the pots (5%) is assumed to be emitted as carbonyl sulfide (COS).[3] Attributing 5% of the sulfur to COS leaves 95% remaining. An example of this calculation using data from September of 2018 is included in Table 3 below:

[3] 40 CFR Part 63, Subpart LL, "PMACT"

Table 3 – September 2018 SO_2 Calculation Engine for Century Aluminum Emissions

ABF SO_2 Emissions (tons/month)
[(11,440 GA ton/mo x 2.20%) + (163 PC ton/mo x 2.91%) – (10,857 BA ton/mo x 2.01%)] x 64 ton SO_2/32 ton S = 76.9
Potlines SO_2 Emissions (tons/month)
18,734 ton Al/mo x 0.414 ton anode/ton Al x 2.01% x (1-5%) x (1-0%) x 64 ton SO_2/32 ton S = 295.7
Total Estimated Emissions (tons/month)
Total ABF + Potline SO_2 Emissions = 76.9 + 295.7 = 372.6

Facility SO_2 emissions totals from 2017 to 2019, determined by the mass balance approach, are demonstrated in Table 4. Facility SO_2 emissions data from 2017 to 2019 is included in Appendix A.

In 2018, SO_2 emissions from Century Aluminum accounted for approximately 46% of all SO_2 emissions in the Area, indicating that at the time the Area was designated nonattainment it was significantly contributing to SO_2 emissions in the Area. Per the facility's Title V operating permit, Century Aluminum has a current SO_2 potential to emit (PTE) of 5,853.432 tons per year (tpy). Table 5 shows a comprehensive list of all SO_2-emitting units at Century Aluminum. While the facility has various emission units, nearly all annual SO_2 emissions come from the anode bake furnace and potlines.

Table 4 – Century Aluminum SO_2 Actual Emission Totals (tpy)

		SO_2 Emissions		
Facility	**Unit**	**2017**	**2018**	**2019**
Century Aluminum – Sebree LLC	N/A	4,629.26	4,239.26	4,314.17
Facility SO_2 Emission Totals		**4,629.26**	**4,239.26**	**4,314.17**

Data retrieved from KYEIS

Table 5 – 2018 Actual and Allowable SO_2 Emissions by Unit for Century Aluminum (tpy)

Equipment ID	Equipment Description	2018 Actual SO_2 Emissions	2018 Allowable SO_2 Emissions
EU-H1(1I)	Homogenizing Furnace	0.0204495	0.035
EU-H2(2I)	Homogenizing Furnace	0.0209085	0.035
EU-H3(3I)	Homogenizing Furnace	0.0192789	0.035
EU-H4(I31))	Homogenizing Furnace	0.0021186	0.036
EU-N2(EE)*	Anode Bake Furnace	0.0990015	0.132
EU-A6(90)	Remelt Furnace	0.0102408	0.166
EU-S5(EI)	Electrode Boiler	0.014982	0.033
EU-S6(EI)	Indirect Heat Exchanger	0.000789	0.033
EU-Z5	Building 001 Emergency Engine	0.0000008	0.000039
EU-Z6	Rock House Emergency Engine	0.0000026	0.000064
EU-Z7	Lift Station Emergency Generator	0.0000018	0.00003
EU-Z2	Caterpillar Emergency Generator	0.0000001	0.000053
EU-Z3	Cummins Emergency Generator	0.0000001	0.000173
EU-Z4	Detroit Diesel Fire Pump Engine	0.0032866	0.0164
EU-Z8	Building 044 Emergency Engine	0.0000004	0.000468
EU-F1(I1-I6)	Holding Furnaces (6)	0.037524	0.237
EU-F2(I7, I8)	Holding Furnaces (2)	0.0265947	0.079
EU-A3**	Building 004 Security Boiler	0.0033	0.0033
EU-A4**	Building 044 Main Building Boiler	0.0044	0.0044
EU-A7**	Building 004 Water Heater	0.0058	0.0058
EU-A9**	Miller Picking Boiler	0.0047	0.0047
EU-I4**	Building 134F Boiler	0.0049	0.0049
SO_2ENG	SO_2 Emissions from Anode Bake & Potlines	4,239	5,853

Actual Emissions were retrieved from KYEIS; Allowable SO_2 Emissions were from permits V-12-015 R4 and V-19-010.

*This accounts for the natural gas combustion contribution only; the remaining SO_2 emissions pertaining to the anode bake furnace are included in the combined anode bake furnace and potline emissions limit (5,853 tpy).

**Units were included in the 2018 permit as Insignificant Activities and were not included in the emissions inventory for that year. Emissions listed in this table are conservative estimates based on the unit's Potential to Emit.

(ii) Big Rivers Electric Corporation – Robert Reid and HMP&L Station 2

When the Area was designated nonattainment, Big Rivers Electric Corporation (BREC) Robert Reid (BREC Robert Reid) had already ceased contributing to SO_2 emissions in the Area. In 2015, the BREC Robert Reid facility was set to transition from using coal-fired burners to new natural gas-fired low NOx burners. The facility ceased operating in May of 2015 to undergo conversion, yet conversions were delayed due to newly implemented Mercury and Air Toxics Standards (MATS). The facility then requested an extension to comply with MATS until 2016 and subsequently maintained construction authority to convert from coal to natural gas. However, the facility did not actually convert, and did not operate, under a permit/application shield, since it could not meet emission limits. BREC Robert Reid's operating authority was revoked on January 17, 2022, when its permit was merged with BREC Green Station; they are now classified as a single source and Unit R1 was removed from the permit. This Title V Significant Permit Revision (V-19-020 R2) can be found in Appendix B (included for reference only).

As reflected in Table 6, emissions data from the facility demonstrates that it has not contributed to SO_2 concentrations within the nonattainment area since it ceased operating in 2015. Facility SO_2 emissions data included in Table 6 can be found in Appendix A. Actual SO_2 emissions and the permitted allowable SO_2 emission rate for Unit R1 at BREC Robert Reid during the 2018 base year are shown in Table 7.

Table 6 – BREC Robert Reid SO_2 Actual Emission Totals (tpy)

		SO_2 Emissions		
Facility	**Unit**	**2017**	**2018**	**2019**
Big Rivers Electric Corporation - Robert Reid	R1	0.00	0.00	0.00
Facility SO_2 Emission Totals		**0.00**	**0.00**	**0.00**

Data retrieved from KYEIS

Table 7 – 2018 SO_2 Actual and Allowable Emissions by Unit for BREC Robert Reid (tpy)

Equipment ID	Equipment Description	Actual Emissions (tpy)	Allowable SO_2 Emission Rate
EU01	(R1) Reid Unit 1	0	5.2 lbs/MMBtu

Actual Emissions were retrieved from KYEIS; Allowable SO_2 Emission Rate is from permit V-11-003 R1

Additionally, BREC Henderson Municipal Power and Light (BREC/HMP&L) Station 2 has also ceased operating. This facility is owned by the city of Henderson and operated by BREC. This partnership has been longstanding due to a series of contracts and amendments thereto (collectively, Station Two Contracts). The Station Two Contracts "include the 1970 Power Sales

Contract, the 1970 Power Plant Construction and Operation Agreement, the 1970 Joint Facilities Agreement, the 1974 System Reserves Agreement, and amendments to the Station Two Contracts that were made in years 1993, 1998, and 2005."[4]

At the time the Area was designated nonattainment, BREC/HMP&L Station 2 was significantly contributing to SO_2 emissions in the Area. However, this facility was retired on February 1, 2019; Appendix C includes a letter documenting the facility's retirement. Table 8 demonstrates the total SO_2 emissions of the facility from 2017 to 2019. Facility emissions data included in Table 8 can be found in Appendix A. Table 9 demonstrates 2018 SO_2 actual emissions emitted by the BREC/HMP&L units along with the permitted allowable SO_2 emission rate for Units H1 and H2. These two units combined emitted only 4% of the permitted allowable SO_2 emission rate. The three emergency units emitted a low amount of SO_2, with the diesel generator and fire pump amounts both being negligible.

Table 8 – BREC/HMP&L Station 2 SO_2 Actual Emission Totals (tpy)

		SO_2 Emissions		
Facility	**Unit**	**2017**	**2018**	**2019**
Big Rivers Electric Corporation - HMP&L Station 2	EU 02	591.47	423.55	7.60
	EU 03	816.58	423.00	9.30
	EU 06	1.27	1.85	2.89
	EU 07	0.01	0.00	0.00
	EU 08	0.00	0.00	0.00
Facility SO_2 Emission Totals		**1,409.33**	**848.40**	**19.79**

Data retrieved from KYEIS

[4] Commonwealth of Kentucky Public Service Commission, CASE NO. 2019-00269, Order, https://psc.ky.gov/order_vault/Orders_2021/201900269_08022021.pdf

Table 9 – 2018 Actual and Allowable SO_2 Emissions by Unit for BREC/HMP&L Station 2 (tpy)

Equipment ID	Equipment Description	Actual Emissions (tpy)	Allowable SO_2 Emission Rate
EU02	(H1) Henderson Sta Unit 1	423.5477526	5.2 lbs/MMBtu
EU03	(H2) Henderson Sta Unit 2	422.9987644	5.2 lbs/MMBtu
EU06*	(RT) Reid Combustion Turbine (Emergency peaking unit)	1.848	N/A
EU07	310 HP Emergency Diesel Generator	0.0041407	N/A
EU08	100 HP Emergency Fire Pump	0.0011805	N/A

Actual emissions were retrieved from KYEIS; allowable SO_2 emission rates were from permit V-11-003 R1
*Note that EU06 is EU12 in permit V-19-020 R2 (Please see Appendix B [included for reference only] for both permits)

(iii) Big Rivers Electric Corporation – Robert D. Green Station

BREC Robert D. Green Station (BREC Green Station) is an electric power generating station consisting of two emission units that are dry bottom wall-fired boilers. The two emission units were coal-fired in 2018, which contributed to significantly higher emissions from this facility during the base year compared to its present emissions levels; both units were converted to natural gas-fired on May 26, 2022. A letter from the facility plant manager documenting the facility's conversion to natural gas can be found in Appendix C.

For the 2018 base year, BREC Green Station emitted 4,114.50 tons of SO_2 annually, contributing to approximately 45% of all SO_2 emissions in the Area. Table 10 demonstrates total SO_2 emissions for all SO_2 emitting units at the facility from 2017 to 2019, which can be found in Appendix A. The comparison of actual SO_2 emissions and permitted allowable SO_2 emission rates for Units G1 and G2 at BREC Green Station during the 2018 base year is shown in Table 11.

Table 10 – BREC Green Station SO_2 Actual Emission Totals (tpy)

		SO_2 Emissions		
Facility	**Unit**	**2017**	**2018**	**2019**
Big Rivers Electric Corporation – R.D. Green Station	G1	2,334.41	2,689.65	2,163.18
	G2	773.72	1,424.85	752.44
Facility SO_2 Emission Totals		**3,108.14**	**4,114.50**	**2,915.62**

Data retrieved from KYEIS. Note that EU09 and EU10 were added in 2020 (V-19-020 R1); both units are less than 1 tpy combined.

Table 11 – 2018 Actual and Allowable SO_2 Emissions by Unit for BREC Green Station

Equipment ID	Equipment Description	Actual Emissions (tpy)	Allowable SO_2 Emission Rate
G1	Indirect Heat Exchanger GREEN UNIT #1	2,689.65	1.2 lb/MMBtu (3-hr avg)
G2	Indirect Heat Exchanger GREEN UNIT #2	1,424.85	0.8 lb/MMBtu (3-hr avg)

Actual Emissions were retrieved from KYEIS; Allowable SO_2 Emission Rates were from permit V-19-020

(iv) Minor Point Sources

The Division identified five minor point sources located within the Area. Table 12 demonstrates 2018 SO_2 emissions for each minor point source facility in the Area, which can be found in Appendix A. Since the SO_2 emissions for these minor point sources cumulatively represent less than one tpy, the Division does not find these sources to significantly contribute to the Area's nonattainment status for the base year.

Table 12 - 2018 SO_2 Emissions for Minor Point Sources within the Henderson-Webster Nonattainment Area

Henderson County	SO_2 Emissions (tpy)
AMG Aluminum North America LLC	0.01
American Tower Corp	0.02
Kentucky 5 Star Energy LLC	0.00
Tyson Chicken Inc. – Robards Facility	0.90
Webster County	**SO_2 Emissions (tpy)**
Tyson Chicken Inc. – Sebree Feed Mill	0.02
Minor Point Source Facilities SO_2 Emission Totals	**0.95**

b. <u>Onroad Sources</u>

Onroad emissions sources consist of onroad vehicles such as automobiles, trucks, motorcycles, and other motor vehicles traveling on public roadways that use gasoline, diesel, and other fuels. Onroad source emissions data for 2017 was developed from emission factors produced by EPA's Motor Vehicle Emission Simulator (MOVES3.0.4) software program using data obtained from

the Kentucky Transportation Cabinet (KYTC), which can be found in Appendix D. Area percent adjustments were applied to account for the nonattainment portions of Henderson and Webster counties. The total adjusted 2017 onroad SO_2 emissions for Henderson County within the Area is 0.01 tpy. The total adjusted 2017 onroad SO_2 emissions for Webster County within the Area is also 0.01 tpy. Collectively, the Area had 0.02 tpy of onroad SO_2 emissions in the 2017 base year. Onroad emissions data for Henderson and Webster counties, along with the area percent adjustments, can be found in Appendix A.

c. Nonpoint Sources/Nonroad Sources

Stationary emissions sources that do not meet the reporting requirements for point sources are classified as nonpoint sources. Nonpoint sources are small-scale stationary industrial, commercial, and residential sources that use materials or perform processes that generate emissions.

Nonroad sources are often referred to as off-road or off-highway vehicles since they do not normally operate on roads or highways. Nonroad sources include agricultural equipment, commercial and industrial equipment, construction and mining equipment, lawn and garden equipment, aircraft and airport equipment, drilling rigs, and locomotives.

Data for nonpoint and nonroad sources was pulled from the EPA 2017 NEI for the counties in the Area. Nonpoint source emissions are estimates calculated as county-wide totals rather than as individual sources. EPA uses the MOVES-NONROAD model to calculate nonroad sources. Area percent adjustments were applied to both source types to account for partial counties as can be seen in Tables 13 and 14; information regarding all nonpoint and nonroad SO_2 emissions data, as well as categorical descriptions of the sources, can be found in Appendix A under the tabs labeled "Henderson 2017 Non-point", "Henderson 2017 Non-road", "Webster 2017 Non-point" and "Webster 2017 Non-road".

Table 13: Henderson County Nonpoint and Nonroad SO_2 Emissions (tpy)

	Nonpoint	Nonroad
Emissions Total County	14.13	0.40
Area Percent Adjustment (8%)	1.13	0.03
Nonattainment Area Emissions	**1.13**	**0.03**

Table 14: Webster County Nonpoint and Nonroad SO_2 Emissions (tpy)

	Nonpoint	Nonroad
Emissions Total County	6.43	0.16
Area Percent Adjustment (25%)	1.61	0.04
Nonattainment Area Emissions	**1.61**	**0.04**

2. Analysis of Base Year Emissions Inventory in the Nonattainment Area

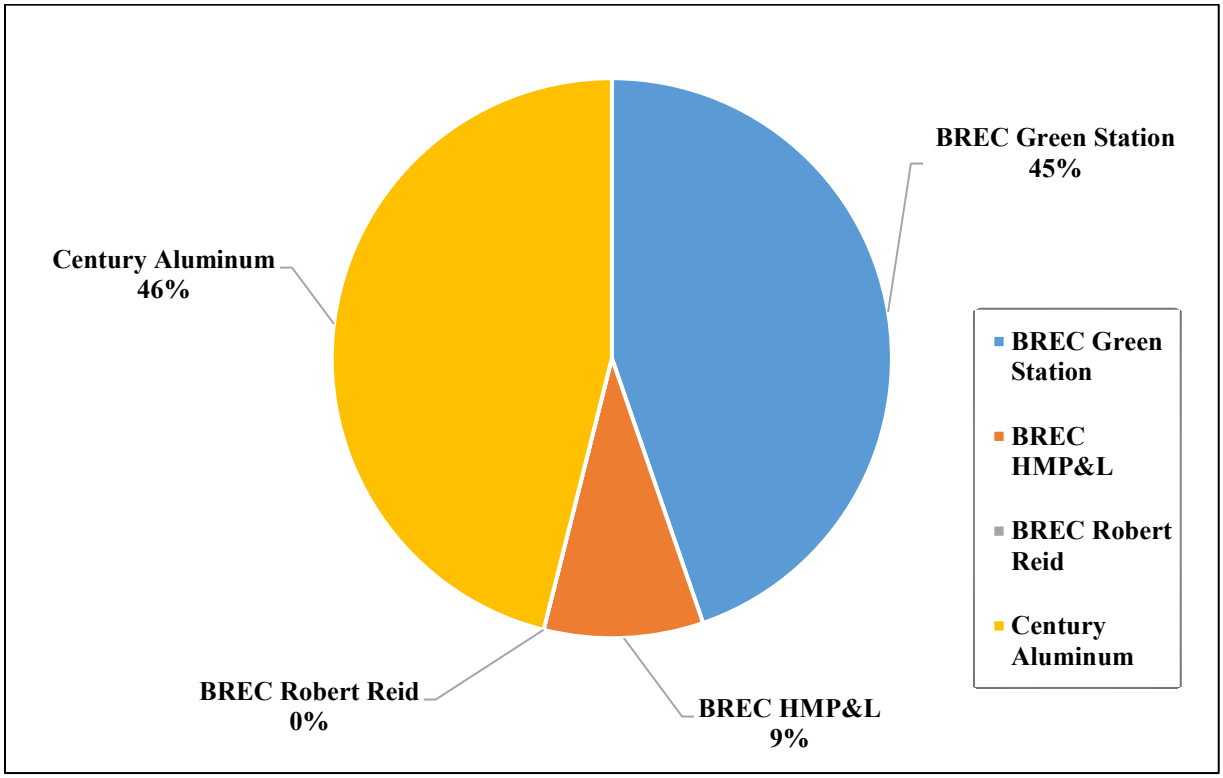
In the Area, point sources account for more than 99 percent of the total emissions of SO_2, as demonstrated in Table 15. Point source emissions totals in Table 15 account for all emissions from the major and minor sources in the Area. Figure 2, below, demonstrates the portion each major source facility contributed to total SO_2 emissions in the Area for the base year.

Table 15: Base Year SO_2 Emissions by Source Sector for the Henderson-Webster Nonattainment Area (tpy)

	Point	Nonpoint	Onroad	Nonroad
Nonattainment Area Emissions	**9,203.09**	**2.74**	**0.02**	**0.07**

Point source data: 2018 KYEIS; Nonpoint, Onroad and Nonroad data: 2017 NEI

Figure 2 – 2018 Actual SO_2 Emissions for Major Point Source Facilities within the Henderson-Webster Nonattainment Area



As evidenced by the base year emissions inventory, the Division recognizes that control measures will be necessary to reduce point source emissions and bring the Area into attainment for the 2010 SO_2 NAAQS. Kentucky's base year emissions inventory for the Area is consistent with EPA's emissions inventory data requirements codified in 40 CFR Part 51, Subpart A. Kentucky's projected attainment year emissions inventory for the Area will be submitted in a separate document with Kentucky's attainment demonstration for the Area.

3. Public Participation

In accordance with 40 CFR 51.102, the SIP revision was available for public review and comment from September 19, 2023 - October 25, 2023.

The SIP revision package was made available on the Division's website during the 37-day comment period from September 19, 2023, until October 25, 2023. A virtual public hearing was scheduled for October 25, 2023, at 10:00 a.m. (EDT). However, due to no request to hold a hearing, it was canceled. The Division received written comments during the public comment period. The Division's response to those comments is provided in Appendix E along with a copy of the public hearing notice.

4. Conclusion

Through this proposed SIP revision, the Division asserts that it has satisfied the base year emissions inventory submission obligation for the Henderson-Webster County, Kentucky 2010 1-hour SO_2 nonattainment area pursuant to the federal CAA Section 172(c)(3) under the 2010 SO_2 NAAQS. Attached with this document is a complete, comprehensive, and accurate inventory of SO_2 emissions in the nonattainment area for the chosen base years. The Division requests that EPA approve this SIP revision for inclusion into Kentucky's State Implementation Plan.

APPENDIX A

Henderson-Webster Base Year Emissions Inventory

Please see attached spreadsheet:

“Henderson-Webster Base Year Emissions Inventory”

APPENDIX B

Title V Significant Permit Revision for Reid/Henderson Station II Generating Station (Permit V-11-003 R1)

Title V Operating Permit for BREC Green Station (V-19-020 R1)

Title V Significant Permit Revision for BREC Green Station (Permit V-19-020 R2)

Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
200 Fair Oaks Lane, 1st Floor
Frankfort, Kentucky 40601
(502) 564-3999

Final

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**Big Rivers Electric Corporation**
Mailing Address:	**201 Third Street, P.O. Box 24, Henderson, KY 42420**
Source Name:	**Reid/Henderson Station II Generating Station**
Mailing Address:	**State Hwy. Jct. 2096/2097 Henderson, KY 42420**
Source Location:	**State Hwy. Jct. 2096/2097**
Permit:	**V-11-003 R1**
Agency Interest:	**4196**
Activity:	**APE20130002**
Review Type:	**Title V / Title IV, Operating**
Source ID:	**21-233-00001**
Regional Office:	**Owensboro Regional Office 3032 Alvey Park Dr. W., Suite 700 Owensboro, KY 42303 (270) 687-7304**
County:	**Webster**
Application Complete Date:	**February 23, 2011**
Issuance Date:	**September 28, 2011**
Revision Date:	**May 27, 2015**
Expiration Date:	**September 28, 2016**

Sean Alteri, Director
Division for Air Quality

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Permit Number	Activity #	Complete Date	Issuance Date	Summary of Action
V-11-003	**APE20100002**	**2/23/2011**	**9/28/2011**	**Title V, Acid Rain Renewal**
V-11-003 R1	**APE20130002**	**11/7/2013**	**5/27/2015**	**Modification to Natural Gas for EU 01**

SECTION A- PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality (Division) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Energy and Environment Cabinet (Cabinet) or any other federal, state, or local agency.

The Division for Air Quality has determined that the Big Rivers Electric Corporation-Reid/Henderson electrical generating station and the Big Rivers Electric Corporation-R.D. Green electrical generating station are one source as defined in 401 KAR 50:020, Permits, and 401 KAR 51:017, Prevention of significant deterioration of air quality. This permit contains requirements for the Reid/Henderson station. Requirements for the R. D. Green station are contained in permit V-05-031 R1.

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit 01: Indirect Heat Exchanger

Description:

Reid Station Unit 1 (R1)
Dry-bottom, wall-fired, pulverized coal-fired unit equipped with electrostatic precipitator and with over fired air (OFA)
No. 2 fuel-oil used for startup and stabilization
Secondary Fuel: pelletized coal fines or petroleum coke
Maximum Continuous Rating: 834 MMBtu/hr
Construction commenced: 1963

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers

401 KAR 51:160, NO_x requirements for large utility

401 KAR 52:060, Acid rain permits

40 CFR 63 Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units [Referenced to in short as the Mercury and Air Toxics Standards (MATS)]

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

40 CFR Part 75, Continuous Emissions Monitoring (CEM)

401 KAR 51:210, CAIR NO_x Annual trading program (See Section K)

401 KAR 51:220, CAIR NO_x ozone season trading program (See Section K)

401 KAR 51:230, CAIR SO_2 Trading program (See Section K)

1. Operating Limitations:

a. The permittee shall comply with all applicable provisions of 40 CFR 63.9991 no later than April 16, 2015. However, the Division has granted an extension until April 16, 2016, in the letter dated January 6, 2015.

i) The permittee must meet the work practice standard and operating limits of 40 CFR 63.9991.

ii) The permittee must be in compliance with the operating limits at all times except during periods of startup or shutdown; however, for coal-fired, liquid oil-fired, or solid oil-derived fuel-fired EGUs, the permittee is required to meet the work practice requirements in Table 3 of MATS during periods of startup or shutdown [40 CFR 63.10000(a)].

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii) At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source [40 CFR 63.10000(b)].

iv) The permittee shall meet the general requirements for complying with 40 CFR 63 Subpart UUUUU according to the applicable provisions of 40 CFR 63.10000(c) through 63.10000(k).

v) In response to an action to enforce the standards set forth in 40 CFR 63.9991 the permittee may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed if the permittee fails to meet the burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief [40 CFR 63.10001].

Compliance Demonstration Method:
Compliance shall be determined by **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements** and **6. Specific Reporting Requirements**.

b. The permittee shall comply with the requirements in Section B for emission unit 01 until completeness of the natural gas burners. Upon completion of the natural gas burners, the permittee shall comply with requirements specified in Section H for emission unit 01.

2. Emission Limitations:

a. Pursuant to 401 KAR 61:015, Section 4(4), particulate matter emissions shall not exceed 0.28 lbs/MMBtu based on a three (3)-hour average.

Compliance Demonstration Method:
Compliance shall be demonstrated by 3.a**. Testing Requirements.**

b. Pursuant to 401 KAR 61:015, Section 4(4), emissions shall not exceed 40 percent opacity based on a six (6)-minute average except:

i. That, a maximum of sixty (60) percent opacity shall be permissible for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes;

ii. Emissions from an indirect heat exchanger shall not exceed forty (40) percent opacity based on a six (6) minute average except during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:
Compliance shall be determined by 4.b. **Specific Monitoring Requirements.**

c. Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emission shall not exceed 5.2 lbs/MMBtu based on a twenty-four (24) hour average.

Compliance Demonstration Method:
Compliance shall be determined by 4.d. **Specific Monitoring Requirements..**

d. See Section D.

e. The permittee shall comply with all applicable provisions of 40 CFR 63.9991 no later than April 16, 2015. However, the Division has granted an extension until April 16, 2016, in the letter dated June 9, 2014.

(i) The permittee must meet the emission limits of 40 CFR 63.9991.

(ii) The permittee must be in compliance with the emission limits at all times except during periods of startup or shutdown. [40 CFR 63.10000(a)]

(iii) The permittee shall demonstrate initial compliance according to the applicable provisions of 40 CFR 63.10005 and 63.10011.

(iv) The permittee shall demonstrate continuous compliance according to the applicable provisions of 40 CFR 63.10006 through 63.10010 and 63.10020 through 63.10023.

Compliance Demonstration Method:
Compliance shall be determined by **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements** and **6. Specific Reporting Requirements**.

3. Testing Requirements:

a. Pursuant to 401 KAR 50:045, the permittee shall submit within six (6) months of the issuance date of permit #V-11-003, a schedule, to conduct a performance test for particulate matter compliance within one (1) year of issuance of permit V-11-003.

b. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. In accordance with sub-Section **4.b Specific Monitoring Requirements**, the permittee shall submit a schedule within six (6) months from the date of issuance of permit #V-11-003 to conduct testing within one (1) year following the issuance of this permit to establish or re-establish the correlation between opacity and particulate emissions.

d. If no additional stack tests are performed pursuant to sub-Section **4.b (ii) Specific Monitoring Requirements**, the permittee shall conduct a performance test for particulate matter emissions by the start of the fourth (4^{th}) year of this permit to demonstrate continued compliance with the applicable standard.

e. If no EPA Reference Method 9 tests are performed pursuant to sub-Section **4.a(ii) Specific Monitoring Requirements**, then the permittee shall determine the opacity of emissions from the stack by Method 9 at least once every fourteen (14) boiler operating days, or more frequently if requested by the Division, to demonstrate compliance with the opacity standard. If no Method 9 test is completed during the time period, the reason for not completing a test shall be documented and the permittee may use the COM system for assuring compliance with the visible emission limitation during that period.

f. The permittee shall demonstrate that compliance has been achieved, by conducting the required performance tests and other activities, no later than 180 days after the applicable extension date (April 16, 2016) [40 CFR 63.9984(f)].

g. The permittee shall comply with all applicable provisions of 40 CFR 63.10005 through 40 CFR 63.10009 and 40 CFR 63.10011.

4 Specific Monitoring Requirements:

a. Pursuant to 401 KAR 61:005, Section 3, Performance Specification 1 of 40 CFR 60, Appendix B, 40 CFR part 64.4 (c) (1), and 401 KAR 52:020, Section 10, a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding exempted time periods, if any three (3) consecutive six-minute (6) average opacity values exceed the applicable opacity standard, the permittee shall, as appropriate:

i. Accept the readout from the COM as an indicator of equipment performance and perform an inspection of the COM and/or the control equipment and make any repairs or;

ii. Within thirty (30) minutes after the third consecutive COM indicated exceedance of the opacity standards, if emissions are visible, initiate a determination of opacity using Reference Method 9 test. Also within thirty (30) minutes after the third consecutive COM indicated exceedance, inspect the COM and/or the control equipment, and initiate any repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Pursuant to 401 KAR 52:020, Section 10, and 401 KAR 61:005, Section 3(6), to meet the monitoring requirement for particulate matter, the permittee shall use a COM.

Pursuant to 40 CFR 64.4(a)(1), opacity shall be used as an indicator of particulate matter emissions and testing shall be conducted to establish the level of opacity that will be used as an indicator of particulate matter emissions. There may be short-term exceedances during the testing period required to establish the opacity indicator level. These exceedances will not be considered noncompliance periods since the testing is required to establish a permit requirement. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level. Excluding exempted time periods:

i. If any three (3) hour opacity value exceeds opacity indicator level, the permittee shall, initiate an inspection of the control equipment and the COM system and make any necessary repairs.

ii. If five (5) percent or greater of the COM data (three (3) hour average of opacity values) recorded in a calendar quarter show excursions above the opacity indicator level, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate matter standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G (5)(a) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance Tests.

c. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor ESP primary/secondary voltages and currents on a daily basis.

d. Pursuant to 401 KAR 61:005, Section 3 and Performance Specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A, and 401 KAR 52:020, Section 10, continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. Pursuant to 40 CFR 64.3(d), the CEMS shall be used to satisfy CAM requirements for sulfur dioxide.

e. Pursuant to 401 KAR 61:015, Section 6 (1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the cabinet.

f. Pursuant to 401 KAR 61:015, Section 6 (3) the rate of fuel burned shall be measured daily or at shorter intervals and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. Where the indirect heat exchanger is used to generate electricity, the average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

g. Pursuant to 401 KAR 61:005, Section 3(4), the Division may provide a temporary exemption from the monitoring and reporting requirements of 401 KAR 61:005, Section 3, for the continuous monitoring system during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

h. Pursuant to 401 KAR 52:020, Section 10, to meet the monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). If any 24-hour average sulfur dioxide emission rate exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.

i. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor and record the date, time, and duration for each startup and shutdown event.

j. See Section D condition 3.

k. The permittee shall comply with all applicable continuous monitoring requirements of 40 CFR 63.10010, 40 CFR 63.10020 and 40 CFR 63.10021.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain files of all information reported in the quarterly summaries, pursuant to 401 KAR 61:005, Section 3(15)(g) and 61:015, Section 6, with the exception that records shall be maintained for a period of five (5) years.

b. Pursuant to KAR 52:020, Section 10, the permittee shall maintain records of:

i. Each fuel analysis;

ii. The rate of fuel burned for each fuel type, on a daily basis;

iii. The heating value and ash content on a weekly basis;

iv. The average electrical output and the minimum and maximum hourly generation rate on a daily basis;

v. When no excess emissions have occurred and when the continuous monitoring system(s) have not been inoperative, repaired, or adjusted;

vi. Data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard;

vii. Results of all compliance tests; and

viii. Percentage of the COM data (excluding exempted time periods) showing excursions above the opacity standard and the opacity indicator level.

c. Pursuant to KAR 52:020, Section 10, records of primary/secondary voltage and current shall be maintained with long-term operational records for a period of five (5) years.

d. Pursuant to KAR 52:020, Section 10, the permittee shall keep visible observation records and Method 9 observations in a designated logbook and/or an electronic format. Records shall be maintained for five (5) years.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. Pursuant to KAR 52:020, Section 10, the permittee shall record the duration of start up.

f. See Section D, condition 3.

g. The permittee shall comply with all applicable recording provisions of 40 CFR 63.10030 through 40 CFR 63.10033.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 61:005, Section 3 (15), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division.

i. Owners or operators of facilities required to install continuous monitoring systems for opacity and sulfur dioxide or those utilizing fuel sampling and analysis for sulfur dioxide emissions shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the emission standard averaging period which is a twenty-four (24) hour averaging period. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.

ii. Owner-operators of facilities required to install continuous monitoring systems for opacity shall submit for every calendar quarter a written report of excess emission and the nature and cause of emissions. The summary shall consist of the magnitude in actual percent opacity of six (6) minute averages of opacity greater than the opacity standard in the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess average of opacity. Opacity data shall be reported in electronic format acceptable to the Division.

iii. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard. The hourly averages shall not appear in the written summary, but shall be provided in electronic format only.

iv. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.

b. The permittee shall report the number of excursions (excluding exempted time periods) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter.

c. For exceedances that occur as a result of startup, the permittee shall report:

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. The type of start-up (cold, warm, or hot);

ii. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations [401 KAR 52:020, Section 10].

d. See Section D.

e. The permittee shall meet the notification requirements in 40 CFR 63.10030 according to the schedule in 40 CFR 63.10030 and in 40 CFR 63 subpart A. Some of the notifications must be submitted before complying with the emission limits and work practice standards in MATS. [40 CFR 63.9984 (c)]

f. The permittee shall comply with all applicable reporting provisions of 40 CFR Part 63.10030 through 40 CFR 63.10033.

7. Specific Control Equipment Operating Conditions:

a. The electrostatic precipitator (ESP) shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or good operating practices [401 KAR 52:055].

b. Records regarding the maintenance of the control equipment shall be maintained. [401 KAR 52:020, Section 10].

c. See Section E - Control Equipment Conditions for further requirements.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 02: Indirect Heat Exchanger

Description:

Henderson Station Unit 1 (H1)
Dry-bottom, wall-fired, pulverized coal-fired unit equipped with electrostatic precipitator (ESP), Low NO_x burners (LNB), flue gas desulfurization (FGD) & selective catalytic reduction (SCR).
No. 2 fuel-oil used for startup and stabilization
Secondary Fuels: pelletized coal fines or petroleum coke
Maximum Continuous Rating: 1,568 MMBtu/hour
Construction commenced: 1970

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers

401 KAR 51:160, NO_x requirements for large utility

401 KAR 52:060, Acid rain permits

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

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

40 CFR Part 75, Continuous Emissions Monitoring (CEM)

401 KAR 51:210, CAIR NO_x Annual trading program (See Section K)

401 KAR 51:220, CAIR NO_x ozone season trading program (See Section K)

401 KAR 51:230, CAIR SO_2 Trading program (See Section K)

1. Operating Limitations:

a. The permittee shall comply with the applicable work practice and operating limitations of 40 CFR 63 Subpart UUUUU no later than April 16, 2015 [40 CFR 63.9984(b)]. However, the Division has granted an extension until April 16, 2016, in the letter dated January 6, 2015.

i) The permittee must meet the work practice standard and operating limits of 40 CFR 63.9991.

ii) The permittee must be in compliance with the operating limits at all times except during periods of startup or shutdown; however, for coal-fired, liquid oil-fired, or solid oil-derived fuel-fired EGUs, the permittee is required to meet the work practice requirements in Table 3 of 40 CFR Subpart UUUUUU during periods of startup or shutdown [40 CFR 63.10000(a)].

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii) At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source [40 CFR 63.10000(b)].

iv) The permittee shall meet the general requirements for complying with 40 CFR 63 Subpart UUUUU according to the applicable provisions of 40 CFR 63.10000(c) through 63.10000(k).

v) In response to an action to enforce the standards set forth in 40 CFR 63.9991 the permittee may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed if the permittee fails to meet the burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief [40 CFR 63.10001].

Compliance Demonstration Method:
Compliance shall be determined by **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements** and and **6. Specific Reporting Requirements**.

2. Emission Limitations:

a. Pursuant to 401 KAR 61:015, Section 4(4), particulate matter emissions shall not exceed 0.21 lbs/MMBtu based on a three (3)-hour average.

Compliance Demonstration Method:
Compliance shall be demonstrated by **3.a. Testing Requirements.**

b. Pursuant to 401 KAR 61:015, Section 4(4), emissions shall not exceed 40 percent opacity based on a six-minute average except:

i. That, a maximum of sixty (60) percent opacity shall be permissible for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes;

ii. Emissions shall not exceed 40 percent opacity based on a six (6) minute average except during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

Compliance Demonstration Method:
Compliance shall be demonstrated by 4.b. **Specific Monitoring Requirement.**

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emission shall not exceed 5.2 lbs/MMBtu.

Compliance Demonstration Method:
Compliance shall be demonstrated by 4.e. **Specific Monitoring Requirement.**

d. See Section D-Source Emission Limitation and Testing Requirements.

e. The permittee shall comply with the applicable emission limits of 40 CFR 63 Subpart UUUUU no later than April 16, 2015 [40 CFR 63.9984(b)]. However, the Division has granted an extension until April 16, 2016, in the letter dated January 6, 2015.

i) The permittee must meet the emission limits of 40 CFR 63.9991.

ii) The permittee must be in compliance with the emission limits at all times except during periods of startup or shutdown [40 CFR 63.10000(a)].

iii) The permittee shall demonstrate initial compliance according to the applicable provisions of 40 CFR 63.10005 and 63.10011.

iv) The permittee shall demonstrate continuous compliance according to the applicable provisions of 40 CFR 63.10006 through 63.10010 and 63.10020 through 63.10023.

Compliance Demonstration Method:
Compliance shall be determined by **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements** and **6. Specific Reporting Requirements**.

3. Testing Requirements:

a. Pursuant to 401 KAR 50:045, the permittee shall submit and schedule within six (6) months of the issuance date of permit #V-11-003, a schedule, to conduct a performance test for particulate matter compliance within one (1) year of issuance of permit # V-11-003.

b. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

c. In accordance with sub-Section **4.b Specific Monitoring Requirements**, the permittee shall submit a schedule within six (6) months from the date of issuance of permit #V-11-003 to conduct testing within one year (1) following the issuance of permit # V-11-003 to establish or re-establish the correlation between opacity and particulate matter emissions.

d. If no additional stack tests are performed pursuant to sub-Section **4.b (ii) Specific Monitoring Requirements**, the permittee shall conduct a performance test for particulate matter emissions

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

by the start of the fourth (4^{th}) year of this permit to demonstrate compliance with the applicable standard.

e. If no EPA Reference Method 9 tests are performed pursuant to sub-Section **4.a(ii) Specific Monitoring Requirements**, then the permittee shall determine the opacity of emissions from the stack by Method 9 at least once every fourteen (14) boiler operating days, or more frequently if requested by the Division, to demonstrate compliance with the opacity standard. If no Method 9 test is completed during the time period, the reason for not completing a test shall be documented and the permittee may use the COM system for assuring compliance with the visible emission limitation during that period.

f. The permittee shall demonstrate that compliance has been achieved, by conducting the required performance tests and other activities, no later than 180 days after the applicable extension date (April 16, 2016) [40 CFR 63.9984(f)].

g. The permittee shall comply with all applicable provisions of 40 CFR 63.10005 through 40 CFR 63.10009 and 40 CFR 63.10011.

4. Specific Monitoring Requirements:

a. Pursuant to 401 KAR 61:005, Section 3, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 10 a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding exempted time periods, if any three consecutive six-minute average opacity values exceed the opacity standard, the permittee shall, as appropriate:

i. Accept the readout from the COM as an indicator of equipment performance and perform an inspection of the COM and/or the control equipment and make any repairs or;

ii. Within thirty (30) minutes after the third consecutive COM indicated exceedance of the opacity standards, if emissions are visible, initiate a determination of opacity using Reference Method 9. Also within thirty (30) minutes after the third consecutive COM indicated exceedance, inspect the COM and the control equipment, and initiate any repairs. If a Method9 cannot be performed, the reason for not performing the test shall be documented.

b. Pursuant to 401 KAR 52:020, Section 10, and 401 KAR 61:005, Section 3(6), to meet the monitoring requirement for particulate matter, the permittee shall use a COM. Pursuant to 40 CFR 64.4(a)(1), opacity shall be used as an indicator of particulate matter emissions and testing shall be conducted to establish the level of opacity that will be used as an indicator of particulate matter emissions. There may be short-term exceedances during the testing period required to establish the opacity indicator level. These exceedances will not be considered noncompliance periods since the testing is required to establish a permit requirement. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.
Excluding exempted time periods:

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. If any three (3) hour opacity value exceeds the opacity indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs.

ii. If five (5) percent or greater of the COM data (three (3) hour average of values) recorded in a calendar quarter show excursions above the applicable limit, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G (5)(a) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance Tests.

c. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor ESP primary/secondary voltages and currents on a daily basis.

d. Pursuant to 401 KAR 52:020, Section 10, as an alternative to monitoring strategies (a) and (b), above, and 3. Testing Requirement, paragraph c to meet the compliance assurance monitoring requirement of 40 CFR 64.4(a)(1) and demonstrate continuing compliance with the particulate matter standard, the permittee shall use a particulate matter continuous emissions monitor (PM CEM). The PM CEM shall comply with Performance Specification 11 of Appendix B to 40 CFR 60 and ongoing quality assurance requirements per 40 CFR 60 Appendix F, Procedure 2. Opacity monitoring required in subsection (a) above excluding subparagraphs (i) and (ii) shall only be used to indicate proper operation of the ESP. Compliance with the opacity standard shall be by Reference Method 9 performed at least once every fourteen (14) boiler operating days. If a Method 9 cannot be performed the reason for not performing the test shall be documented.

e. Pursuant to 401 KAR 61:005, Section 3 and material incorporated by reference in 401 KAR 52:020, Section 10, continuous emission monitoring (CEM) systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. The continuous emission monitoring systems shall comply with 401 KAR 61:005, Section 3, particularly, Performance Specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A. Pursuant to 40 CFR 64.3(d), the CEMS shall be used to satisfy CAM requirements for sulfur dioxide.

f. Pursuant to 401 KAR 61:015, Section 6 (1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the cabinet.

g. Pursuant to 401 KAR 61:015, Section 6 (3) the rate of fuel burned shall be measured daily or at shorter intervals and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. The average electrical output and the minimum and maximum hourly generation rate shall be measured and recorded daily.

h. Pursuant to 401 KAR 61:005, Section 3(4), the Division may provide a temporary exemption from the monitoring and reporting requirements of 401 KAR 61:005, Section 3, for the continuous monitoring system during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. Pursuant to 401 KAR 52:020, Section 10, to meet the monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). If any twenty-four (24) hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.

j. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor and record the date, time, and duration for each startup and shutdown event.

k. See Section D condition 3.

l. The permittee shall comply with all applicable continuous monitoring requirements of 40 CFR 63.10010, 40 CFR 63.10020 and 40 CFR 63.10021.

5. Specific Recordkeeping Requirements:

a. In accordance with 401 KAR 61:005, Section 3(15)(f) and 61:015, Section 6, the owner or operator shall maintain a file of all information reported in the quarterly summaries, with the exception that records shall be maintained for a period of five (5) years.

b. Pursuant to 401 KAR 52:020, Section 10, the permittee shall maintain records of:

i. Each fuel analysis;

ii. The rate of fuel burned for each fuel type, on a daily basis;

iii. The heating value and ash content on a weekly basis;

iv. The average electrical output and the minimum and maximum hourly generation rate on a daily basis;

v. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted;

vi. Data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard;

vii. Results of all compliance tests; and

viii. Percentage of the COM data (excluding exempted time periods) showing excursions above the opacity standard and the opacity indicator level.

c. Pursuant to KAR 52:020, Section 10, records of ESP primary/secondary voltage and current shall be maintained with long-term operational records for a period of five (5) years.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. Pursuant to 401 KAR 52:020, Section 10, the permittee shall keep visible observation records and Method 9 observations in a designated logbook and/or an electronic format. Records shall be maintained for five (5) years.

e. Pursuant to 401 KAR 52:020, Section 10, the permittee shall record the date, time, and duration for each startup and shutdown event.

f. See Section D, condition 3.

g. Pursuant to 401 KAR 52:020, Section 10, the permittee shall maintain a daily operations check sheet to verify proper operation of the ESP. During periods when the opacity monitor is out of service, the check sheet shall be completed on an hourly basis.

For particulate and opacity by alternate operating scenario using PM CEMS,

h. Pursuant to 401 KAR 52:020, Section 10, the permittee shall maintain records of the PM CEMs data and the number of excursions above the particulate emission standard, time and date of the excursions, and particulate matter emission value (lbs/MMBtu) of the excursions in each calendar quarter.

i. The permittee shall comply with all applicable recording provisions of 40 CFR 63.10030 through 40 CFR 63.10033.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 61:005, Section 3 (15), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division.

i. The permittee required to install continuous monitoring systems for opacity and sulfur dioxide or those utilizing fuel sampling and analysis for sulfur dioxide emissions shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the emission standard averaging period which is a twenty-four (24) hour averaging period. All quarterly reports shall be postmarked by the thirtieth (30^{th}) day following the end of each calendar quarter.

ii. The permittee required to install continuous monitoring systems for opacity shall submit for every calendar quarter a written report of excess emission and the nature and cause of emissions. The summary shall consist of the magnitude in actual percent opacity of six (6) minute averages of opacity greater than the opacity standard in the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess average of opacity. Opacity data shall be reported in electronic format acceptable to the Division.

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard. The hourly averages shall not appear in the written summary, but shall be provided in electronic format only.

iv. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.

b. The permittee shall report the number of excursions (excluding exempted time periods) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter if the PM CEMS is not utilized as the particulate compliance monitoring method.

c. For exceedances that occur as a result of startup, the permittee shall report:

i. The type of start-up (cold, warm, or hot);

ii. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations [401 KAR 52:020, Section 10].

d. See Section D.

e. The permittee shall meet the notification requirements in 40 CFR 63.10030 according to the schedule in 40 CFR 63.10030 and in 40 CFR 63 subpart A. Some of the notifications must be submitted before complying with the emission limits and work practice standards in 40 CFR 63 Subpart UUUUUU. [40 CFR 63.9984 (c)]

f. The permittee shall comply with all applicable reporting provisions of 40 CFR Part 63.10030 through 40 CFR 63.10033.

7. Specific Control Equipment Operating Conditions:

a. The electrostatic precipitator (ESP), flue gas desulfurization unit (FGD), low NOx burner and selective catalytic reduction (SCR) system shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and good operating practices [401 KAR 50:055].

b. Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020 Section 10 and 40 CFR 63.10032].

c. See Section E – Control Equipment Conditions for further requirements.

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 03: Indirect Heat Exchanger

Description:

Henderson Station Unit 2 (H2)
Dry-bottom, wall-fired, pulverized coal-fired unit equipped with electrostatic precipitator (ESP), Low NOx burners (LNB), flue gas desulfurization (FGD) & selective catalytic reduction (SCR).
Number two fuel-oil used for startup and stabilization
Secondary Fuel: pelletized coal fines or petroleum coke
Maximum Continuous Rating: 1,568 MMBtu/hour
Construction commenced: 1970

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers

401 KAR 51:160, NO_x requirements for large utility and industrial boilers

401 KAR 52:060, Acid rain permits

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

40 CFR Part 64, Compliance Assurance Monitoring (CAM)

40 CFR Part 75, Continuous Emissions Monitoring (CEM)

401 KAR 51:210, CAIR NO_x Annual trading program (See Section K)

401 KAR 51:220, CAIR NO_x ozone season trading program (See Section K)

401 KAR 51:230, CAIR SO_2 Trading program (See Section K)

1. Operating Limitations:

a. The permittee shall comply with the applicable work practice and operating limitations of 40 CFR 63 Subpart UUUUU no later than April 16, 2015 [40 CFR 63.9984(b)]. However, the Division has granted an extension until April 16, 2016, in the letter dated January 6, 2015.

(i) The permittee must meet the work practice standard and operating limits of 40 CFR 63.9991.

(ii) The permittee must be in compliance with the operating limits at all times except during periods of startup or shutdown; however, for coal-fired, liquid oil-fired, or solid oil-derived fuel-fired EGUs, the permittee is required to meet the work practice requirements in Table 3 of MATS during periods of startup or shutdown. [40 CFR 63.10000(a)]

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

(iii) At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source [40 CFR 63.10000(b)].

(iv) The permittee shall meet the general requirements for complying with MATS according to the applicable provisions of 40 CFR 63.10000(c) through 63.10000(k).

(v) In response to an action to enforce the standards set forth in 40 CFR 63.9991 the permittee may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed if the permittee fails to meet the burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief [40 CFR 63.10001].

Compliance Demonstration Method:
Compliance shall be determined by **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements** and and **6. Specific Reporting Requirements**.

2. Emission Limitations:

a. Pursuant to 401 KAR 61:015, Section 4(4), particulate matter emissions shall not exceed 0.21 lbs/MMBtu based on a three (3)-hour average.

Compliance Demonstration Method:
Compliance shall be demonstrated by **3.a. Testing Requirements.**

b. Pursuant to 401 KAR 61:015, Section 4(4), emissions shall not exceed 40 percent opacity based on a six-minute average except:

i. That, a maximum of sixty (60) percent opacity shall be permissible for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes;

ii. Emissions shall not exceed 40 percent opacity based on a six (6) minute average except during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

Compliance Demonstration Method:
Compliance shall be demonstrated by 4.b. **Specific Monitoring Requirement.**

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emission shall not exceed 5.2 lbs/MMBtu.

Compliance Demonstration Method:
Compliance shall be demonstrated by **4.e. Specific Monitoring Requirements.**

d. See Section D-Source Emission Limitation and Testing Requirements

e. The permittee shall comply with the applicable emission limits of 40 CFR 63 Subpart UUUUU no later than April 16, 2015 [40 CFR 63.9984(b)]. However, the Division has granted an extension until April 16, 2016, in the letter dated January 6, 2015.

(i) The permittee must meet the emission limits of 40 CFR 63.9991.

(ii) The permittee must be in compliance with the emission limits at all times except during periods of startup or shutdown. [40 CFR 63.10000(a)]

(iii) The permittee shall demonstrate initial compliance according to the applicable provisions of 40 CFR 63.10005 and 63.10011.

(iv) The permittee shall demonstrate continuous compliance according to the applicable provisions of 40 CFR 63.10006 through 63.10010 and 63.10020 through 63.10023.

Compliance Demonstration Method:
Compliance shall be determined by **3. Testing Requirements**, **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements** and **6. Specific Reporting Requirement.**

3. Testing Requirements:

a. Pursuant to 401 KAR 50:045, the permittee shall submit and schedule within six (6) months of the issuance date of permit #V-11-003, a schedule, to conduct a performance test for particulate matter compliance within one (1) year of issuance of V-11-003 permit.

b. Testing shall be conducted in accordance with 401 KAR 50:045, Performance Tests, and pursuant to 40 CFR 64.4(c)(1), the testing shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit.

c. In accordance with sub-Section **4.b Specific Monitoring Requirements**, the permittee shall submit a schedule within six (6) months from the date of issuance of permit #V-11-003 to conduct testing within one year (1) following the issuance of this permit to establish or re-establish the correlation between opacity and particulate matter emissions.

d. If no additional stack tests are performed pursuant to sub-Section **4.b (ii) Specific Monitoring Requirements**, the permittee shall conduct a performance test for particulate matter emissions

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

by the start of the fourth (4^{th}) year of this permit to demonstrate compliance with the applicable standard.

e. If no EPA Reference Method 9 tests are performed pursuant to sub-Section **4.a(ii) Specific Monitoring Requirements**, then the permittee shall determine the opacity of emissions from the stack by Method 9 at least once every fourteen (14) boiler operating days, or more frequently if requested by the Division, to demonstrate compliance with the opacity standard. If no Method 9 test is completed during the time period, the reason for not completing a test shall be documented and the permittee may use the COM system for assuring compliance with the visible emission limitation during that period.

f. The permittee shall demonstrate that compliance has been achieved, by conducting the required performance tests and other activities, no later than 180 days after the applicable extension date (April 16, 2016) [40 CFR 63.9984(f)].

g. The permittee shall comply with all applicable provisions of 40 CFR 63.10005 through 40 CFR 63.10009 and 40 CFR 63.10011.

4. Specific Monitoring Requirements:

a. Pursuant to 401 KAR 61:005, Section 3, Performance Specification 1 of 40 CFR 60, Appendix B, and 401 KAR 52:020, Section 10 a continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding exempted time periods, if any three consecutive six-minute average opacity values exceed the opacity standard, the permittee shall, as appropriate:

i. Accept the readout from the COM as an indicator of equipment performance and perform an inspection of the COM and/or the control equipment and make any repairs or;

ii. Within thirty (30) minutes after the third consecutive COM indicated exceedance of the opacity standards, if emissions are visible, initiate a determination of opacity using Reference Method 9. Also within thirty (30) minutes after the third consecutive COM indicated exceedance, inspect the COM and/or the control equipment, and initiate any repairs. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. Pursuant to 401 KAR 52:020, Section 10, and 401 KAR 61:005, Section 3(6), to meet the monitoring requirement for particulate matter, the permittee shall use a COM. Pursuant to 40 CFR 64.4(a)(1), opacity shall be used as an indicator of particulate matter emissions and testing shall be conducted to establish the level of opacity that will be used as an indicator of particulate matter emissions. There may be short-term exceedances during the testing period required to establish the opacity indicator level. These exceedances will not be considered noncompliance periods since the testing is required to establish a permit requirement. The opacity indicator level shall be established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level.
Excluding exempted time periods:

   i. If any three (3) hour opacity value exceeds the opacity indicator level, the permittee shall, as appropriate, initiate an inspection of the control equipment and the COM system and make any necessary repairs.

   ii. If five (5) percent or greater of the COM data (three (3) hour average of values) recorded in a calendar quarter show excursions above the applicable limit, the permittee shall perform a stack test in the following calendar quarter to demonstrate compliance with the particulate standard while operating at representative conditions. The permittee shall submit a compliance test protocol as required by Section G (5)(a) of this permit before conducting the test. The Division may waive this testing requirement upon a demonstration that the cause(s) of the excursions have been corrected, or may require stack tests at any time pursuant to 401 KAR 50:045, Performance Tests.

c. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor ESP primary/secondary voltages and currents on a daily basis.

d. Pursuant to 401 KAR 52:020, Section 10, as an alternative to monitoring strategies (a) and (b), above, and 3. Testing Requirement, paragraph c to meet the compliance assurance monitoring requirement of 40 CFR 64.4(a)(1) and demonstrate continuing compliance with the particulate matter standard, the permittee shall use a particulate matter continuous emissions monitor (PM CEM). The PM CEM shall comply with Performance Specification 11 of Appendix B to 40 CFR 60 and ongoing quality assurance requirements per 40 CFR 60 Appendix F, Procedure 2. Opacity monitoring required in subsection (a) above excluding subparagraphs (i) and (ii) shall only be used to indicate proper operation of the ESP. Compliance with the opacity standard shall be by Reference Method 9 performed at least once every fourteen (14) boiler operating days. If a Method 9 cannot be performed the reason for not performing the test shall be documented.

e. Pursuant to 401 KAR 61:005, Section 3 and material incorporated by reference in 401 KAR 52:020, Section 10, continuous emission monitoring (CEM) systems shall be installed, calibrated, maintained, and operated for measuring sulfur dioxide emissions and either oxygen or carbon dioxide emissions. The continuous emission monitoring systems shall comply with 401 KAR 61:005, Section 3, particularly, Performance Specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A. Pursuant to 40 CFR 64.3(d), the CEMS shall be used to satisfy CAM requirements for sulfur dioxide.

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f. Pursuant to 401 KAR 61:015, Section 6 (1), the sulfur content of solid fuels, as burned shall be determined in accordance with methods specified by the cabinet.

g. Pursuant to 401 KAR 61:015, Section 6 (3) the rate of fuel burned shall be measured daily or at shorter intervals and recorded. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. The average electrical output and the minimum and maximum hourly generation rate shall be measured and recorded daily.

h. Pursuant to 401 KAR 61:005, Section 3(4), the Division may provide a temporary exemption from the monitoring and reporting requirements of 401 KAR 61:005, Section 3, for the continuous monitoring system during any period of monitoring system malfunction, provided that the source owner or operator shows, to the Division's satisfaction, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

i. Pursuant to 401 KAR 52:020, Section 10, to meet the monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM). If any twenty-four (24) hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable.

j. Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor and record the date, time, and duration for each startup and shutdown event.

k. See Section D condition 3.

l. The permittee shall comply with all applicable continuous monitoring requirements of 40 CFR 63.10010, 40 CFR 63.10020 and 40 CFR 63.10021.

5. Specific Recordkeeping Requirements:

a. In accordance with 401 KAR 61:005, Section 3(15)(f) and 61:015, Section 6, the owner or operator shall maintain a file of all information reported in the quarterly summaries, with the exception that records shall be maintained for a period of five (5) years.

b. Pursuant to 401 KAR 52:020, Section 10, the permittee shall maintain records of:

i. Each fuel analysis;

ii. The rate of fuel burned for each fuel type, on a daily basis;

iii. The heating value and ash content on a weekly basis;

iv. The average electrical output and the minimum and maximum hourly generation rate on a daily basis;

v. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted;

SECTION B EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

vi. Data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard;

vii. Results of all compliance tests; and

viii. Percentage of the COM data (excluding exempted time periods) showing excursions above the opacity standard and the opacity indicator level.

c. Pursuant to 401 KAR 52:020, Section 10, records of primary/secondary voltages and currents shall be maintained with long-term operational records for a period of five (5) years.

d. Pursuant to 401 KAR 52:020, Section 10, the permittee shall keep visible observation records and Method 9 observations in a designated logbook and/or an electronic format. Records shall be maintained for five (5) years.

e. Pursuant to 401 KAR 52:020, Section 10, the permittee shall record the date, time, and duration for each startup and shutdown event.

f. See Section D, condition 3.

g. Pursuant to 401 KAR 52:020, Section 10, the permittee shall maintain a daily operations check sheet to verify proper operation of the ESP. During periods when the opacity monitor is out of service, the check sheet shall be completed on an hourly basis.

For particulate and opacity by alternate operating scenario using PM CEMS,

h. Pursuant to 401 KAR 52:020, Section 10, the permittee shall maintain records of the PM CEMs data and the number of excursions above the particulate emission standard, time and date of the excursions, and particulate matter emission value (lbs/MMBtu) of the excursions in each calendar quarter.

i. The permittee shall comply with all applicable recording provisions of 40 CFR 63.10030 through 40 CFR 63.10033.

6. Specific Reporting Requirements:

a. Pursuant to 401 KAR 61:005, Section 3 (15), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division.

i. The permittee required to install continuous monitoring systems for opacity and sulfur dioxide or those utilizing fuel sampling and analysis for sulfur dioxide emissions shall submit for every calendar quarter, a written report of excess emissions and the nature and cause of the excess emissions if known. The averaging period used for data reporting should correspond to the emission standard averaging period which is a twenty-four (24) hour averaging period. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. The permittee required to install continuous monitoring systems for opacity shall submit for every calendar quarter a written report of excess emission and the nature and cause of emissions. The summary shall consist of the magnitude in actual percent opacity of six (6) minute averages of opacity greater than the opacity standard in the applicable standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute. Any time period exempted shall be considered before determining the excess average of opacity. Opacity data shall be reported in electronic format acceptable to the Division.

iii. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard. The hourly averages shall not appear in the written summary, but shall be provided in electronic format only.

iv. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of system repairs or adjustments shall be reported. Proof of continuous monitoring system performance is required as specified by the Division whenever system repairs or adjustments have been made.

b. The permittee shall report the number of excursions (excluding exempted time periods) above the opacity standard, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions above the opacity standard in each calendar quarter if the PM CEMS is not utilized as the particulate compliance monitoring method.

c. For exceedances that occur as a result of startup, the permittee shall report:

i. The type of start-up (cold, warm, or hot);

ii. Whether or not the duration of the start-up exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations [401 KAR 52:020, Section 10].

d. See Section D.

e. The permittee shall meet the notification requirements in 40 CFR 63.10030 according to the schedule in 40 CFR 63.10030 and in subpart A of this part. Some of the notifications must be submitted before complying with the emission limits and work practice standards in 40 CFR 63 Subpart UUUUU [40 CFR 63.9984 (c)].

f. The permittee shall comply with all applicable reporting provisions of 40 CFR Part 63.10030 through 40 CFR 63.10033.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

7. Specific Control Equipment Operating Conditions:

a. The electrostatic precipitator (ESP), flue gas desulfurization unit (FGD), low NOx burner and selective catalytic reduction (SCR) system shall be operated to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and good operating practices [401 KAR 50:055].

b. Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020 Section 10 and 40 CFR 63.10032].

c. See Section E - Control Equipment Conditions for further requirements.

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 04: Coal Handling Operation

Description:

Equipment Includes:	Receiving hopper, barge unloading, feeders, magnetic separator, conveyors, secondary crusher, coal stockpiles, and haul roads
Control equipment:	Enclosures, telescopic chutes, water spray
Operating Rate:	800 tons/hour
Construction:	Commenced: 1963

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions.

1. Operating Limitations:

N/A

2. Emission Limitations:

a. Pursuant to 401 KAR 63:010, Section 3(1), no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished, or a road to be used without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

i. Application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;

ii. Installation and use of enclosed chutes, hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays, fog mists, or other measures to suppress the dust emissions during handling.

iii. Traveling at a rate of speed adequate to prevent transported material from becoming airborne.

iv. The maintenance of paved roadways in a clean condition.

Compliance Demonstration Method:
The permittee shall demonstrate compliance with this operating limitation by speed controls, and good operating practices during material handling.

b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

c. Pursuant to 401 KAR 63:010, Section 3, the following shall apply to vehicles operating outside company property:

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. Open bodied trucks, operating outside company property, transporting materials likely to become airborne, shall be covered at all times when in motion.

ii. No one shall allow ash or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor the amount of coal received and processed on a weekly basis.

5. Specific Recordkeeping Requirements:

Pursuant to 401 KAR 52:020, Section 10, the permittee shall keep records amount of coal received and processed on a weekly basis.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a. The enclosures, water spray, compaction, and telescopic chutes shall be operated to maintain compliance with permitted emission limitations in accordance with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b. Records regarding the maintenance of the control equipment shall be maintained [401 KAR 50:055].

SECTION B- EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 05: H12 & H13 Cooling Towers (Two identical units)

Description:

Operating rate: 5.1 million gallons of cooling water per hour per unit
Construction commenced: 1970

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions

1. **Operating Limitations:**

   N/A

2. **Emission Limitations:**

   a. Pursuant to 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

   b. Pursuant to 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

3. **Testing Requirements:**

   N/A

4. **Specific Monitoring Requirements:**

   Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor the cooling water usage rate on monthly basis.

5. **Specific Record Keeping Requirements:**

   Pursuant to 401 KAR 52:020, Section 10, the permittee shall maintain records of the amount of cooling water usage on monthly basis.

6. **Specific Reporting Requirements:**

   See Section F.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit 06: Combustion Turbine

Description:

Natural-gas/Number two fuel-oil fired unit
Rated Capacity: 803 MMBtu /hour
Construction commenced: 1970

Applicable Regulations:

There are no applicable requirements to this unit other than the general applicable requirements. [401 KAR 52:020] Unit is exempted from New Source Performance Standard due to the date of construction.

1. **Operating Limitations:**

   N/A

2. **Emission Limitations:**

   N/A

3. **Testing Requirements:**

   N/A

4. **Specific Monitoring Requirements:**

   Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor fuel usage and hours of operation on quarterly basis.

5. **Specific Record Keeping Requirements:**

   Pursuant to 401 KAR 52:020, Section 10, the permittee shall maintain the record of fuel usage and hours of operation on a quarterly basis.

6. **Specific Reporting Requirements:**

   See Section F, Conditions 5, 6, 7 and 8.

SECTION B- EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Units 07-08: Existing CI Emergency RICE <500 HP

Emission Unit	Description	Manufacture Date	Maximum Continuous Rating (HP)	Fuel	Control Equipment
07	Cummins Model 5SJ4447P23C1, Serial JG375077 (Emergency Generator)	1972	310.00	Diesel	None
08	General Motors Model PTA-1SD-50, Serial 378910, Detroit Diesel # 5171519 (Emergency Fire- Pump)	1981	100.00	Diesel	None

APPLICABLE REGULATIONS:

40 CFR 63 Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

1. **Operating Limitations:**

   a. The permittee must comply with the operating limitations no later than May 3, 2013 [40 CFR 63.6602].

   b. Pursuant to 40 CFR 63.6602, the permittee must comply with the following operating limitations:

      i. Change oil and filter every 500 hours of operation or annually, whichever comes first;

      ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and

      iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

   c. To extend the specified oil change requirement in Operating Limitation (b)(i), the permittee has the option of utilizing an oil analysis program according to the methods in 40 CFR 6625(i). The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine [40 CFR 63.6625(i)].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. The permittee must minimize the emergency stationary RICE time spent at idle during startup and minimize the emergency stationary RICE startup time to a period needed for appropriate and safe loading of the emergency stationary RICE, not to exceed 30 minutes [40 CFR 63.6625(h)].

e. The permittee must install a non-resettable hour meter if one is not already installed [40 CFR 63.6625(f)]

f. The permittee must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of 40 CFR 63.6640. In order for the emergency stationary RICE to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of 40 CFR 63.6640, is prohibited. If the permittee do not operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of 40 CFR 63.6640, the emergency stationary RICE will not be considered an emergency stationary RICE under 40 CFR Subpart ZZZZ and must meet all requirements for non-emergency engines [40 CFR 63.6640 (f)].

g. Beginning January 1, 2015, the permittee an existing emergency CI stationary RICE with a site rating of more than 100 hp and displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purpose specified in 40 CFR 63.6640 (f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640 (f)(4)(ii), the permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted [40 CFR 63.6604(b)].

h. The permittee must operate and maintain the emergency stationary RICE according to the manufacturer's emission-related written instructions, or develop your own maintenance plan which must provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 63.6625(e)].

i. There is no limit on the use of emergency stationary RICE in emergency situations [40 CFR 63.6640 (f) (1).

j. Maintenance checks and readiness testing of this unit is limited to 100 hours per year. Operation of the unit in non-emergency situations is counted towards the 100 hours per year provided for maintenance and testing, including, as provided in 40 CFR 63.6640(f)(2)(i), 40 CFR 63.6640(f)(2)(ii), for demand response 40 CFR 6640(f)(2)(iii) [40 CFR 63.6640 (f) (1)].

k. The permittee must be in compliance with the emission limitations and operating limitations in this that apply at all times [40 CFR 63.6605(a)].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

The permittee must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d of 40 CFR 63 Subpart ZZZZ that apply according to methods specified in Table 6 of 40 CFR 63 Subpart ZZZZ [40 CFR 63.6640(a)].

3. Testing Requirements:

NA

4. Specific Monitoring Requirements:

Pursuant to 401 KAR 52:020, Section 10, the permittee shall monitor the hours of operation on a monthly basis.

5. Specific Record Keeping Requirements:

a. The permittee must keep records of each notification and report that is submitted, the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment, records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii), records of all required maintenance performed on the air pollution control and monitoring equipment, and records of action taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning processes and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR 63.6655(a)].

b. The permittee shall maintain records of the maintenance conducted on the emergency stationary RICE in order to demonstrate that the engine was operated and maintained, including any after-treatment control device, according to the maintenance plan for the engine [40 CFR 63.6655(e)].

c. If the engine is not certified to the standards applicable to non-emergency engines (see Table 2c to 40 CFR 63 Subpart ZZZZ), then the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for demand response, records must be kept of the notification of the emergency situation, and the time the emergency stationary rice was operated as part of demand response [40 CFR 63.6655(f)(1)].

d. The permittee must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you [40 CFR 63.6655(d)].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. The permittee must keep records of the maintenance conducted on the engine in order to demonstrate, operated and maintained the engine and after-treatment control device (if any) according to your own maintenance plan [40 CFR 63.6655(e)].

f. Pursuant to 401 KAR 52:020, Section 10, the permittee shall record the fuel usage on a monthly basis.

6. Specific Reporting Requirements:

a. The permittee must submit, if applicable, the annual report according to 40 CFR 63:6650 (h).

b. The permittee must report each instance in which the engine did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d of 40 CFR 63 Subpart ZZZZ that apply. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablish the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the required emission limitations applicable to engine are meet [40 CFR 63.6640(b)].

c. The permittee must also report each instance that did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE [40 CFR 63.6640(e)].

d. See Section F.

SECTION C- INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

	Description	Generally Applicable Regulation
1.	Diesel fuel-oil tank (capacity 120 gallons)	N/A
2.	Kerosene tank (capacity 295 gallons)	N/A
3.	Kerosene tank	N/A
4.	Ignition fuel-oil No. 2 tank (capacity 23,000 gall.)	N/A
5.	Fuel-oil No. 2 tank (throughput 114,000 gall.), So.	N/A
6.	Fuel-oil No. 2 tank (throughput 114,000 gall.), No.	N/A
7.	Fly-ash silo	401 KAR 63:010
8.	Ignition fuel-oil No. 2 tank (capacity 23,000 gall.)	N/A
9.	Cooling tower water treatment operations	N/A
10.	Closed cooling water system	N/A
11.	Demineralizer process operation	N/A
12.	Freeze protection operation for coal conveyors	N/A
13.	Portable water treatment operations	N/A
14.	Lime slaking operations	N/A
15.	Thermal evaporation of boiler cleaning wastes	N/A
16.	Fly ash pneumatic conveying and storage	401 KAR 63:010

SECTION D- SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Particulate, sulfur dioxide and visible (opacity) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. Electrical Generating Units 01 and 02 at the R. D. Green Station and Units 02 and 03 at the Reid/Henderson Station.

    a. To preclude the applicability of 401 KAR 51:017, Prevention of significant deterioration of air quality, total emissions of sulfur dioxide from Emissions Units 01 and 02 at the R. D. Green Station and Emissions Units 02 and 03 at the Reid/Henderson Station shall not exceed 20,846 tons during any consecutive twelve (12) month period in which any amount of petroleum coke is burned. Upon completion of natural gas burner for emission unit 01 it will no longer be subject to this limitation for petroleum coke and it will burn only natural gas.

    b. The permittee shall use the sulfur dioxide continuous emission monitoring system (CEMs) to determine the monthly and twelve consecutive month emissions from the electrical generating units.

    c. The permittee shall calculate and record the total sulfur dioxide emissions from all the electrical generating units referenced above on a monthly and twelve consecutive month basis.

    d. The permittee shall maintain records of the dates on which any petcoke is burned and the monthly and annual quantities.

    e. The permittee shall submit a report of sulfur dioxide emissions for the previous twelve consecutive month period every six months in accordance with Section F.5. Exceedances of the emission limitation specified above shall be reported within 30 days following the date when the exceedance is determined.

SECTION E- SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F- MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F- MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.
   e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F- MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Dr W. STE 700
Owensboro, KY 42303-2191

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St
Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

SECTION G- GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
      (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
      (4) New requirements become applicable to a source subject to the Acid Rain Program.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

SECTION G- GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) 2.].

l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) 4.].

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) 1.].

SECTION G- GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
(1) Applicable requirements that are included and specifically identified in this permit; and
(2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

3. Permit Revisions

a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission unit 01 (only the burners) in accordance with the terms and conditions of this permit.

a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

SECTION G- GENERAL PROVISIONS (CONTINUED)

b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
(1) The date when construction commenced.
(2) The date of start-up of the affected facilities listed in this permit.
(3) The date when the maximum production rate specified in the permit application was achieved.

c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.

e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.

f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

5. Testing Requirements, Where applicable

a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under

SECTION G- GENERAL PROVISIONS (CONTINUED)

normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   (1) An emergency occurred and the permittee can identify the cause of the emergency;
   (2) The permitted facility was at the time being properly operated;
   (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
   (5) This requirement does not relieve the source of other local, state or federal notification requirements.

SECTION G- GENERAL PROVISIONS (CONTINUED)

b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
(3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
(6) 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.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G- GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

   a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

      RMP Reporting Center
      P.O. Box 1515
      Lanham-Seabrook, MD 20703-1515.

   b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H- ALTERNATE OPERATING SCENARIOS

Emissions Unit 01: **Indirect Heat Exchanger**

Description:

Reid Station Unit 1 (R1)

Maximum Continuous Rating:	1008 MMBtu/hr
Primary Fuel:	Natural Gas
Construction commenced (Boiler):	1963
Modified (Low NOx Burners):	2015

APPLICABLE REGULATIONS:

401 KAR 61:015, Existing indirect heat exchangers

401 KAR 51:160, NO_x requirements for large utility and industrial boilers

401 KAR 52:060, Acid rain permits (See Section J)

40 CFR Part 75, Continuous Emissions Monitoring (CEM)

401 KAR 51:210, CAIR NO_x Annual Trading Program (See Section K)

401 KAR 51:220, CAIR NO_x Ozone season Trading Program (See Section K)

401 KAR 51:230, CAIR SO_2 Trading Program (See Section K)

1. **Operating Limitations:**

   a. To preclude the applicability of 401 KAR 51:017, the gross megawatt hours output for the unit shall not exceed 199,825 MW-hrs/yr on rolling twelve (12) month average.

   Compliance Demonstration Method:

   Compliance shall be demonstrated by 4.f. **Specific Monitoring Requirements** and **5.d. Specific Recordkeeping Requirements.**

   b. To preclude the applicability of 401 KAR 51:017, Emission Unit 01 at the Reid/Henderson Station will no longer utilize coal/petroleum coke and burn only natural gas as a fuel.

   c. The permittee shall comply with the requirements in Section B for emission unit 01 until completeness of the natural gas burners. Upon completion of the natural gas burners, the permittee shall comply with requirements specified in Section H for emission unit 01.

SECTION H- ALTERNATE OPERATING SCENARIOS (CONTINUED)

2. Emission Limitations:

a. Pursuant to 401 KAR 61:015, Section 4(4) particulate matter emissions shall not exceed 0.28 lb/MMBtu based on a three (3)-hour average.

b. Pursuant to 401 KAR 61:015, Section 4(4) emissions shall not exceed 40 percent opacity based on a six (6)-minute average, except for the emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

c. Pursuant to 401 KAR 61:015, Section 5(1), sulfur dioxide emissions shall not exceed 3.5 lbs/MMBtu based on twenty four (24) hour average .

Compliance Demonstration Method:
The unit is considered to be in compliance with the allowable PM, opacity, and SO_2 limitations while burning natural gas.

3. Testing Requirements:

Testing shall be conducted at such time as may be requested by the Cabinet in accordance with 401 KAR 50:045, Section (4).

4. Specific Monitoring Requirements:

a. The permittee of an affected unit that uses a certified flow monitor and a certified diluent gas (O_2 or CO_2) monitor to measure the unit heat input rate shall determine SO_2 emissions in accordance with 40 CFR 75.11(e)(1) [40 CFR 75.11(e)].

b. The permittee who, in accordance with 40 CFR 75.11(e)(1), uses a certified flow monitor and a certified diluent monitor and Equation F-23 in appendix F to this part to calculate SO_2 emissions during hours in which a unit combusts only natural gas or pipeline natural gas (as defined in 40 CFR 72.2 of this chapter) shall meet all quality control and quality assurance requirements in appendix B to this part for the flow monitor and the diluent monitor [40 CFR 75.21 (a) (10)].

c. Continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for measuring nitrogen oxides (NO_x), and carbon dioxide (CO_2) emissions [401 KAR 61:005, Section 3 and Performance Specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A].

d. The permittee shall operate, calibrate and maintain the continuous emission monitoring system according to the quality assurance and quality control procedures in appendix B of 40 CFR 75 [40CFR 75.21 (a)(1)].

e. Pursuant to 401 KAR 61:015, Section 6 (3), the rate of fuel burned shall be measured daily or at shorter intervals and recorded. Where the indirect heat exchanger is used to generate electricity, the average electrical output, and the minimum and maximum hourly generation rate shall be measured and recorded daily.

SECTION H- ALTERNATE OPERATING SCENARIOS (CONTINUED)

f. The permittee shall monitor the monthly and the twelve (12) month rolling total gross megawatt hours for the indirect heat exchanger [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain all information reported in the quarterly summaries, Pursuant to 401 KAR 61:005, Section 3(15)(g) and 61:015, Section 6, with the exception that records shall be maintained for a period of two (2) years.

b. Pursuant to KAR 52:020, Section 10, the permittee shall maintain records of:

i. The rate of fuel burned, on a daily basis;

ii. The monthly and twelve month (12) consecutive usage of natural gas;

iii. The average electrical output and the minimum and maximum hourly generation rate on a daily basis;

iv. Results of all compliance tests;

v. Documentation that the fuel combusted is actually pipeline natural gas or natural gas using the procedures in section 2.3.1.4 of appendix D to 40 CFR Part 75; and

vi. Calculated SO_2 emissions using Equation F-23 in appendix F to 40 CFR Part 75.

c. Pursuant to KAR 52:020, Section 10, the permittee shall record the duration of each start up.

d. The permittee shall record the monthly and twelve (12) month rolling total gross megawatt hours for the indirect heat exchanger [401 KAR 52:020, Section 10].

e. The permittee of an affected unit shall prepare and maintain a monitoring plan. Except as provided in paragraphs (f) or (h) of 40 CFR 75 (as applicable), a monitoring plan shall contain sufficient information on the continuous emission or opacity monitoring systems, excepted methodology under 40 CFR 75.19, or excepted monitoring systems under appendix D or E to 40 CFR 75 and the use of data derived from these systems to demonstrate that all unit SO_2 emissions, NO_X emissions, CO_2 emissions, and opacity are monitored and reported [40 CFR 75.53 (a)(2)].

f. The permittee of any affected source subject to the requirements of this part shall maintain for each affected unit a file of all measurements, data, reports, and other information required by this part at the source in a form suitable for inspection for at least three (3) years from the date of each record [40 CFR 75.57 (a)].

6. Specific Reporting Requirements:

See Section F.

SECTION I - COMPLIANCE SCHEDULE

N/A

SECTION J- ACID RAIN PERMIT

1. Statutory and Regulatory Authority

In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to 401 KAR 52:020, Permits, 401 KAR 52:060, Acid Rain Permit, and 40 CFR Part 76.

2. Permit Requirements:

This Acid Rain Permit covers Acid Rain Units 01-03 (Emission Units 01-03) at the Robert Reid Station, and two HMP&L Stations (ORIS Code: 001382 and 001383). Currently, Unit 01 is a base electric generating unit that utilizes coal/petroleum as a fuel. In 2015-2016, Unit 01 will be changed to fire natural gas only. Units 2-3 are coal-fired base load electric generating units. The Acid Rain Permit Application and NO_X Compliance Plan received on May 3, 2013, for Phase II are hereby incorporated into and made part of this permit and the permittee must comply with the standard requirements and special provisions set forth in the application [40 CFR 72.9(a)(2)].

3. Acid Rain Program Emission and Operating Limitations:

The applicable Acid Rain emission limitations for the permittee are set in 40 CFR 73.10, Table 2, 40 CFR 76.5, and 40 CFR 76.11 and they are tabulated in the table below:

Affected Unit: Robert Reid Station,R1 (Emissions Unit 01)					
Year for SO_2 Allowances	2015	2016	2017	2018	2019
40 CFR Part 73.10	944*	944*	944*	944*	944*
NO_x Limits and Requirements					
Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves the NO_X emissions averaging plan for this unit. This plan is effective for calendar year 2015 through 2019. Under this plan, determined in accordance with 40 CFR Part 75, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.90 lb/MMBtu. In addition, this unit shall not have an annual heat input greater than 7,305,840 MMBtu. As an alternative means of compliance demonstration, this emission unit shall not cause the system weighted average to exceed the applicable emission rate in accordance with 40 CFR 76.11(d)(B)(ii). In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.					

*** The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).**

SECTION J - ACID RAIN (CONTINUED)

Affected Unit: HMP&L Station 2,H1 (Emissions Unit 02)					
Year for SO_2 Allowances	2015	2016	2017	2018	2019
40 CFR Part 73.10	5,769*	5,769*	5,769*	5,769*	5,769*

NO_x Limit and Requirements

Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves the NO_X emissions averaging plan for this unit. This plan is effective for calendar year 2015 through 2019. Under this plan, determined in accordance with 40 CFR Part 75, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.40 lb/MMBtu. As an alternative means of compliance demonstration, this emission unit shall not cause the system weighted average to exceed the applicable emission rate in accordance with 40 CFR 76.11(d)(B)(ii).

In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.

*** The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).**

Affected Unit: HMP&L Station 2, H2 (Emissions Unit 03)					
Year for SO_2 Allowances	2015	2016	2017	2018	2019
40 CFR Part 73.10	5,946*	5,946*	5,946*	5,946*	5,946*

NO_x Limits and Requirements

Pursuant to 40 CFR Part 76, the Kentucky Division for Air Quality approves the NO_X emissions averaging plan for this unit. This plan is effective for calendar year 2015 through 2019. Under this plan, determined in accordance with 40 CFR Part 75, this unit's NOx emissions shall not exceed the annual average alternative contemporaneous emissions limitation (ACEL) of 0.40 lb/MMBtu. As an alternative means of compliance demonstration, this emission unit shall not cause the system weighted average to exceed the applicable emission rate in accordance with 40 CFR 76.11(d)(B)(ii).

In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.

*** The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).**

SECTION J - ACID RAIN (CONTINUED)

4. Compliance Plan:

a. The permittee shall operate in compliance with the requirements contained in the Acid Rain application and incorporated into this permit [40 CFR 72.9].

b. The Division approves the NO_X Average Plan submitted for these units for the NO_X Emissions Compliance Plan, effective for the duration of this permit. Under this plan, a unit's NO_X emissions shall not exceed the applicable annual average alternative contemporaneous emissions limitation (ACEL) listed in Subsection 3(a). [40 CFR 76]

(1) The actual Btu-weighted annual average NO_X emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_X emission rate for the same units had they been operated, during the same period of time, in compliance with the individual applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7 and listed in Subsection 3(a).

(2) For each unit, if the designated representative demonstrates that the requirement of Subsection 4(b)(1) is met for the plan year, then the unit shall be deemed to be in compliance for the year with its ACEL and associated heat input limit in Subsection 3.

(3) If the designated representative cannot make the demonstration in Subsection 4(b)(1), according to 40 CFR 76.11(d)(1)(ii), for the plan year and if a unit fails to meet the annual average ACEL or has a heat input greater than the applicable value listed in Subsection 3, then excess emissions of NO_X have occurred during the year for that unit.

(4) As an alternative means of compliance demonstration, this emission unit shall not cause the system weighted average to exceed the applicable emission rate in accordance with 40 CFR 76.11(d)(B)(ii).

SECTION K – CLEAN AIR INTERSTATE RULE (CAIR)

1. Statutory and Regulatory Authority:

In accordance with KRS 224.10-100, the Kentucky Energy and Environmental Cabinet issues this permit pursuant to 401 KAR 52:020, Title V permits, 401 KAR 51:210, CAIR NO_X Annual Trading Program, 401 KAR 51:220, CAIR NO_X ozone season trading program, and 401 KAR 51:230, CAIR SO_2 Trading Program.

2. Application and Requirements:

The CAIR application for three electrical generating units was submitted to the Division and received on October 22, 2007. The standard requirements and special provisions set forth in the application are hereby incorporated into and made part of this CAIR Permit. [401 KAR 51:210, 401 KAR 51:220, and 401 KAR 51:230]. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

3. Unit Description

The affected units are one (1) dry bottom wall fired boiler rated at 834 MMBtu/hour (EU 01) and, two (2) dry bottom wall-fired boilers each rated 1568 MMBtu /hour (EU 02 and 03). Each unit has a capacity to generate 25 megawatts or more of electricity, which is offered for sale. Unit 01 utilizes natural gas while units 02 and 03 use coal and pet coke as a fuel source. Units 01, 02 and 03 are used as base load electric generating units.

4. Summary of Actions

The CAIR Permit is being issued as part of the Title V permit for this source. Public, affected state and U.S. EPA review will follow procedures specified in 401 KAR 52:100.

A December 2008 court decision kept the requirements of CAIR in place temporarily but directed EPA to issue a new rule to implement Clean Air Act requirements concerning the transport of air pollution across state boundaries. On July 6, 2011, the U.S. EPA finalized the Cross-State Air Pollution Rule (CSAPR). On December 30, 2011, CSAPR was stayed prior to implementation. On April 29, 2014, the U.S. Supreme Court issued an opinion reversing an August 21, 2012 D.C. Circuit decision that had vacated CSAPR. Following the remand of the case to the D.C. Circuit, EPA requested that the court lift the CSAPR stay and toll the CSAPR compliance deadlines by three years. On October 23, 2014, the D.C. Circuit granted EPA's request. CSAPR Phase I implementation is now in place and replaces requirements under EPA’s 2005 Clean Air Interstate Rule.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR)

Pursuant to 40 CFR 97.404(a), the permittee shall be subject to and shall comply with all applicable requirements of 40 CFR 97, Subpart AAAAA, TR NO_x Annual Trading Program.

Pursuant to 40 CFR 97.504(a), the permittee shall be subject to and shall comply with all applicable requirements of 40 CFR 97, Subpart BBBBB, TR NO_x Ozone Season Trading Program.

Pursuant to 40 CFR 97.604(a), the permittee shall be subject to and shall comply with all applicable requirements of 40 CFR 97, Subpart CCCCC, TR SO_2 Group 1 Trading Program.

Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601
(502) 564-3999

Final

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**Big Rivers Electric Corporation**
Mailing Address:	**201 Third Street, Henderson, KY**
Source Name:	**R. D. Green Station**
Mailing Address:	**201 Third Street, Henderson, KY**
Source Location:	**State Hwy. Jct. 2096/2097**
Permit:	**V-19-020 R1**
Agency Interest:	**44411**
Activity:	**APE20200001**
Review Type:	**Title V, Operating**
Source ID:	**21-233-00052**
Regional Office:	**Owensboro Regional Office** **3032 Alvey Park Dr. W., Suite 700** **Owensboro, KY 42303** **(270) 687-7304**
County:	**Webster**
Application Complete Date:	**February 23, 2012**
Issuance Date:	**July 12, 2020**
Revision Date:	**September 18, 2020**
Expiration Date:	**July 12, 2025**

Rick J. Shewekah

For Melissa Duff, Director
Division for Air Quality

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Permit type	Activity #	Complete Date	Issuance Date	Summary of Action
V-19-020 R1	**APE20200001**	**09/17/2020**	**9/18/2020**	**Administrative Amendment**
V-19-020 Permit Renewal	**APE20110001**	**02/23/2012**		**Title V, Acid Rain, CAIR Renewal**
	APE20130002	**12/13/2013**	**7/12/2020**	**Title V, Previously Unidentified Emission Points Added**
	APE20180002	**6/10/2019**		**Addition of Transfer Point not previously identified. Cooling tower update.**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

The Division for Air Quality has determined that the Big Rivers Electric Corporation - Green Station and the Big Rivers Electric Corporation Reid Station are one source as defined in 401 KAR 52:001 and Regulation 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality. This permit contains requirements for the Green Station. Requirements for the Reid Station are contained in permit V-11-003 R1.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Units 1 and 2: Identical Pulverized Coal-fired, Dry Bottom, Wall-fired Boilers

Description:
Controls: Low NO_x burner (LNB), dry electrostatic precipitator (ESP), wet (scrubber) flue gas desulfurization (FGD) (dolomitic lime), coal re-burn technology, dry sorbent injection (DSI) (hydrated lime), activated carbon injection (ACI)
Monitoring Equipment: Continuous Opacity Monitoring System (COMS), Continuous Emissions Monitoring (CEMS) Mercury (Hg), Sulfur Dioxide (SO_2), Nitrogen Oxides (NO_x), Carbon Dioxide (CO_2)
No. 2 fuel oil used for startup and stabilization
Secondary Fuel: Petroleum Coke
Maximum Continuous Rating: 2,660 MMBtu/hour, each
Construction Commenced: June 1976
Commercial Operation: December 1979 (EU 1) January 1981 (EU 2)

APPLICABLE REGULATIONS:
401 KAR 51:160, *NO_x Requirements for Large Utility and Industrial Boilers*
401 KAR 51:210, *CAIR NO_x annual trading program*
401 KAR 51:220, *CAIR NO_x Ozone Season Group 2 trading program*
401 KAR 51:230, *CAIR SO_2 Trading Program*
401 KAR 51:240, *Cross-State Air Pollution Rule (CSAPR) NO_x annual trading program*
401 KAR 51:250, *Cross-State Air Pollution Rule (CSAPR) NO_x ozone season group 2 trading program*
401 KAR 52: 260, *Cross-State Air Pollution Rule (CSAPR) SO_2 group 1 trading program*
401 KAR 52:060, *Acid Rain Permits*
401 KAR 59:015, *New Indirect Heat Exchangers*
401 KAR 60:005, Section 2(2)(a), 40 C.F.R. 60.40 to 60.46, (**Subpart D**), *Standards of Performance for Fossil-Fuel-Fired Steam Generators*
401 KAR 63:002, Section 2(4)(yyyy), 40 C.F.R. 63.9980 to 63.10042, (**Subpart UUUUU)**, *National Emission Standards for Hazardous Air Pollutants: Coal and Oil-fired Electric Utility Steam Generating Units*
40 CFR 52.21, (a) through (i) and (s) through (w), *Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979*
40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*
40 CFR Part 75, *Continuous Emissions Monitoring (CEM)*

1. **Operating Limitations:**
   a) The permittee is required to meet work practice requirements specified in 40 CFR 63, Subpart UUUUU, Table 3, Items 3 and 4 at all times except during periods of startup per paragraph **1. Operating Limitations: (a)(i)** and **(ii)** and shutdown requirements per **1. Operating Limitations: (a)(iii)** [40 CFR 63.9991(a) and 40 CFR 63.10000(a)]
      i) The permittee shall comply with the following because they have chosen to comply using paragraph (1) of the definition of "startup" in 40 CFR 63.10042: [*Startup* means the first-ever firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use). Any fraction of any hour in which startup occurs constitutes a full hour of startup] [40 CFR 63.10000(a)

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

and 40 CFR 63, Subpart UUUUU, Table 3, Item 3a].

A) The Permittee shall operate all Continuous Monitoring System(s) (CMS) during startup [40 CFR 63, Subpart UUUUU, Table 3, Item 3a].

B) For startup of a unit, the permittee shall use clean fuels as defined in 40 CFR 63.10042 for ignition [40 CFR 63, Subpart UUUUU, Table 3, Item 3a].

C) Once the permittee converts to firing coal the permittee shall engage all of the applicable control technologies except dry scrubber and SCR. The permittee shall start the dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation [40 CFR 63, Subpart UUUUU, Table 3, Item 3a].

D) The permittee shall comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in 40 CFR 63, Subpart UUUUU [40 CFR 63, Subpart UUUUU, Table 3, Item 3a].

E) The permittee shall collect monitoring data during startups as specified in 40 CFR 63.10020(a) and (e) and maintain records during startup periods, as specified in 40 CFR 63.10032 and 63.10021(h). The permittee shall provide reports concerning activities and startup periods, as specified in 40 CFR 63.10011(g), 63.10021(i), and 63.10031 [40 CFR 63, Subpart UUUUU, Table 3, Item 3a and 3d].

F) The permittee shall provide reports concerning activities and startup periods, as specified in 40 CFR 63.10011(g) and 40 CFR 63.10021(h) and (i) and 40 CFR 63.10031 [40 CFR 63, Subpart UUUUU, Table 3 Item 3(1)(a) and Item 3(2)(d)].

G) To satisfy the initial and continuous compliance requirements of 40 CFR 63.10011(g) and 63.10021(h), respectively, the permittee may use diluent cap and default gross output values, as described in 40 CFR 63.10007(f), during startup periods.

H) The permittee shall provide reports concerning activates and startup periods, as specified in 40 CFR 63.10011(g) and 40 CFR 63.10021(h) and (i), and 40 CFR 63.10031.

ii) The permittee has the option of using either definition of startup defined in 40 CFR 63, Subpart UUUUU, Table 3 Item 3(a)(1) or Item 3(a)(2) for demonstrating initial compliance. The permittee may switch from Item 3(a)(1) to Item 3(a)(2) of 40 CFR 63, Subpart UUUUU, Table 3 (or vice-versa) provided that all the Notification, Reporting and Recordkeeping requirements of 40 CFR 63.10030(e)(8)(iii)(A) through (E) are fulfilled [40 CFR 63.10030(e)(8)].

iii) The permittee shall comply with the following during a shutdown [shutdown means the period in which cessation of operation of an EGU is initiated for any purpose. Shutdown begins when the EGU no longer generates electricity or makes useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes or when no coal, liquid gas, syngas, or solid oil-derived fuel is being fired in the EGU, whichever is earlier. Shutdown ends when the EGU no longer generates electricity or makes useful thermal energy (such as steam or heat) for industrial commercial, heating, or cooling purposes, and no fuel is being fired in the EGU. Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown.] [40 CFR 63.10000(a) and 40 CFR 63, Subpart UUUUU, Table 3, Item 4.]

A) The permittee shall operate all CMS during shutdown [40 CFR 63, Subpart

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

UUUUU, Table 3, Item 4, 1st Paragraph].

B) The permittee shall also collect appropriate data, and the permittee shall calculate the pollutant emission rate for each hour of shutdown for these pollutants for which a CMS is used [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 1st Paragraph].

C) While firing coal during shutdown, the permittee shall vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal fuel being fed into the EGU and for as long as possible thereafter considering operational and safety concerns [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 2nd Paragraph].

D) In any case, the permittee shall operate the controls when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than 40 CFR 63, Subpart UUUUU and that require operation of the control devices [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 2nd Paragraph].

E) If, in addition to the fuel used prior to initiation of shutdown, another fuel shall be used to support the shutdown process, that additional fuel shall be one or a combination of the clean fuels defined in 40 CFR 63.10042 and shall be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 3rd Paragraph].

F) The permittee shall comply with all applicable emission limits at all times except during shutdown periods at which time the permittee shall meet this work practice [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 5th Paragraph].

G) The permittee shall collect monitoring data during shutdown periods, as specified in 40 CFR 63.10020(a) [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 5th Paragraph].

H) The permittee shall maintain records during shutdown periods as provided in 40 CFR 63.10032 and 40 CFR 63.10021(h) [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 5th Paragraph].

I) To satisfy the initial and continuous compliance requirements of 40 CFR 63.10011(g) and 63.10021(h), respectively, the permittee may use diluent cap and default gross output values, as described in 40 CFR 63.10007(f), during shutdown periods.

J) The permittee shall provide reports concerning shutdown periods, as specified in 40 CFR 63.10011(g), 40 CFR 63.10021(h), 40 CFR 63.10021(i), and 40 CFR 63.10031 [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 5th Paragraph].

Compliance Demonstration: See **1. Operating Limitations: (c)** and **(g)**, **5. Specific Recordkeeping Requirements: (b), (h)**, and **(k)** through **(m)**.

b) The permittee shall conduct periodic performance tune-ups for each EGU, as specified in 40 CFR 63.10021(e)(1) through (9). Subsequently the permittee shall perform an inspection of the burner at least once every 36 calendar months. If an EGU is offline when a deadline to perform the tune-up passes, the permittee shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit [40 CFR 63.10021(e)].

i) Inspect the burner and combustion controls, and clean or replace any components of

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the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows [40 CFR 63.10021(e)(1)]:

A) Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO shall be installed within three calendar months after the burner inspection [40 CFR 63.10021(e)(1)(i)];

B) Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the operator [40 CFR 63.10021(e)(1)(ii)];

ii) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type [40 CFR 63.10021(e)(2)];

iii) As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors [40 CFR 63.10021(e)(3)];

iv) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors [40 CFR 63.10021(e)(4)];

v) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O_2 probes and/or sensor, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary [40 CFR 63.10021(e)(5)];

vi) Optimize combustion to minimize generation of CO and NO_x. The optimization should be consistent with the manufacturer's specification, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burner, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles [40 CFR 63.10021(e)(6)];

vii) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppm, by volume, and oxygen in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). The permittee may use portable CO, NO_x and O_2 monitors for this measurement. EGU's employing neural network optimization systems need only

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provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system [40 CFR 63.10021(e)(7)];

viii) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information specified here-in including [40 CFR 63.10021(e)(8)];
   A) The concentrations of CO and NO_x in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems [40 CFR 63.10021(e)(8)(i)];
   B) A description of any corrective actions taken as a part of the combustion adjustment [40 CFR 63.10021(e)(8)(ii)]; and
   C) The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period [40 CFR 63.10021(e)(8)(iii)]; and

ix) Report the dates of the initial and subsequent tune-ups in hard copy, as specified in 40 CFR 63.10031(f)(5), through June 30, 2020. On or after July 1, 2020, report the date of all tune-ups electronically, in accordance with 40 CFR 63.10031(f). The tune-up report date is the date when tune-up requirements in 40 CFR 63.10021(e)(6) and (e)(7) are completed [40 CFR 63.10021(e)(9)].

Compliance Demonstration: See **5. Specific Recordkeeping Requirements: (d)** and **(h)**.

c) If the permittee elects to (or is required to) use CEMS to continuously monitor Hg, HCl, HF, SO_2, or PM emissions (or, if applicable, sorbent trap monitoring systems to continuously collect Hg emissions data), the following default values are available for use in the emission rate calculations during startup periods or shutdown periods (as defined in 40 CFR 63.10042). For the purposes of 40 CFR 63, Subpart UUUUU, these default values are not considered to be substitute data.

i) *Diluent cap values.* If the permittee uses CEMS (or, if applicable, sorbent trap monitoring systems) to comply with a heat input-based emission rate limit, the permittee may use the following diluent cap values for a startup or shutdown hour in which the measured CO_2 concentration is below the cap value or the measured O_2 concentration is above the cap value. The permittee may use 5% for CO_2 or 14% for O_2 [40 CFR 63.10007(f)].

ii) *Default gross output.* If the permittee uses CEMS to continuously monitor Hg, HCl, HF, SO_2, or PM emissions (or, if applicable, sorbent trap monitoring systems to continuously collect Hg emissions data), the following default value is available for use in the emission rate calculations during startup periods or shutdown periods (as defined in 40 CFR 63.10042). For the purposes of 40 CFR 63, Subpart UUUUU, this default value is not considered to be substitute data. For a startup or shutdown hour in which there is heat input to an affected EGU but zero gross output, the permittee shall calculate the pollutant emission rate using a value equivalent to 5% of the maximum sustainable gross output, expressed in megawatts, as defined in 40 CFR 75, Appendix A, section 6.5.2.1(a)(1). This default gross output is either the nameplate capacity of the EGU or the highest gross output observed in at least four representative quarters of EGU operation. For a monitored common stack, the default gross output is used only when all EGUs are operating (*i.e.,* combusting fuel) are in startup or shutdown mode, and have zero electrical generation. Under those conditions, a default gross

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output equal to 5% of the combined maximum sustainable gross output of the EGUs that are operating but have a total of zero gross output must be used to calculate the hourly gross output-based pollutant emissions rate [40 CFR 63.10007(f)(2)].

d) The permittee shall either install the required CEMS, PM CPMS, and sorbent trap monitoring systems in the stack or at a location in the ductwork downstream of all emissions control devices, where the pollutant and diluents concentrations are representative of the emissions that exit to the atmosphere [40 CFR 63.10010(a)(1)].

e) The permittee shall comply with the applicable General Provisions in 40 CFR 63.1 through 40 CFR 63.15 that are provided in Table 9 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10040].

f) The permittee shall comply with all applicable notification and recording requirements in 40 CFR 60.10030 through 40 CFR 63.10033 according to the schedule in 40 CFR 63.10030 and Subpart A of 40 CFR 63, Subpart UUUUU, no later than April 16, 2016. The permittee shall demonstrate compliance no later than one-hundred-eighty (180) days after April 16, 2016 (October 13, 2016).

g) During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in 40 CFR 63, Subpart UUUUU. An affected facility subject to 40 C.F.R. 63.9991 shall meet the work practice standards established in 40 C.F.R. Part 63, Table 3 to Subpart UUUUU, as established in 401 KAR 63:002, Section 2(4)(yyyy). [401 KAR 59:015, Section 7 and Section 7(2)(b)]

2. Emission Limitations:

a) Particulate matter (PM) emissions from each stack shall not exceed 0.10 lb/MMBtu, based on a 3-hour average [40 CFR 60.42(a)(1) and 40 CFR 52.21].
Compliance Demonstration: Compliance with **2. Emission Limitations: (b)** substantiates compliance with this PM emission limitation.

b) Visible emissions shall not exceed twenty 20% opacity based on a six-minute average, except that a maximum of 27% opacity shall be allowed for one six-minute period in any 60 consecutive minutes [40 CFR 60.42(a)(2)].
Compliance Demonstration: See **3. Testing Requirements: (a)** and **4. Specific Monitoring Requirements: (a)** and **6. Specific Reporting Requirements: (a).**

c) SO_2 emissions from each stack shall not exceed 1.2 lb/MMBtu based on a three-hour average [40 CFR 60.43(a)(2)].
Compliance Demonstration: Compliance with **2. Emission Limitations: (d)** substantiates compliance with this emission limitation.

d) SO_2 emissions from each stack shall not exceed 0.8 lb/MMBtu based on a three-hour average [40 CFR 52.21].
Compliance Demonstration: See **4. Specific Monitoring Requirements: (c)** through **(f).**

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e) NO_x emissions from each stack shall not exceed 0.70 lb/MMBtu based on a three-hour average [40 CFR 60.44(a)(3)].
Compliance Demonstration: See **4. Specific Monitoring Requirements: (c)** through **(f)**.

f) For filterable PM, emissions shall not exceed 3.0E-2 lb/MMBtu based on the appropriate requirements in Table 2 of 40 CFR 63, Subpart UUUUU and shall apply at all times except during periods of startup or shutdown [40 CFR 63.9991(a), 40 CFR 63, Subpart UUUUU Table 2, Item 1.a, and 40 CFR 63.10000(a)].
Compliance Demonstration: See **3. Testing Requirements: (b)**, **(e)** though **(h),** and **(j)** and **6. Specific Reporting Requirements: (c)**.

g) For hydrogen chloride (HCl), emissions shall not exceed 2.0E-3 lb/MMBtu based on the appropriate requirements in Table 2 of 40 CFR 63, Subpart UUUUU and shall apply at all times except during periods of startup or shutdown [40 CFR 63.9991(a), 40 CFR 63, Subpart UUUUU Table 2, Item 1.b., and 40 CFR 63.10000(a)].
Compliance Demonstration: See **3. Testing Requirements: (c)**, **(e)** through **(j),** and **6. Specific Reporting Requirements: (c)**.

h) For mercury (Hg), emissions shall not exceed 1.2 lb/TBtu based on calculating the 30-boiler operating day rolling arithmetic average emissions rate in units of the applicable emissions standard basis at the end of each boiler operating day using all of the quality assured hourly average CEMS data for the previous 30-boiler operating days, excluding data recorded during periods of startup or shut down [40 CFR 63.9991(a), 40 CFR 63. Subpart UUUUU, Table 2, Item 1.c.].
Compliance Demonstration: See **3. Testing Requirements: (d)** and **(e)** through **(j)**, **4. Specific Monitoring Requirements: (g)** through **(l)**, and **5. Specific Recordkeeping Requirements: (f)** and **(g)**.

3. Testing Requirements:

a) If no U.S. EPA Reference Method 9 tests are performed pursuant to paragraph **4. Specific Monitoring Requirements: (a)**, then the permittee shall determine the opacity from the stack by U.S. EPA Reference Method 9 at least once every 14 boiler operating days, or more frequently if requested by the Division, to demonstrate compliance with the opacity standard. If no U.S. EPA Reference Method 9 test is completed during the time period, the reason for not completing a test shall be documented and the permittee may use the COM system for assuring compliance with the visible emission limitation during that period.

b) Since the coal-fired EGU's have not qualified as LEEs for filterable particulate matter (PM), the permittee shall demonstrate compliance through initial and periodic quarterly performance stack test for PM according to Table 5 and 40 CFR 63.10007, except as otherwise provided in 40 CFR 63.10021(d)(1) [40 CFR 63.10000(c)(1)(iv), 40 CFR 63.10006(c) and 40 CFR 63.10011(a)].

c) Since the coal-fired EGUs have not qualified as LEEs for hydrogen chloride (HCl), the permittee shall demonstrate initial and continuous compliance by conducting initial and periodic quarterly performance stack test for HCl according to Table 5 and 40 CFR

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63.10007, except as otherwise provided in 40 CFR 63.10021(d)(1) [40 CFR 63.10000(c)(1)(v), 40 CFR 63.10006(d), and 40 CFR 63.10011(a)].

d) Since the coal-fired EGUs have not qualified as LEEs for Hg, the permittee shall demonstrate initial and continuous compliance through use of a Hg CEMS, in accordance with appendix A of 40 CFR 63, Subpart UUUUU. The initial performance test shall consist of a 30-boiler operating day rolling average emissions rate obtained with a certified CEMS, expressed in units of the standard. If the monitoring system is certified prior to the applicable compliance date, the initial averaging period shall either begin with: The first boiler operating day on or after the compliance date; or 30 boiler operating days prior to that date, as described in 40 CFR 63.10005(b). In all cases, the initial 30-operating day averaging period shall be completed on or before the date that compliance shall be demonstrated, in accordance with 40 CFR 63.9984(f). Initial compliance is demonstrated if the results of the performance test meet the applicable emission limit in Table 2 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10000(c)(1)(vi) and 40 CFR 63.10011(c)(1)].

e) For complying with emission standards under 40 CFR 63, Subpart UUUUU, the permittee may skip performance testing in those quarters during which less than 168 boiler operating hours occur, except that a performance test shall be conducted at least once every calendar year [40 CFR 63.10021(d)(1)].

f) The permittee shall conduct all required performance tests according to 40 CFR 63.7(d), (e), (f), and (h). The permittee shall also develop a site-specific test plan according to the requirements in 40 CFR 63.7(c) [40 CFR 63.10007(a)].
   i) For Hg CEMS, to determine compliance with a 30-boiler operating day rolling average emission limit, the permittee shall collect data for all nonexempt unit operating conditions (see 40 CFR 63.10011(g) and Table 3 of 40 CFR 63, Subpart UUUUU) [40 CFR 63.10007(a)(1)].
   ii) For PM and HCl performance testing, maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of site specific normal operations during each test run [40 CFR 63.10007(a)(2)].

g) The permittee shall conduct each performance test (including traditional 3-run stack tests, 30-boiler operating day tests based on CEMS data) according to the requirements in Table 5 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10007(b)].

h) The permittee shall conduct a minimum of three separate test runs for each performance tests, as specified in 40 CFR 63.7(e)(3). Each test run shall comply with the minimum applicable sampling time or volume specified in Table 2 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10007(d)].

i) The permittee is required to (or elects to) demonstrate initial compliance using a CMS, for a particular emission or operating limit, the CMS shall pass a performance evaluation prior to the initial compliance demonstration. If a CMS has been previously certified under another state or federal program and is continuing to meet the on-going quality-assurance (QA) requirements of that program, then, provided that the certification and

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QA provisions of that program meet the applicable requirement of 40 CFR 63.10010(b) through (h), an additional performance evaluation of the CMS is not required under 40 CFR 63, Subpart UUUUU. To demonstrate compliance with the applicable Hg emission limit specified in **2. Emission Limitations: (h)**, using Hg CEMS, initial compliance shall be demonstrated no later than the applicable date specified in 40 CFR 63.9984(f). Initial compliance is achieved if the arithmetic average of 30-boiler operating days of quality-assured CEMS data, expressed in units of the standard (see section 6.2 of appendix A of 40 CFR 63, Subpart UUUUU), meets the applicable Hg emission limit in Table 2 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10005(d)].

j) The permittee shall complete performance tests for the EGU at least 45 calendar days, measured from the test's end date, shall separate performance tests conducted every quarter. For units demonstrating compliance through quarterly emission testing, the permittee shall conduct a performance test in the 4th quarter of a calendar year if the EGU has skipped performance tests in the first 3 quarters of the calendar year. If the EGU misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next test period, the permittee shall complete an additional performance test in that period as follows[40 CFR 63.10006(f)]:
   i) At least 15 calendar days shall separate two performance tests conducted in the same quarter [40 CFR 63.10006(f)(1)];
   ii) At least 107 calendar days shall separate two performance tests conducted in the same calendar year [40 CFR 63.10006(f)(2)]; and
   iii) At least 350 calendar days shall separate two performance tests conducted in the same 3 year period [40 CFR 63.10006(f)(3)].

4. Specific Monitoring Requirements:

a) A continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding exempted time periods, if any three consecutive six-minute average opacity values exceed the applicable opacity standard, the permittee shall, as appropriate [40 CFR 60.45(a), 401 KAR 59:005, Section 4(3)(a)(1), 40 CFR 64.5(c)(1), and 401 KAR 52:020, Section 10]:
   1) Accept the readout from the COM as an indicator of equipment performance and perform an inspection of the COM and/or the control equipment and make any repairs or;
   2) Within 30 minutes after the third consecutive COM indicated exceedance of the opacity standards, if emissions are visible, initiate a determination of opacity using U.S. EPA Reference Method 9 test. Also within 30 minutes after the third consecutive COM indicated exceedance, inspect the COM and/or the control equipment, and initiate any repairs. If a U.S. EPA Reference Method 9 cannot be performed, the reason for not performing the test shall be documented.

b) The permittee shall monitor the voltage and amperage readings of the ESP transformer/rectifier sets once per shift. Corrective action shall be initiated when an excursion occurs outside the indicator ranges established in the approved CAM plan for those parameters [401 KAR 52:020, Section 10].

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c) Continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for SO_2 emissions, NO_x emissions, and either oxygen (O_2) or carbon dioxide (CO_2) emissions [40 CFR 60.45(a), 401 KAR 52:020, Section 10]. The continuous emission monitoring systems shall be used to satisfy CAM requirements for SO_2 and NO_x [40 CFR 64.3(d)].
   1) NO_x and SO_2 CEMS shall comply with Performance Specification 2 of Appendix B to 40 CFR Part 60 and 40 CFR Part 75 [40 CFR 64.3(d)(2)(ii) and (d)(2)(iv)].
   2) O_2 or CO_2 CEMS shall comply with Performance Specification 3 of Appendix B to 40 CFR Part 60 and 40 CFR Part 75 [40 CFR 64.3(d)(2)(ii) and (d)(2)(iv)].
   3) The continuous emission monitoring systems shall be used to satisfy CAM requirements for SO_2 and NO_x [40 CFR 64.3(d)].

d) To meet the monitoring requirement for SO_2 and NO_x, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shutdown periods, if any three-hour average nitrogen oxide or sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable [401 KAR 52:020, Section 10].

e) Performance evaluations of CEMS required under 40 CFR 60.13(c) and calibration checks required under 40 CFR 60.13(d), shall be completed based on the procedures in 40 CFR 60.45(c) and listed below [40 CFR 60.45(c)]:
   1) Methods 6, 7, and 3B of appendix A of this part, as applicable, shall be used for the performance evaluations of SO_2 and NO_x continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B in Appendix A of 40 CFR 60 are given in 40 CFR 60.46(d). [40 CFR 60.45(c)(1)]
   2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60 [40 CFR 60.45(c)(2)].
   3) The span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent. The span value for a continuous monitoring system measuring sulfur oxides or NO_x shall be determined based on the table in 40 CFR 60.45(c)(3)(i) or the permittee may elect to use the span values for SO_2 and NO_x according to section 2.1.1 and 2.1.2 in Appendix A of 40 CFR 75 [40 CFR 60.45(c)(3)].

f) Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described 40 CFR 60.45(e) and 40 CFR 60.45(f) [40 CFR 60.45(e)].

g) The permittee shall install, certify, maintain, and operate a Hg CEMS for Emission Unit 01 and 02, in accordance with Appendix A of 40 CFR 63, Subpart UUUUU [40 CFR 63, Subpart UUUUU, Table 5, Item 4].

h) If the permittee demonstrates compliance with any applicable emissions limit through use of a continuous monitoring system (CMS) where a CMS includes a continuous parameter monitoring system (CPMS) as well as a continuous emissions monitoring system

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(CEMS), the permittee shall develop a site-specific monitoring plan and submit this site-specific monitoring plan, if requested, at least 60 days before the initial performance evaluation (where applicable) of the CMS. This requirement also applies to the permittee if the permittee petitions the Administrator for alternative monitoring parameters under 40 CFR 63.8(f). This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS and CPMS prepared under Appendix B to 40 CFR part 60 or 40 CFR part 75, and meet the requirements of 40 CFR 63.10010. Using the process described in 40 CFR 63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified, if approved, include those in the site-specific monitoring plan [40 CFR 63.10000(d)(1)].

i) The site-specific monitoring plan shall include the information specified in 40 CFR 63.10000 (d)(5)(i) through (d)(5)(vii). Alternatively, the requirements of 40 CFR 63.10000 (d)(5)(i) through (d)(5)(vii) are considered to be met for a particular CMS [40 CFR 63.10000(d)(2)]:
   A) The CMS is installed, certified, maintained, operated, and quality-assured either according to 40 CFR 75, or appendix A or B of 40 CFR 63, Subpart UUUUU [40 CFR 63.10000(d)(2)(i)]; and
   B) The recordkeeping and reporting requirements of 40 CFR 75, or appendix A or B of 40 CFR 63, Subpart UUUUU, that pertain to CMS are met [40 CFR 63.10000(d)(2)(ii)].

ii) If requested by the Administrator, the permittee shall submit the monitoring plan (or relevant portion of the plan) at least 60 days before the initial performance evaluation of a particular CMS, except where the CMS has already undergone a performance evaluation that meets the requirements of 40 CFR 63.10010 (e.g., if the CMS was previously certified under another program) [40 CFR 63.10000(d)(3)].

iii) The permittee shall operate and maintain the CMS according to the site-specific monitoring plan [40 CFR 63.10000(d)(4)].

iv) The provisions of the site-specific monitoring plan shall address the following items [40 CFR 63.10000(d)(5)]:
   A) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). See 40 CFR 63.10010(a) for further details [40 CFR 63.10000(d)(5)(i)];
   B) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems [40 CFR 63.10000(d)(5)(ii)];
   C) Schedule for conducting initial and periodic performance evaluations [40 CFR 63.10000(d)(5)(iii)];
   D) Performance evaluation procedures and acceptance criteria (e.g., calibrations), including the quality control program in accordance with the general requirements of 40 CFR 63.8(d) [40 CFR 63.10000(d)(5)(iv)];
   E) On-going operation and maintenance procedures, in accordance with the general requirements of 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii) [40 CFR 63.10000(d)(5)(v)];

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F) Conditions that define a CMS that is out of control consistent with 40 CFR 63.8(c)(7)(i) and for responding to out of control periods consistent with 40 CFR 63.8(c)(7)(ii) and (c)(8) [40 CFR 63.10000(d)(5)(vi)];

G) On-going recordkeeping and reporting procedures, in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i), or as specifically required under 40 CFR 63, Subpart UUUUU [40 CFR 63.10000(d)(4)(vii)].

i) The permittee shall operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see 40 CFR 63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. The permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable [40 CFR 63.10020(b)].

j) The permittee shall not use data recorded during EGU startup or shutdown in calculations used to report emissions. In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. The permittee shall use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system [40 CFR 63.10020(c)].

k) Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activates including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation from the monitoring requirements [40 CFR 63.10020(d)].

l) Since the permittee use a CEMS to measure Hg emissions, the permittee shall demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS and the other required monitoring systems (e.g., flow rate, CO_2, O_2, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day rolling average basis, updated at the end of each new boiler operating day [40 CFR 63.10021(b)].

m) See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

systems and devices; and all other information required by 40 CFR 60. All information shall be recorded in a permanent form suitable for inspection [40 CFR 60.7(f)].

b) The permittee shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the emission unit; any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative [40 CFR 60.7(b)].

c) Records of primary/secondary voltage and current shall be maintained with long-term operational records for a period of five years [40 CFR 64 and 401 KAR 52:020, Section 10].

d) The permittee shall maintain adequate records of the accounts of each tune-up and provide documentation that all tune-up meet all rule requirements [40 CFR 63.10005(f)].

e) Upon request, the permittee shall make available to the EPA Administrator such records as may be necessary to determine whether the performance tests have been done according to the requirements in 40 CFR 63, Subpart UUUUU [40 CFR 63.10007(g)].

f) For Hg, the permittee shall maintain records according to Appendix A of 40 CFR 63, Subpart UUUUU and the following [40 CFR 63.10032(a)]:
   i) A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv) [40 CFR 63.10032(a)(1)];
   ii) Records of performance stack tests, fuel analysis, or other compliance demonstrations and performance evaluations, as required in 40 CFR 63.10(b)(2)(viii) [40 CFR 63.10032(a)(2)].

g) For each CEMS, the permittee shall maintain the following [40 CFR 63.10032(b)]:
   i) Records described in 40 CFR 63.10(b)(2)(vi) through (xi) [40 CFR 63.10032(b)(1)];
   ii) Previous versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3) [40 CFR 63.10032(b)(2)];
   iii) Request for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i) [40 CFR 63.10032(b)(3)];
   iv) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during the period of startup, shutdown, or malfunction or during another period [40 CFR 63.10032(b)(4)].

h) The permittee shall maintain the records required in Table 7 of 40 CFR 63, Subpart UUUUU to show continuous compliance with each emission limit and operating limit that applies to the permittee [40 CFR 63.10032(c)].

i) The permittee shall maintain the following:
   i) Records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used [40 CFR 63.10032(d)(1)];

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii) If the permittee combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the permittee shall maintain a record which documents how the secondary material meets each of the legitimacy criteria. If the permittee combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(2), the permittee shall maintain records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the permittee shall maintain a record which documents how the fuel satisfies the requirements of the petition [40 CFR 63.10032(d)(2)].

j) The permittee shall maintain records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.10032(g)].

k) The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR 63.10032(h)].

l) The records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1) [40 CFR 63.10033(a)].

m) As specified in 40 CFR 63.10(b)(1), the permittee shall maintain each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record [40 CFR 63.10033(b)].

n) The permittee shall maintain each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years [40 CFR 63.10033(c)].

o) The permittee shall keep visible observation records and U.S. EPA Reference Method 9 observations in a designated logbook and/or an electronic format. Records shall be maintained for five years [KAR 52:020, Section 10].

6. Specific Reporting Requirements:

a) Excess emission and monitoring system performance reports shall be submitted to the Administrator semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows [40 CFR 60.45(g)]:

1) Excess emissions for opacity are defined as any six-minute period during which the average opacity exceeds twenty percent, except that one six-minute average per hour of up to 27% opacity need not be reported [40 CFR 60.45(g)(1)].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2) Excess emissions of sulfur dioxide are defined as any three hour period during which the average emissions (arithmetic average of three contiguous one hour periods) as measure by CEMS exceed the applicable sulfur dioxide emissions standards [40 CFR 60.45(g)(2)].
3) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards [40 CFR 60.45(g)(3)].

b) The permittee shall submit all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6) and 40 CFR 63.9(b) through (h) that apply to the permittee [40 CFR 63.10030(a)].

c) The permittee shall submit Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin [40 CFR 63.10030(d)].

d) The permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that [40 CFR 63.10021(i) and 40 CFR 63.10030(e)(8)(iii)]:
   i) The permittee submits a request that identifies for each EGU or EGU emissions averaging group involved in the proposed switch both the current definition of "startup" relied on and the proposed definition you plan to rely on;
   ii) The request arrives to the Administrator at least 30 calendar days prior to the date that the switch is proposed to occur;
   iii) The permittee revises and submits all other applicable plans, e.g., monitoring and emissions averaging, with your submission;
   iv) The permittee maintains records of all information regarding your choice of the definition of "startup"; and
   v) The permittee begins to use the revised definition of "startup" in the next reporting period after receipt of written acknowledgement from the Administrator of the switch.

e) The permittee shall submit each report according to Table 8 of 40 CFR 63, Subpart UUUUU that applies. For continuously monitoring Hg emissions, the permittee shall also submit the electronic reports required under appendix A, at the specified frequency [40 CFR 63.10031(a)].

f) Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee shall submit each report by the date in Table 8 of 40 CFR 63, Subpart UUUUU and according to the requirements specified [40 CFR 63.10031(b)]:
   i) The first compliance report shall cover the initial period (April 16, 2016) and end on December 31, 2017 (at least 180 days after the applicable start date) [40 CFR 63.10031(b)(1)];
   ii) The first compliance report shall be postmarked or submitted electronically no later than January 31, 2017 [40 CFR 63.10031(b)(2)];
   iii) Each subsequent compliance report shall cover the semiannual reporting period from January 1 to June 30 or July 1 through December 31 [40 CFR 63.10031(b)(3)];

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iv) Each subsequent compliance report shall be postmarked or submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period [40 CFR 63.10031(b)(4)];

v) For each affected source that is subject to permitting regulations pursuant 40 CFR 70 or 71 and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates specified in 40 CFR 63.10031(b)(1) through (4) [40 CFR 63.10031(b)(5)].

g) The semiannual compliance report shall contain the following [40 CFR 63.10011(g), Table 3, 40 CFR 63.10021(f) through (i) 40 CFR 63.10031(c) and 40 CFR 63, Subpart UUUUU, Table 8, Item 1]:

i) The information required by the summary report located in 40 CFR 63.10(e)(3)(vi) [40 CFR 63.10031(c)(1)];

ii) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited, to , a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure [40 CFR 63.10031(c)(2)];

iii) Indicate whether the permittee burned new types of fuel during the reporting period. If new type of fuel was burned, the permittee shall include the date of the performance test where that fuel was in use[40 CFR 63.10031(c)(3)];

iv) Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in 40 CFR 63.10021(e)(6) and (7) where completed [40 CFR 63.10031(c)(4)];

v) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test[40 CFR 63.10031(c)(7)];

vi) A certification [40 CFR 63.10031(c)(8)];

vii) For deviations from any emission limit, work practice standard, or operating limit, the permittee shall also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation [40 CFR 63.10031(c)(9)];

viii) If there are no deviations from any emission limitations (emission limit and operating limit) that apply and there are no deviations from the requirements for work practice standards, the permittee shall provide a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMS were out-of-control as specified in 40 CFR 63.8(c)(7), the permittee shall provide a statement that there were no periods during which the CMS were out-of-control during the reporting period [40 CFR 63, Subpart UUUUU, Table 8 Item 1(b)];

ix) If the permittee has a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report shall contain the information in 40 CFR 63.10031(d). If there were periods during which the CMS were out-of-control, as specified in 40 CFR 63.8(c)(7), the report shall

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

control the information in 40 CFR 63.10031(e). [40 CFR 63, Subpart UUUUU, Table 8 Item 1(c)].

h) For each excess emissions occurring where the permittee is using a CMS to comply with that emission limit or operating limit, the permittee shall include the information required in 40 CFR 63.10(e)(3)(v) in the compliance report specified in 40 CFR 63.10031(c) [40 CFR 63.10031(d)].

i) The permittee shall report all deviations as defined in 40 CFR 63, Subpart UUUUU, in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 8 along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority [40 CFR 63.10031(e)].

j) If the permittee has a malfunction during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have cause any applicable emission limitation to be exceeded [40 CFR 63.10031(g)].

k) On or after July 1, 2020, within 60 days after the date of completing each performance test, you must submit the performance test reports required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov*). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see *https://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using those test methods on the ERT website are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority [40 CFR 63.10031(f)].
   i) On or after July 1, 2020, within 60 days after the date of completing each CEMS (SO_2, PM, HCl, HF, and Hg) performance evaluation test, as defined in §63.2 and required by this subpart, you must submit the relative accuracy test audit (RATA)

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

data (or, for PM CEMS, RCA and RRA data) required by this subpart to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (*https://cdx.epa.gov*). The RATA data shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (*https://www.epa.gov/ttn/chief/ert/index.html*). Only RATA data compounds listed on the ERT website are subject to this requirement. Owners or operators who claim that some of the information being submitted for RATAs is confidential business information (CBI) shall submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) by registered letter to EPA and the same ERT file with the CBI omitted to EPA via CDX as described earlier in this paragraph. The compact disk or other commonly used electronic storage media shall be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. At the discretion of the delegated authority, owners or operators shall also submit these RATAs to the delegated authority in the format specified by the delegated authority. Owners or operators shall submit calibration error testing, drift checks, and other information required in the performance evaluation as described in §63.2 and as required in this chapter [40 CFR 63.10031(f)(1)].

ii) On or after July 1, 2020, for a PM CEMS, PM CPMS, or approved alternative monitoring using a HAP metals CEMS, within 60 days after the reporting periods ending on March 31st, June 30th, September 30th, and December 31st, you must submit quarterly reports to the EPA's WebFIRE database by using the CEDRI that is accessed through the EPA's CDX (*https://cdx.epa.gov*). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format. For each reporting period, the quarterly reports must include all of the calculated 30-boiler operating day rolling average values derived from the CEMS and PM CPMS. [40 CFR 63.10031(f)(2)].

iii) Reports for an SO_2 CEMS, a Hg CEMS or sorbent trap monitoring system, an HCl or HF CEMS, and any supporting monitors for such systems (such as a diluent or moisture monitor) shall be submitted using the ECMPS Client Tool, as provided for in Appendices A and B to this subpart and 40 CFR 63.10021(f) [40 CFR 63.10031(f)(3)].

iv) On or after July 1, 2020, submit the compliance reports required under paragraphs (c) and (d) of this section and the notification of compliance status required under 40 CFR 63.10030(e) to the EPA's WebFIRE database by using the CEDRI that is accessed through the EPA's CDX (*https://cdx.epa.gov*). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format [40 CFR 63.10031(f)(4)].

v) All reports required by this subpart not subject to the requirements in paragraphs (f) introductory text and (f)(1) through (4) of this section must be sent to the Administrator at the appropriate address listed in §63.13. If acceptable to both the Administrator and the owner or operator of an EGU, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to paragraphs (f) introductory text and (f)(1) through (4) of this section in paper format [40 CFR 63.10031(f)(5)].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

vi) Prior to July 1, 2020, all reports subject to electronic submittal in paragraphs (f) introductory text, (f)(1), (2), and (4) of this section shall be submitted to the EPA at the frequency specified in those paragraphs in electronic portable document format (PDF) using the ECMPS Client Tool. Each PDF version of a submitted report must include sufficient information to assess compliance and to demonstrate that the testing was done properly. The following data elements must be entered into the ECMPS Client Tool at the time of submission of each PDF file [40 CFR 63.10031(f)(6)]:

A) The facility name, physical address, mailing address (if different from the physical address), and county [40 CFR 63.10031(f)(6)(i)];

B) The ORIS code (or equivalent ID number assigned by EPA's Clean Air Markets Division (CAMD)) and the Facility Registry System (FRS) ID [40 CFR 63.10031(f)(6)(ii)];

C) The EGU (or EGUs) to which the report applies. Report the EGU IDs as they appear in the CAMD Business System [40 CFR 63.10031(f)(6)(iii)];

D) If any of the EGUs in paragraph (f)(6)(iii) of this section share a common stack, indicate which EGUs share the stack. If emissions data are monitored and reported at the common stack according to part 75 of this chapter, report the ID number of the common stack as it is represented in the electronic monitoring plan required under §75.53 of this chapter [40 CFR 63.10031(f)(6)(iv)];

E) If any of the EGUs described in paragraph (f)(6)(iii) of this section are in an averaging plan under §63.10009, indicate which EGUs are in the plan and whether it is a 30- or 90-day averaging plan [40 CFR 63.10031(f)(6)(v)];

F) The identification of each emission point to which the report applies. An "emission point" is a point at which source effluent is released to the atmosphere, and is either a dedicated stack that serves one of the EGUs identified in paragraph (f)(6)(iii) of this section or a common stack that serves two or more of those EGUs. To identify an emission point, associate it with the EGU or stack ID in the CAMD Business system or the electronic monitoring plan (e.g., "Unit 2 stack," "common stack CS001," or "multiple stack MS001") [40 CFR 63.10031(f)(6)(vi)];

G) The rule citation (e.g., 40 CFR 63.10031(f)(1), 40 CFR 63.10031(f)(2), etc.) for which the report is showing compliance [40 CFR 63.10031(f)(6)(vii)];

H) The pollutant(s) being addressed in the report [40 CFR 63.10031(f)(6)(viii)];

I) The reporting period being covered by the report (if applicable) [40 CFR 63.10031(f)(6)(ix)];

J) The relevant test method that was performed for a performance test (if applicable) [40 CFR 63.10031(f)(6)(x)];

K) The date the performance test was conducted (if applicable) [40 CFR 63.10031(f)(6)(xi)]; and

L) The responsible official's name, title, and phone number [40 CFR 63.10031(f)(6)(xii)].

7. <u>Specific Control Equipment Operating Conditions</u>:

a) The electrostatic precipitator (ESP), wet flue gas desulfurization unit (FGD), and low NO_x burner system shall be operated to maintain compliance with permitted emission

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

limitations, consistent with manufacturer's specifications and good operating practices [401 KAR 50:055].

b) Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020 Section 10 and 40 CFR 63.10032].

c) See **Section E-Source Control Equipment Requirements** for further requirements.

d) At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source [40 CFR 63.10000(b)].

Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)** and **(i)** through **(k)**; **5. Specific Recordkeeping Requirements: (a)** through **(c)**, and **(j)** through **(n)**.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 03: Coal and Pet Coke Hauling and Storage Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU03(1)	Coal and Pet Coke Storage Piles	800 tons/hr	Wet Material, Compaction, Telescopic Chute	1975
EU03(2)	Haul Trucks on Unpaved Roads to Stockpiles	400 tons/hr	Wet Material, Water Suppression	1975
EU03(3)	Haul Trucks on Paved Road to Coal Pile or Receiving Hoppers (Coal)	400 tons/hr	Wet Material, Water Suppression	1975

APPLICABLE REGULATIONS:
401 KAR 63:010, Fugitive Emissions

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   a) Reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following [401 KAR 63:010, Section 3]:
      i) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land [401 KAR 63:010, Section 3(a)];
      ii) Application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces, which can create airborne dusts [401 KAR 63:010, Section 3(1)(b)];
      iii) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne [401 KAR 63:010, Section 3(1)(d)];
      iv) The maintenance of paved roadways in a clean condition [401 KAR 63:010, Section 3(1)(e)]; and
      v) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water [401 KAR 63:010, Section 3(1)(f)].

   b) Additional Requirements, in addition to the requirements of Section 3 of this regulation, the following shall apply [401 KAR 63:010, Section 4]:
      i) Open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered at all times when in motion [401 KAR 63:010, Section 4(1)];
      ii) The provisions of 401 KAR 63:010, Section 3(1) and (2) shall not be applicable to temporary blasting or construction operations [401 KAR 63:010, Section 4(3)]; and
      iii) No one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway [401 KAR 63:010, Section 4(4)].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations:

Discharge of visible fugitive dust emissions beyond the property line is prohibited [401 KAR 63:010, Section 3(2)].

Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)**.

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

a) The permittee shall monitor the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) Visual observations shall be made on a daily basis during operation, to ensure that the fugitive air emissions are not being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with applicable requirements of 401 KAR 63:010 [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain the records of amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall maintain records of the daily visual observations performed and, if applicable, records of when water or other wetting agents were used to suppress fugitive emissions as noted in **4. Specific Monitoring Requirements: (b)** [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

7. Specific Control Equipment Operating Conditions:

a) Water suppression and compaction shall be operated to maintain compliance with applicable requirements, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) See **Section E – Source Control Equipment Requirements** for additional requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 04A: Coal and Pet Coke Crushing and Processing Equipment

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU04(1)	Receiving Hoppers (Coal) from Haul Trucks to Underground A1Conveyor	400 tons/hr	Wet Material, Partial Enclosure	1975
EU04(2)	Coal Conveyor & Transfer Points (30" x350')(A1 Conveyor)(From A1 to A Conveyors)	400 tons/hr	Partial Enclosure	1975
EU04(4)	Coal and Pet Coke from Green Barge Unloading	1,500 tons/hr	Baghouse	1975
EU04(5)	Coal and Pet Coke from Green Barge Transfer onto B1 Conveyors	1,500 tons/hr	Baghouse (Share with EU04 (4))	1975
EU04(6)	Coal and Pet Coke Conveyor & Transfer Points (54" x 542') (B1 Conveyor)	1,500 tons/hr	Bin Vent Filters	1975
EU04(8)	Coal/Pet Coke Conveyor & Transfer Points (2 at 30" x 1686')(1C & 2C Conveyors) (From 1C & 2C to Crusher)	800 tons/hr	Wet Material, Partial Enclosure	1975
EU04(9)	Crusher House Feeders (400 tons/hr per Crusher)	800 tons/hr	Wet Material, Complete Enclosure	1975
EU04(10)	Coal/Pet Coke Conveyor & Transfer Points (Crusher House)(From Crusher House to 2D Conveyor)	400 tons/hr	Bin Vent Filters	1975
EU04(11)	Coal/Pet Coke Conveyor & Transfer Points (Crusher House)(From Crusher House to 1D Conveyor)	400 tons/hr	Bin Vent Filters	1975
EU04(12)	Coal/Pet Coke Conveyor & Transfer Points (2 at 30" x 1014')(1D & 2D Conveyors)(From 1D & 2D Conveyors to Tripper Room)	800 tons/hr	Baghouse	1975
EU04(16)	Coal Conveyor & Transfer Points (42" x 843')(Stack-Out Conveyor)(From Stack-Out Conveyor to Radial Stacker)	400 tons/hr	Wet Material, Partial Enclosures	2000

Applicable Regulations:
401 KAR 59:010, New Process Operations

401 KAR 60:005, Section 2(2)(gg), 40 C.F.R. 60.250 to 60.258, (**Subpart Y**), *Standards of Performance for Coal Preparation Plants*.

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   N/A

2. **Emission Limitations:**
   a) Particulate matter emissions into the open air from shall not exceed:
      i) $[3.59(P)^{0.62}]$ lbs/hr, where P is the processing rate in tons per hour, for P<30 tons/hr [401 KAR 59:010, Section 3(2)].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii) [$17.31(P)^{0.16}$] lbs/hr, where P is the processing rate in tons per hour, for P>30 tons/hr [401 KAR 59:010, Section 3(2)].

Compliance Demonstration: These units are assumed to be in compliance with the particulate emission limit based on the AP-42 particulate matter emission factor.

b) Visible emissions shall not equal or exceed twenty 20% based on a six-minute average [401 KAR 59:010, Section 3(1)(a)].
Compliance Demonstration: **See 4. Specific Monitoring Requirements: (b).**

c) On and after the date on which the performance test is conducted or required to be completed under 40 CFR 60.8, whichever date comes first, the permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20% opacity or greater [40 CFR 60.254(a)].
Compliance Demonstration: See **3. Testing Requirements: (b**) and **4. Specific Monitoring Requirements: (b)**.

3. Testing Requirements:

a) Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4.

b) The permittee shall conduct opacity testing according to 40 CFR 60.257(a) by performing a U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR part 60, and shall follow the procedures as described in 40 CFR 60.11 when visible emissions are observed [40 CFR 60.257(a)].

4. Specific Monitoring Requirements:

a) The permittee shall monitor the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall perform a qualitative visible observation of the opacity from stacks on a daily basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by U.S. EPA Reference Method 9 and the permittee shall initiate an inspection of the control equipment for any necessary repairs. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

a) The permittee shall monitor the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall record and maintain a log of any U.S. EPA Reference Method 9 opacity observations made recording the date, time, and opacity reading. The permittee shall also document inspections and any repairs made [401 KAR 52:020, Section 10].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

7. Specific Control Equipment Operating Conditions:

a) The enclosure and baghouse at Green Station barge unloading, bin vent filters on the B1 Conveyor transfer point, enclosure on the Crusher House, bin vent filters on the crusher house to 2D conveyor transfer point, bin vent filters on the crusher house to 1D conveyor transfer point, baghouse on the tripper room and conveyor transfer points shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020 Section 10].

c) See **Section E – Source Control Equipment Requirement**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 04B: Coal and Pet Coke Crushing and Processing Equipment

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU04(3)	Coal Conveyor & Transfer Points (30" x 350')(A Conveyor)(From A Conveyor to Coal Stockpile)	400 tons/hr	Wet Material, Telescopic Chute	1975
EU04(7)	Coal / Pet Coke Conveyor & Transfer Point (54" x 1078')(B2 Conveyor)(From B2 Conveyor to Coal/Pet Coke Pile)	1,500 tons/hr	Wet Material, Telescopic Chute	1975
EU04(13)	Coal from Reid Barge Unloader	800 tons/hr	Partial Enclosure & Wet Material	1963
EU04(14)	Coal Conveyor & Transfer Points (Barge Unloader)(From Unloader to #1 River Conveyor)	800 tons/hr	Partial Enclosure & Wet Material	1963
EU04(15)	Coal Conveyor & Transfer Points (42" x 1318')(Transfer House)(From #1 River to Stack-Out Conveyors)	800 tons/hr	Wet Material, Partial Enclosure	1963
EU04(17)	Coal Conveyor & Transfer Points (36" x 400') (Radial Stacker)(From Radial Stacker to Coal Pile)	400 tons/hr	Wet Material	2000

Applicable Regulations:
401 KAR 63:010, Fugitive Emissions

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   Reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following [401 KAR 63:010, Section 3(1)]:
   a) Installation and use of hoods, fans, and enclosures to vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling; and/or
   b) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces, which can create airborne dusts.

2. **Emission Limitations:**
   No person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate [401 KAR 63:010, Section 3(2)].
   Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)**.

3. **Testing Requirements:**
   N/A

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a) The permittee shall monitor the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) Visual observations shall be made on a daily basis during operation, to ensure that the fugitive air emissions are not being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with applicable requirements of 401 KAR 63:010. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

a) The permittee shall keep records of the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall maintain records of the daily visual observations and, if applicable, records of when water or other wetting agents were used to suppress fugitive emissions as noted in **4. Specific Monitoring Requirements: (b)** [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See **Section F – Monitoring Recordkeeping and Reporting Requirements**.

7. Specific Control Equipment Operating Conditions:

a) The partial enclosures on the conveyor transfer points, wetting, and telescopic chutes shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) See **Section E-Source Control Equipment Requirements**.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 05: Lime Conveying and Storage Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU05(1)	Lime Conveyor & Transfer Points (30" x 2450')(L1 Conveyor)(From L1 Conveyor to Lime Tower)	400 tons/hr	Baghouse	1975
EU05(2)	Lime Silos (Four (4) Silos with East & West Screw Conveyors)	400 tons/hr	Baghouse	1975
EU05(3)	Lime From Green Barge Unloading	400 tons/hr	Baghouse	1975
EU05(4)	Lime from Green Barge Unloading Transfer onto L1 Conveyor	400 tons/hr	Baghouse	1975

APPLICABLE REGULATIONS:
401 KAR 59:010, New Process Operations

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   N/A

2. **Emission Limitations:**
   a) Particulate matter emissions into the open air from shall not exceed:
      i) $[3.59(P)^{0.62}]$ lbs/hr, where P is the processing rate in tons per hour, for P<30 tons/hr [401 KAR 59:010, Section 3(2)].
      ii) $[17.31(P)^{0.16}]$ lbs/hr, where P is the processing rate in tons per hour, for P>30 tons/hr [401 KAR 59:010, Section 3(2)].

      Compliance Demonstration: These units are assumed to be in compliance with the particulate emission limit based on the AP-42 particulate matter emission factor and the proper operation of the baghouse and dust collectors.

   b) Visible emissions shall not equal or exceed twenty 20% based on a six-minute average [401 KAR 59:010, Section 3(1)(a)].
      Compliance Demonstration: See **4. Specific Monitoring Requirements: (a)**.

3. **Testing Requirements:**
   N/A

4. **Specific Monitoring Requirements:**
   a) The permittee shall perform a qualitative visual observation of the opacity from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity by U.S. EPA Reference Method 9 and the permittee shall initiate an inspection of the control equipment for any necessary repairs. [401 KAR 52:020, Section 10]

   b) The permittee shall monitor the amount of lime received and conveyed on a weekly basis [401 KAR 52:020, Section 10].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

a) The permittee shall keep records of the amount of lime received and conveyed on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall record and maintain a log of U.S. EPA Reference Method 9 opacity observations made recording the date, time, and opacity reading. The permittee shall also document inspections and any repairs made. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

7. Specific Control Equipment Operating Conditions:

a) The baghouses and dust collectors at storage silos and conveyor transfer points shall be operated to maintain compliance with applicable requirements, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020 Section 10].

c) See **Section E - Source Control Equipment Requirements**.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06: Lime Handling and Processing Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU06	Lime Slurry Slaker System	400 tons/hr	Enclosed	1975

APPLICABLE REGULATIONS:
401 KAR 63:010, Fugitive Emissions

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   Reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the installation and use of hoods, fans, and enclosure to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling [401 KAR 63:010, Section 3(1)(c)].

2. **Emission Limitations:**
   a) No person shall cause or permit the discharge of visible fugitive dust emissions beyond the property line on which the emissions originate [401 KAR 63:010, Section 3(2)].

   b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the Secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gasborne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air [401 KAR 63:010, Section 3(3)].
   Compliance Demonstration: See **4. Specific Monitoring Requirements**.

3. **Testing Requirements:**
   N/A

4. **Specific Monitoring Requirements:**
   Visual observations shall be made on a daily basis each day of operation, to ensure the control equipment is functioning while the associated equipment is in operation and to determine if any fugitive air emissions are being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with applicable requirements of 401 KAR 63:010 [401 KAR 52:020, Section 10].

5. **Specific Recordkeeping Requirements:**
   The permittee shall maintain records of the daily visual observations and, if applicable, records of when water or other wetting agents were used to suppress fugitive emissions as noted in **4. Specific Monitoring Requirements: (b)** [401 KAR 52:020, Section 10].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:
See **Sections F – Monitoring Recordkeeping and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 07A: Ash and Sludge Handling Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU07(1)	Ash Truck Loadout Stations	200 tons/hr	N/A	1975
EU07(4)	Sludge Conveyor	250 tons/hr	Inherent Moisture	1975
EU07(5)	Sludge Stockpile	250 tons/hr	Inherent Moisture	1975
EU07(6)	Sludge Truck Loadout	250 tons/hr	Inherent Moisture	1975
EU07(7)	Paved Haul Road	250 tons/hr	Chemical/Water Suppression	1975
EU07(8)	Unpaved Haul Road	250 tons/hr	Chemical/Water Water Suppression	1975
EU07(9)	Truck Dumping of Sludge to Landfill	250 tons/hr	Inherent Moisture	1975
EU07(10)	Landfill	250 tons/hr	Inherent Moisture	1975

APPLICABLE REGULATIONS:
401 KAR 63:010, Fugitive Emissions

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   Reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
   a) Application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces, which can create airborne dusts 401 KAR 63:010, Section 3(1)(b)];
   b) The maintenance of paved roadways in a clean condition [401 KAR 63:010, Section 3(1)(e)]; and
   c) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water [401 KAR 63:010, Section 3(1)(f)]

2. **Emission Limitations:**
   Discharge of visible fugitive dust emissions beyond the property line is prohibited [401 KAR 63:010, Section 3].
   Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)**.

3. **Testing Requirements:**
   N/A

4. **Specific Monitoring Requirements:**
   a) The permittee shall monitor the amount of fly ash and sludge processed on a weekly basis [401 KAR 52:020, Section 10].

   b) Visual observations shall be made on a daily basis during operations, to ensure that the fugitive air emissions are not being generated in such a manner as to cause a nuisance or

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with applicable requirements of 401 KAR 63:010. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain the records of the amount of flyash and sludge on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall maintain records of the daily visual observations and, if applicable, records of when water or other wetting agents were used to suppress fugitive emissions as noted in **4. Specific Monitoring Requirements: (b)** [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 07B: Ash and Sludge Handling Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU07(2)	Pug Mills	200 tons/hr	Baghouse	1975
EU07(3)	Fly Ash Silos	200 tons/hr	Baghouse	1975

APPLICABLE REGULATIONS:
401 KAR 59:010, New Process Operations

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   N/A

2. **Emission Limitations:**
   a) Particulate matter emissions into the open air from shall not exceed:
      i) [3.59(P)0.62] lbs/hr, where P is the processing rate in tons per hour, for P<30 tons/hr [401 KAR 59:010, Section 3(2)].
      ii) [17.31(P)0.16] lbs/hr, where P is the processing rate in tons per hour, for P>30 tons/hr [401 KAR 59:010, Section 3(2)].

      Compliance Demonstration: These units are assumed to be in compliance with the particulate emission limit based on the AP-42 particulate matter emission factor and the proper operation of the baghouse and dust collectors.

   b) Visible emissions shall not equal or exceed 20% opacity based on a six minute average [401 KAR 59:010, Section 3(1)(a)].
      Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)**.

3. **Testing Requirements:**
   Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4.

4. **Specific Monitoring Requirements:**
   a) The permittee shall monitor the amount of fly ash and sludge processed on a weekly basis [401 KAR 52:020, Section 10].

   b) The permittee shall perform a qualitative visual observation of the opacity from the pug mill stack and slurry storage silo stacks on a daily basis and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity by U.S. EPA Reference Method 9 and the permittee shall initiate an inspection of the control equipment for any necessary repairs [401 KAR 52:020, Section 10].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain the records of amount of fly ash and sludge processed on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall record and maintain a log of any U.S. EPA Reference Method 9 opacity observations made recording the date, time, and opacity reading. The permittee shall also document inspections and any repairs made [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

7. Specific Control Equipment Operating Conditions:

a) The baghouse on the pug mills and fly ash silos shall be operated to maintain compliance with applicable requirements, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020, Section 10].

c) See Section E-Source Control Equipment Requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 08: Two Cooling Towers

Description:

Emission Unit	Description	Operating Rate	Commenced Construction
EU08(1)	Cooling Tower	6.3 MMgal/hr	1975
EU08(2)	Cooling Tower	6.3 MMgal/hr	1975

APPLICABLE REGULATIONS:
401 KAR 59:010, New Process Operations

1. **Operating Limitations:**
   a) Particulate matter emissions into the open air from shall not exceed:
      i) [3.59(P)0.62] lbs/hr, where P is the processing rate in tons per hour, for P<30 tons/hr [401 KAR 59:010, Section 3(2)].
      ii) [17.31(P)0.16] lbs/hr, where P is the processing rate in tons per hour, for P>30 tons/hr [401 KAR 59:010, Section 3(2)].

   b) Visible emissions shall not equal or exceed twenty 20% based on a six-minute average [401 KAR 59:010, Section 3(1)(a)].

   Compliance Demonstration Method:
   The permittee is assumed to be in compliance with the applicable opacity and particulate matter emission standard. [401 KAR 50:045, Section 4(3)(c)1.]

2. **Emission Limitations:**
   NA

3. **Testing Requirements:**
   Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4.

4. **Specific Monitoring Requirements:**
   The permittee shall monitor total dissolved solids content of the circulating water on a monthly basis. [401 KAR 52:020, Section 10]

5. **Specific Recordkeeping Requirements:**
   The permittee shall maintain records of the maximum pumping capacity and monthly records of the total dissolved solids content. [401 KAR 52:020, Section 10]

6. **Specific Reporting Requirements:**
   See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 09: Diesel Emergency Fire Pump Engine

Description:

Emission Unit	Description	Model Year	Maximum Engine Rating	Fuel	Control Equipment
EU09	Cummins Model N-855-F, Serial # 10770141	1978	215 HP	Diesel	N/A

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(eeee), 40 CFR 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (**Subpart ZZZZ**), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Note: DC Circuit Court [*Delaware v. EPA*, 785 F. 3d 1 (DC Cir. 2015)] has vacated the provisions in 40 CFR 63, Subpart ZZZZ that contain the 100-hour exemption for operation of emergency engines for purposes of emergency demand response under 40 CFR 63.6640(f)(2)(ii)-(iii). The DC Circuit Court issued the mandate for the vacatur on May 4, 2016.

1. **Operating Limitations:**
   a) For the existing emergency fire pump unit the permittee shall [40 CFR 63.6602, 40 CFR 63.6625(e), 40 CFR 63.6595(a), and 40 CFR 63.6625(h), and 40 CFR 63, Subpart ZZZZ, Table 2c, Item 1]:
      i) Change oil and filter every 500 hours of operation or annually, whichever comes first, or change oil utilizing an oil analysis program according to the methods and requirements in order to extend the specified oil change requirements [40 CFR 63, Subpart ZZZZ, Table 2c, Item 1.a.];
      ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first [40 CFR 63, Subpart ZZZZ, Table 2c, Item 1.b.]; and
      iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary [40 CFR 63, Subpart ZZZZ, Table 2c, Item 1.c.].
      iv) Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply [40 CFR 63, Subpart ZZZZ, Table 2c, Item 1.d.].

   b) The permittee shall install a non-resettable hour meter if one is not already installed [40 CFR 63.6625(f)].

   c) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement of Table 2c, Item 1 to 40 CFR 63 Subpart ZZZZ, as provided for in 40 CFR 63.6625(i). The oil analysis shall be performed at the same frequency as specified for changing the oil [40 CFR 63.6625(i)].

   d) The permittee shall operate and maintain the engine according to the manufacturer's emission-related operating and maintenance instructions, or develop and follow own maintenance plan which shall provide, to the extent practicable, for the maintenance and

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 63.6625(e)].

e) The permittee shall operate the emergency engine according to the requirements in **1. Operating Limitations: (e)(i)** through **(iii)**. In order for the engine to be considered an emergency engine under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (3), is prohibited. If the engine is not operated according to the requirements in 40 CFR 63.6640(f)(1) through (iii), the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and shall meet all requirements for non-emergency [40 CFR 63.6640(f)].
   i) There is no time limit on the use of emergency engine in emergency situations [40 CFR 63.6640(f)(1)].
   ii) The permittee may operate the emergency engine for any combination of the purposes specified in 40 CFR 63.6640(f)(2) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). The emergency engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the emergency engine beyond 100 hours per calendar year [40 CFR 63.6640(f)(2)].
   iii) The emergency engine located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 63.6640(f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity [40 CFR 63.6640(f)(3)].

f) The permittee shall be in compliance with the emission limitations and operating limitations in 40 CFR 63, Subpart ZZZZ that apply at all times [40 CFR 63.6605(a)].

2. Emission Limitations:
N/A

3. Testing Requirements:
Testing shall be conducted at such time as may be requested by the cabinet in accordance with 401 KAR 50:045, Section 4.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of fuel usage and hours of operation on a monthly basis [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

a) The permittee shall keep records of each notification and report that is submitted, the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment, records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii), records of all required maintenance performed on the air pollution control and monitoring equipment, and records of action taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)]

b) The permittee shall maintain records of the maintenance conducted on the engine in order to demonstrate that the engine was operated and maintained, including any after-treatment control device, according to the maintenance plan for the engine[40 CFR 63.6655(e)].

c) The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation [40 CFR 63.6655(f)(1)].

d) The permittee shall maintain records for fuel usage on a monthly basis [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

a) The permittee shall report each instance in which the operating limitations in **1. Operating Limitations: (a)** have not been met. These instances are deviations from the emission and operating limitation in 40 CFR 63 Subpart ZZZZ and shall be reported according to 40 CFR 63.6650. [40 CFR 63.6640(b)]

b) The permittee shall report each instance in which the requirements of Table 8 to 40 CFR 63 Subpart ZZZZ, that apply, have not been met. The notifications listed 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (f)(6), 40 CFR 63.9(b) through (e) and (g) are not required. [40 CFR 63.6645(a)(5)]

c) See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 10: Diesel Fired Emergency Generator (new stationary RICE)

Description:

Emission Unit	Description	Model Year	Maximum Engine Rating	Fuel
EU10	Generac Model SD500 Engine Model TAD1641GE, Serial # 56815	2011	757 HP	Diesel

Applicable Regulations:
401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (**Subpart IIII**), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

401 KAR 63:002, Section 2(4)(eeee) 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (**Subpart ZZZZ**), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Note: DC Circuit Court [*Delaware v. EPA*, 785 F. 3d 1 (DC Cir. 2015)] has vacated the provisions in 40 CFR 63, Subpart ZZZZ and 40 CFR 60 Subpart IIII that contain the 100-hour exemption for operation of emergency engines for purposes of emergency demand response under 40 CFR 63.6640(f)(2)(ii)-(iii) and 60.4211(f)(2)(ii)-(iii). The DC Circuit Court issued the mandate for the vacatur on May 4, 2016.

1. **Operating Limitations:**
   a) The permittee shall submit an initial notification requirement and include the information in 40 CFR 63.9(b)(2)(i) through (v), and a statement that the emergency engine has no additional requirements and explain the basis for the exclusion [40 CFR 63.6645(f)].

   b) The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel [40 CFR 60.4207(b)].
   ***Compliance Demonstration*:** The permittee shall demonstrate compliance by using fuel supplier certification.

   c) The permittee must operate the emergency engine according to the requirements in 40 CFR 60.6640(f)(1) through (4). In order for the engine to be considered an emergency engine under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.6640(f)(1) through (4), is prohibited. If the permittee do not operate the engine according to the requirements in 40 CFR 60.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and shall meet all requirements for non-emergency engines [40 CFR 60.4211(f)]:
      i) There is no time limit on the use of emergency engine in emergency situations [40 CFR 60.4211(f)(1)].
      ii) The permittee may operate the emergency engine for any combination of the purposes specified in 40 CFR 60.6640(f)(2) for a maximum of 100 hours per calendar year.

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Any operation for non-emergency situations as allowed by paragraph 40 CFR 60.6640(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.6640(f)(2). The emergency engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency engine beyond 100 hours per calendar year.

iii) Emergency engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 60.6640(f)(2). Except as provided in 40 CFR 60.6640(f)(ii), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;

C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;

D) The power is provided only to the facility itself or to support the local transmission and distribution system;

E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

d) The permittee shall operate and maintain each of the stationary CI internal combustion engines according to the manufacturer's emission-related settings that are permitted by the manufacturer [40 CFR 60.4211(a)].

e) The permittee shall meet the requirements of 40 CFR parts 89, 94, and/or 1068, as they apply [40 CFR 60.4211(a)(3)].

2. <u>Emission Limitations</u>:

The engines shall meet the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

all pollutants [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b)]. Each engine shall meet the emission standards over the life of the engine [40 CFR 60.4206].

3. Testing Requirements:
Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 50:045, Section 4.

4. Specific Monitoring Requirements:

a) The permittee shall monitor the fuel usage (gallons) and hours of operation on a monthly basis [401 KAR 52:020, Section 10].

b) If an engine does not meet the standards applicable to non-emergency engines, the permittee shall install a non-resettable hour meter prior to startup of the engine [40 CFR 60.4209(a)].

c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter shall be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached [40 CFR 60.4209(b)].

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain records necessary to demonstrate compliance with the applicable emission limits, according to the method specified [401 KAR 52:020, Section 10].

b) The permittee shall maintain records of fuel usage (gallons) and hours of operation on a monthly basis and fuel supplier certification according to the fuel requirements in subsection 1(b) [401 KAR 52:020, Section 10].

c) Records of performance tests shall report emission limits and actual emissions in the unit of the applicable standard [401 KAR 52:020, Section 10].

d) If the emergency engine does not meet the emission standards specified in 2. Operating Limitations: (c), the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

e) If the engine is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached [40 CFR 60.4214(c)].

6. Specific Reporting Requirements:

a) The permittee is required to submit an initial notification as required in 40 CFR 63.9(b)(1)(i) [40 CFR 63.6645(f)].

b) See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee shall comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

Description	Generally Applicable Regulation
1. Kerosene tanks (500 gallons)	N/A
2. Kerosene tanks (340 gallons)	N/A
3. Unleaded gasoline tank (500 gallons)	N/A
4. Gasoline tank (300 gallons)	N/A
5. Diesel fuel oil storage tank (500 gallons)	N/A
6. No. 2 fuel storage tank (50,000 gallons)	N/A
7. Diesel fuel tank for emergency fire pump (500 gal)	N/A
8. Diesel fuel tank for emergency generator (797 gal)	N/A
9. Diesel fuel storage tank (500 gallons)	N/A
10. Closed cooling water system	N/A
11. Demineralizer process operation	N/A
12. Freeze protection operation for coal conveyors	N/A
13. Wastewater treatment plant operations	N/A
14. Pneumatic flyash conveyors and storage silos	401 KAR 63:010
15. PAC Storage Silos (2)	401 KAR 59:010
16. Hydrated Lime Storage Silos (2)	401 KAR 59:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Particulate matter, sulfur dioxide, nitrogen oxides, and visible (opacity) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. Electrical Generating Units 01 and 02 at the R. D. Green Station:

a) To preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration of air quality, total emissions of sulfur dioxide from Emissions Units 01 and 02 at the R. D. Green Station shall not exceed 20,846 tons during any consecutive 12 month period in which any amount of petroleum coke is burned.

Compliance Demonstration:

i) The permittee shall use the sulfur dioxide continuous emission monitoring system (CEMS) to determine the monthly and twelve consecutive rolling month emissions from the electrical generating units.

ii) The permittee shall calculate and record the total sulfur dioxide emissions from all the electrical generating units referenced above on a monthly and 12 consecutive month basis.

iii) The permittee shall maintain records of the dates on which any petcoke is burned and the monthly and annual quantities.

iv) The permittee shall submit a report of sulfur dioxide emissions for the previous twelve consecutive month period every six months in accordance with Section F.5. Exceedances of the emission limitation specified above shall be reported within 30 days following the date when the exceedance is determined.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
   a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
   b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
   c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.

9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Dr. W STE 700
Owensboro, KY 42303-2191

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St. SW
Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
      (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit shall be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
      (4) New requirements become applicable to a source subject to the Acid Rain Program.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements [Section 1a-15 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) 2].

l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) 4.].

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) 1.].

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and

SECTION G - GENERAL PROVISIONS (CONTINUED)

incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
   (1) Applicable requirements that are included and specifically identified in this permit; and
   (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

   a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

   b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

3. Permit Revisions

   a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

   b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

   No construction is authorized by this permit V-19-020.

5. Testing Requirements

   a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test

SECTION G - GENERAL PROVISIONS (CONTINUED)

protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of 60 days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least 30 days prior to the test.

b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within 45 days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NO_x compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   (1) An emergency occurred and the permittee can identify the cause of the emergency;
   (2) The permitted facility was at the time being properly operated;
   (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an

SECTION G - GENERAL PROVISIONS (CONTINUED)

emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

(5) This requirement does not relieve the source of other local, state or federal notification requirements.

b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156 and 82.157.

(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.

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

(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166

(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 82.157.

(6) 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.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP* eSubmit software.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

NA.

SECTION I - COMPLIANCE SCHEDULE

NA

SECTION J - ACID RAIN PERMIT

1. **Statutory and Regulatory Authority:**
   In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to 401 KAR 52:020, Permits, 401 KAR 52:060, Acid Rain Permit, and 40 CFR Part 52:060, Acid Rain Permit, and Federal Regulation 40 CFR Part 76.

2. **Permit Requirements:**
   This Acid Rain Permit covers Acid Rain Units 1-2 (Emission Units 01-02) at the R.D. Green Generating Station (ORIS Code: 6639). Units 1-2 are coal-fired based load electric generating units. The Acid Rain Permit Application and NO_x Compliance Plan received on December 27, 2011, for Phase II are hereby incorporated into and made part of this permit and the permittee shall comply with the standard requirements and special provisions set forth in the application [40 CFR 72.9(a)(2)].

3. **Acid Rain Program Emission and Operating Limitations:**
   The applicable Acid Rain emission limitations for the permittee are set in 40 CFR 73.10, Table 2, 40 CFR 76.5, and 40 CFR 76.11 and they are tabulated in the table below:

Affected Unit: Green River Generation Station (Emissions Unit 01)					
Year for SO_2 Allowances	2019	2020	2021	2022	2023
40 CFR Part 73.10	5,303*	5,303*	5,303*	5,303*	5,303*
NO_x Limits and Requirements					
Big Rivers Electric Corporation terminated the NO_x averaging plan in accordance with 40 CFR 72.40 via a letter dated September 25, 2018, reverting to the NO_x emission rate specified under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers. This unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.					

*** The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).**

SECTION J - ACID RAIN (CONTINUED)

Affected Unit: Green River Generation Station (Emissions Unit 02)					
Year for SO_2 Allowances	2019	2020	2021	2022	2023
40 CFR Part 73.10	6,389*	6,389*	6,389*	6,389*	6,389*
NO_x Limit and Requirements					
Big Rivers Electric Corporation terminated the NOx averaging plan in accordance with 40 CFR 72.40 via a letter dated September 25, 2018, reverting to the NO_x emission rate specified under 40 CFR 76.5(a)(2), of 0.50 lb/MMBtu for dry bottom wall-fired boilers. This unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.					

* **The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).**

SECTION K – CLEAN AIR INTERSTATE RULE (CAIR)

1. **Statutory and Regulatory Authority:**
   In accordance with KRS 224.10-100, the Kentucky Energy and Environmental Cabinet issues this permit pursuant to 401 KAR 52:020, Title V permits, 401 KAR 51:210, CAIR NO_x Annual Trading Program, 401 KAR 51:220, CAIR NO_x ozone season trading program, and 401 KAR 51:230, CAIR SO_2 Trading Program.

2. **Application and Requirements:**
   The CAIR application for two (2) electrical generating units was submitted to the Division and received on September 10, 2007. The standard requirements and special provisions set forth in the application are hereby incorporated into and made part of this CAIR Permit. [401 KAR 51:210, 401 KAR 51:220, and 401 KAR 51:230]. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

3. **Unit Description:**
   The affected units are two dry bottom wall fired boiler each rated at 2,660 MMBtu/hour (EU 01-02). Each unit has a capacity to generate 25 megawatts or more of electricity, which is offered for sale. The units use coal and pet coke as a fuel source, and are used as base load electric generating units.

4. **Summary of Actions:**
   The CAIR Permit is being issued as part of the Title V permit for this source. Public, affected state and U.S. EPA review will follow procedures specified in 401 KAR 52:100.

   A December 2008 court decision kept the requirements of CAIR in place temporarily but directed EPA to issue a new rule to implement Clean Air Act requirements concerning the transport of air pollution across state boundaries. On July 6, 2011, the U.S. EPA finalized the Cross-State Air Pollution Rule (CSAPR). On December 30, 2011, CSAPR was stayed prior to implementation. On April 29, 2014, the U.S. Supreme Court issued an opinion reversing an August 21, 2012 D.C. Circuit decision that had vacated CSAPR. Following the remand of the case to the D.C. Circuit, EPA requested that the court lift the CSAPR stay and toll the CSAPR compliance deadlines by three years. On October 23, 2014, the D.C. Circuit granted EPA's request. CSAPR Phase I implementation is now in place and replaces requirements under EPA’s 2005 Clean Air Interstate Rule.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR)

The CSAPR subject units, and the unit-specific monitoring provisions at this source, are identified in the following tables. These units are subject to the requirements for the CSAPR NO_x Annual Trading Program, CSAPR NO_x Ozone Season Group 2 Trading Program, and CSAPR SO_2 Group 1 Trading Program

Unit ID: 1 and 2, Pulverized Coal Fired Boilers					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, Subpart B (for SO_2 monitoring) and 40 CFR part 75, Subpart H (for NO_x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, Subpart E
SO_2	X				
NO_x	X				
Heat input	X				

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30) (CSAPR NO_x Annual Trading Program), 401 KAR 51:250 Section 3(25) through 401 KAR 51:250, Section 3(30) (CSAPR NO_x Ozone Season Group 2 Trading Program), and 401 KAR 51:260 Section 3(25) through 401 KAR 51:260, Section 3(30) (CSAPR SO_2 Group 1 Trading Program). The monitoring, recordkeeping, and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.

2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website: https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources#

3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

accordance with 40 CFR 75, Subpart E and 40 CFR 75.66 and 401 KAR 51:240, Section 3(30) (CSAPR NO_x Annual Trading Program), 401 KAR 51:250, Section 3(30) (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 401 KAR 51:260, Section 3(30) (CSAPR SO_2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at: https://www.epa.gov/airmarkets/petition-preparation-help

4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirements under 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(29) (CSAPR NO_x Annual Trading Program), 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(29) (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(29) (CSAPR SO_2 Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 401 KAR 51:240, Section 3(30) (CSAPR NO_x Annual Trading Program), 401 KAR 51:250, Section 3(30) (CSAPR SO_2 Group 1 Trading Program), and 401 KAR 51:260, Section 3(30) (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at: https://www.epa.gov/airmarkets/petition-preparation-help

5. The descriptions of monitoring applicable to the unit included above meet the requirement of 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(29) (CSAPR NO_x Annual Trading Program), 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(29) (CSAPR NO_x Ozone Season Group 2 Trading Program), and 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(29) (CSAPR SO_2 Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B), may be used to add or change this unit's monitoring system description.

CSAPR NO_x Annual Trading Program requirements (401 KAR 51:240, Section 3(4))

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 401 KAR 51:240, Section 3(10) through 401 KAR 51:240, Section 3(15).

b) Emissions monitoring, reporting, and recordkeeping requirements.

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 401 KAR 51:240, Section 3(25) (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 401 KAR 51:240, Section 3(26) (initial monitoring system certification and recertification procedures), 401 KAR 51:240, Section 3(27) (monitoring system out-of-control periods), 401 KAR 51:240, Section 3(28) (notifications concerning monitoring), 401 KAR 51:240, Section 3(29) (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 401 KAR 51:240, Section 3(30) (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

2) The emissions data determined in accordance with 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30) shall be used to calculate allocations of CSAPR NO_x Annual allowances under 401 KAR 51:240, Section 3(8) (40 CFR 97.411(a)(2) and (b)) and 401 KAR 51:240, Section 3(9) and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, 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 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30) 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 401 KAR 51:240, Section 3(20) (40 CFR 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) above, 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 401 KAR 51:240, Section 3(20) (40 CFR 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 401 KAR 51:240 (40 CFR 97, Subpart AAAAA) 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 the 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 Annual allowances available for deduction for such control period under 401 KAR 51:240, Section 3(21) (40 CFR 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 401 KAR 51:240, Section 3(21) (40 CFR 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

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 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 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) above, 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 such control period.

iii) Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the 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 401 KAR 51:240, Section 3(7)(a)(1) and the state's variability limit under 401 KAR 51:240, Section 3(7)(a)(3).

iv) It shall not be a violation of 401 KAR 51:240, 40 CFR 97, Subpart AAAAA, 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 the 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 the 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) above,

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) above and each day of such control period shall constitute a separate violation of 401 KAR 51:240, 40 CFR 97, Subpart AAAAA, 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) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:240, Section 3(25) (40 CFR 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) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:240, Section 3(25) (40 CFR 97.430(b)) and for each control period thereafter.

4) Vintage of allowances held for compliance.

i) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year shall be a CSAPR NO_x Annual allowance that was allocated for such control period or a control period in a prior year.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

ii) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year shall be a CSAPR NO_x Annual allowance that was allocated 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 401 KAR 51:240.

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 40 CFR 97, 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.

d) Title V permit revision 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 401 KAR 51:240.

2) This permit incorporates the CSAPR emissions monitoring, recordkeeping, and reporting requirements pursuant to 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30), and the requirements for a continuous emission monitoring system (pursuant to 40 CFR 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with 401 KAR 51:240, Section 3(4) (40 CFR 97.406(d)(2)) and 70.7(e)(2)(i)(B).

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 maintain 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 401 KAR 51:240, Section 3(13) 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 401 KAR 51:240, Section 3(13) changing the designated representative.

ii) All emissions monitoring information, in accordance with 401 KAR 51:240.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 401 KAR 51:240, Section 3(15). 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 40 CFR 70.

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 401 KAR 51:240, Section 3(3) 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.

CSAPR NO_x Ozone Season Group 2 Trading Program Requirements (401 KAR 51:250, Section 3(4))

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 401 KAR 51:250, Section 3(10) through 401 KAR 51:250, Section 3(15).

b) Emissions monitoring, reporting, and recordkeeping requirements.

a) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 401 KAR 51:250, Section 3(25) (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 401 KAR 51:250, Section 3(26) (initial monitoring system certification and recertification procedures), 401 KAR 51:250, Section 3(27) (monitoring system out-of-control periods), 401 KAR 51:250, Section 3(28) (notifications concerning monitoring), 401 KAR 51:250, Section 3(29) (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 401 KAR 51:250, Section 3(30) (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

b) The emissions data determined in accordance with 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(30) shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 401 KAR 51:250, Section 3(8) (40 CFR

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

97.811(a)(2) and (b)) and 401 KAR 51:250, Section 3(9) (40 CFR 97.812) and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) below, 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 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(30) 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 Ozone Season Group 2 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 Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 401 KAR 51:250, Section 3(20) (40 CFR 97.824(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 2 units at the source.
   ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) above, then:
      A) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 401 KAR 51:250, Section 3(20) (40 CFR 97.824(d)); and
      B) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 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 401 KAR 51:250, 40 CFR 97, Subpart EEEEE, and the Clean Air Act.
2) CSAPR NO_x Ozone Season Group 2 assurance provisions.
   i) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the 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 2 allowances available for deduction for such control period under 401 KAR 51:250, Section 3(21) (40 CFR 97.825(a)) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 401 KAR 51:250, Section 3(21) (40 CFR 97.825(b)), of multiplying—

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 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 Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.

ii) The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph (c)(2)(i) above, 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 such control period.

iii) Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the 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 2 trading budget under 401 KAR 51:250, Section 3(7)(a)(1) (40 CFR 97.810(a)) and the state's variability limit under 401 KAR 51:250, Section 3(7)(a)(3) (40 CFR 97.810(b)).

iv) It shall not be a violation of 401 KAR 51:250, 40 CFR 97, Subpart EEEEE, or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the 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 Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the 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 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,

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 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 401 KAR 51:250, 40 CFR 97, Subpart EEEEE and the Clean Air Act.

3) Compliance periods.

i) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:250, Section 3(25) (40 CFR 97.830(b)) and for each control period thereafter.

ii) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:250, Section 3(25) (40 CFR 97.830(b)) and for each control period thereafter.

4) Vintage of allowances held for compliance.
   i) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year shall be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
   ii) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year shall be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated 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 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR 97, Subpart EEEEE.
6) Limited authorization. A CSAPR NO_x Ozone Season Group 2 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 2 Trading Program; and
   ii) Notwithstanding any other provision of 401 KAR 51:250, 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 2 allowance does not constitute a property right.

d) Title V permit revision requirements.

1) No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 401 KAR 51:250.
2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 401 KAR 51:250, Section 3(25) through 401 KAR 51:250, Section 3(30), and the requirements for a continuous emission monitoring system (pursuant to 40 CFR 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with401 KAR 51:250, Section 3(4) (40 CFR 97.806(d)(2)) and 70.7(e)(2)(i)(B).

e) Additional recordkeeping and reporting requirements.

1) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall maintain on site at the source each of the following documents (in hardcopy or electronic

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 401 KAR 51:250, Section 3(13) for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 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 401 KAR 51:250, Section 3(13) changing the designated representative.

ii) All emissions monitoring information, in accordance with 401 KAR 51:250.

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 2 Trading Program.

2) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in 401 KAR 51:250, Section 3(15). 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 40 CFRs 70.

f) Liability.

1) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.

2) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 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 2 Trading Program or exemption under 401 KAR 51:250, Section 3(3) shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

CSAPR SO_2 Group 1 Trading Program requirements (401 KAR 51:260, Section 3(4))

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 401 KAR 51:260, Section 3(10) through 401 KAR 51:260, Section 3(15).

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 401 KAR 51:260, Section

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

3(25) (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 401 KAR 51:260, Section 3(26) (initial monitoring system certification and recertification procedures), 401 KAR 51:260, Section 3(27) (monitoring system out-of-control periods), 401 KAR 51:260, Section 3(28) (notifications concerning monitoring), 401 KAR 51:260, Section 3(29) (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 401 KAR 51:260, Section 3(30) (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

2) The emissions data determined in accordance with 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30) shall be used to calculate allocations of CSAPR SO_2 Group 1 allowances under 401 KAR 51:260, Section 3(8) (40 CFR 97.611(a)(2)) and (b)) and 401 KAR 51:260, Section 3(9) and to determine compliance with the CSAPR SO_2 Group 1 emissions limitation and assurance provisions under paragraph (c) below, 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 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30) and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

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 401 KAR 51:260, Section 3(20) (40 CFR 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) above, 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 401 KAR 51:260, Section 3(20) (40 CFR 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 401 KAR 51:260, 40 CFR 97, Subpart CCCCC, 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 the 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

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 401 KAR 51:260, Section 3(21) (40 CFR 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 401 KAR 51:260, Section 3(21) (40 CFR 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 for such control period, by which each common designated 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 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) above, 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 such control period.

iii) Total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in the 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 401 KAR 51:260, Section 3(7)(a)(1) and the state's variability limit under 401 KAR 51:260, Section 3(7)(a)(3).

iv) It shall not be a violation of 401 KAR 51:260, 40 CFR 97, Subpart CCCCC, 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 the 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 the 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) above,

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) above and each day of such control period shall constitute a separate violation of 401 KAR 51:260, 40 CFR 97, Subpart CCCCC 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) above for the control period starting on the later of January 1, 2015 or the

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

deadline for meeting the unit's monitor certification requirements under 401 KAR 51:260, Section 3(25) (40 CFR 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) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:260, Section 3(25) (40 CFR 97.630(b)) and for each control period thereafter.

4) Vintage of allowances held for compliance.
   i) A CSAPR SO_2 Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year shall be a CSAPR SO_2 Group 1 allowance that was allocated 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) above for a control period in a given year shall be a CSAPR SO_2 Group 1 allowance that was allocated 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 401 KAR 51:260.
6) Limited authorization. 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 401 KAR 51:260, 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. CSAPR SO_2 Group 1 allowance does not constitute a property right.

d) Title V permit revision 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 401 KAR 51:260.
2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30), and the requirements for a continuous emission monitoring system (pursuant to 40 CFR 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 75, Subpart E), Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with 401 KAR 51:260, Section 3(4) (40 CFR 97.606(d)(2)) and 70.7(e)(2)(i)(B).

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 maintain on site at the source each of the following documents (in hardcopy or electronic format) for a period of

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 401 KAR 51:260, Section 3(13) 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 40 CFR 97.616 changing the designated representative.

ii). All emissions monitoring information, in accordance with 401 KAR 51:260.

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 401 KAR 51:260, Section 3(15). 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 40 CFR 70.

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 401 KAR 51:260, Section 3(3) shall be construed as exempting or excluding the owners and operators, and the designated 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.

Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601
(502) 564-3999

Final

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**Big Rivers Electric Corporation**
Mailing Address:	**P.O. Box 24, Henderson, KY 42419**
Source Name:	**Big Rivers Electric Corp – R.D. Green Station**
Mailing Address:	**9000 KY 2096, Robards, KY 42452**
Source Location:	**Same as Above**
Permit:	**V-19-020 R2**
Agency Interest:	**44411**
Activity:	**APE20210001**
Review Type:	**Title V/Synthetic Minor, Construction/Operating**
Source ID:	**21-233-00052**
Regional Office:	**Owensboro Regional Office** **3032 Alvey Park Dr. W., Suite 700** **Owensboro, KY 42303** **(270) 687-7304**
County:	**Webster**
Application Complete Date:	**February 23, 2012**
Issuance Date:	**July 12, 2020**
Revision Date:	**January 17, 2022**
Expiration Date:	**July 12, 2025**

Rick Shewekah

For Melissa Duff, Director
Division for Air Quality

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Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action
V-19-020 Permit Renewal	**APE20110001**	**02/23/2012**	**7/12/2020**	**Title V, Acid Rain, CAIR Renewal**
	APE20130002	**12/13/2013**		**Title V, Previously Unidentified Emission Points Added**
	APE20180002	**6/10/2019**		**Addition of Transfer Point not previously identified. Cooling tower update.**
V-19-020 R1	**APE20200001**	**9/17/2020**	**9/18/2020**	**Administrative Amendment**
V-19-020 R2	**APE20210001**	**8/11/2021**	**1/17/2022**	**Title V Significant Revision, Natural Gas conversion**

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit was issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

The Division for Air Quality has determined that the Big Rivers Electric Corporation – Green Station and the Big Rivers Electric Corporation – Reid Station are one source as defined in 401 KAR 52:001 and Regulation 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality. This permit contains requirements for both Big Rivers Electric Corporation – Green Station and Big Rivers Electric Corporation – Reid Station.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Units 1 and 2: Identical Natural Gas-fired, Dry Bottom, Wall-fired Boilers

Description:
Natural gas-fired
Construction Commenced: June 1976
Commercial Operation: December 1979 (EU 1) January 1981 (EU 2)
Fuel Conversion Project: September 2021
Monitoring Equipment: Continuous Emissions Monitoring (CEMS) Nitrogen Oxides (NO_x), Carbon Dioxide (CO_2)
Maximum Continuous Rating: 2,453 MMBtu/hour, each

APPLICABLE REGULATIONS:
401 KAR 51:160, *NO_x requirements for large utility and industrial boilers.*
401 KAR 51:210, *CAIR NO_x annual trading program.*
401 KAR 51:220, *CAIR NO_x ozone season trading program.*
401 KAR 51:230, *CAIR SO_2 trading program.*
401 KAR 51:240, *Cross-State Air Pollution Rule (CSAPR) NO_x annual trading program.*
401 KAR 51: 260, *Cross-State Air Pollution Rule (CSAPR) SO_2 group 1 trading program*
401 KAR 52:060, *Acid rain permits*
401 KAR 59:015, *New indirect heat exchangers*
401 KAR 60:005, Section 2(2)(a), 40 C.F.R. 60.40 through 60.46, (**Subpart D**), *Standards of Performance for Fossil-Fuel-Fired Steam Generators*
401 KAR 63:002, Section 2(4)(iiii), 40 C.F.R 63.7480 through 63.7575, Tables 1 to 13, (**Subpart DDDDD**), *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*
40 CFR Part 75, *Continuous Emissions Monitoring (CEM)*
40 CFR 97, Subpart GGGGG, *CSAPR NO_x Ozone Season Group 3 Trading Program*

1. **Operating Limitations:**
   a. Once the Gas Conversion Project is completed or by September 1, 2022, whichever is sooner, Emission Units 1 and 2 shall no longer utilize coal, petroleum coke, or No. 2 fuel oil and shall only utilize natural gas as a fuel. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

   b. The permittee shall limit the fuel heat input to Emission Units 1 and 2 to no more than 40,410,722 MMBtu/yr on a 12 month rolling total basis. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

      Compliance Demonstration: The permittee shall demonstrate compliance according to **4. Specific Monitoring Requirements d.** and **5. Specific Recordkeeping Requirements e.**

   c. The permittee shall meet the work practice standards established in 40 CFR Part 63, Table 3 to Subpart DDDDD, as established in 401 KAR 63:002, Section 2(4)(iiii) [401 KAR 59:015, Section 7 and 401 KAR 59:015, Section 7(2)(a)].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. At all times, the permittee shall operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

e. The permittee shall meet the requirements in 40 CFR 63.7500(a)(1) through (3), except as provided in 40 CFR 63.7500(b) through (e). The permittee shall meet these requirements at all times the affected unit is operating, except as provided in 40 CFR 63.7500(f). The permittee shall meet each emission limit and work practice standard in 40 CFR 63, Subpart DDDDD Tables 1 through 3, and 11 through 13 that applies to the boiler or process heater, for each boiler or process heater at the source, except as provided under 40 CFR 63.7522. [40 CFR 63.7500(a) and (a)(1)]

f. For an existing EGU that becomes subject after January 31, 2016, the permittee shall demonstrate compliance within 180 days after becoming an affected source [40 CFR 7510(i)]

g. The permittee shall conduct a 5-year performance tune-up according to 40 CFR 63.7540(a)(12). Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) shall be conducted no more than 61 months after the previous tune-up. [40 CFR 63.7515(d)]

h. The permittee shall conduct a tune-up of the boiler every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. The permittee may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but shall inspect each burner at least once every 72 months. [40 CFR 63.7540(a)(12)]
   i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment [40 CFR 63.7540(a)(10)(i)];

   ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available [40 CFR 63.7540(a)(10)(ii)];

   iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown) [40 CFR 63.7540(a)(10)(iii)];

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the units are subject [40 CFR 63.7540(a)(10)(iv)];

v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [40 CFR 63.7540(a)(10)(v)]

vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C) [40 CFR 63.7540(a)(10)(vi)],

1. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater [40 CFR 63.7540(a)(10)(vi)(A)];

2. A description of any corrective actions taken as part of the tune-up; and [40 CFR 63.7540(a)(10)(vi)(B)]

3. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit [40 CFR 63.7540(a)(10)(vi)(C)].

i. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

j. The permittee shall have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in 40 CFR 63, Table 3, satisfies the energy assessment requirement. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and the compliance date specified in 40 CFR 63.7495 that includes the affected units also satisfies the energy assessment requirement. The energy assessment shall include the following with extent of the evaluation for 40 CFR 63, Table 3 4. a. through e. appropriate for the on-site technical hours listed in 40 CFR 63.7575 [40 CFR 63, Subpart DDDDD, Table 3 4.];

i. A visual inspection of the boiler or process heater system [40 CFR 63, Subpart DDDDD, Table 3 4. a.].

ii. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating, and maintenance procedures, and unusual operating constraints [40 CFR 63, Subpart DDDDD, Table 3 4. b.].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the permittee [40 CFR 63, Subpart DDDDD, Table 3 4. c.].

iv. A review of available architectural and engineering plans, facility operation, and maintenance procedures and logs, and fuel usage [40 CFR 63, Subpart DDDDD, Table 3 4. d.].

v. A review of the facility energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified [40 CFR 63, Subpart DDDDD, Table 3 4. e.].

vi. A list of cost-effective energy conservation measures that are within the facility's control [40 CFR 63, Subpart DDDDD, Table 3 4. f.].

vii. A list of the energy savings potential of the energy conservation measures identified [40 CFR 63, Subpart DDDDD, Table 3 4. g.].

viii. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments [40 CFR 63, Subpart DDDDD, Table 3 4. h.].

2. Emission Limitations:

a. Particulate matter (PM) emissions from each stack shall not exceed 0.10 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(b)]

b. Visible emissions from each stack shall not exceed 20% opacity, except: [401 KAR 59:015, Section 4(2)]

i. That a maximum of 27% opacity shall be allowed for one six-minute period in any 60 consecutive minutes. [401 KAR 59:015, Section 4(2)(a)]

ii. For emissions from an affected facility caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]

c. Sulfur Dioxide (SO_2) emissions from each stack shall not exceed 0.8 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(b)1.]

Compliance Demonstration: The permittee is assumed to be in compliance with the applicable 401 KAR 59:015 PM, opacity, and SO_2 standards.

d. Nitrogen oxides (NO_x) emissions from each stack shall not exceed 0.20 lb/MMBtu (86 ng/J). [40 CFR 60.44(a)(1)]

Compliance Demonstration: The permittee shall demonstrate compliance according to **3. Testing Requirements** a. and **4. Specific Monitoring Requirements** a.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. See **Section D – Source Emission Limitations and Testing Requirements**.

3. Testing Requirements:

a. In conducting the performance tests required in 40 CFR 60.8 and subsequent performance tests as requested by the EPA Administrator, the permittee shall use as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.46(d). The permittee shall determine compliance with the NO_x standard in 40 CFR 60.44 according to 40 CFR 60.46(b). [40 CFR 60.46(a) and (b)]

b. Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1.

4. Specific Monitoring Requirements:

a. Continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for, NO_x emissions and carbon dioxide (CO_2) emissions [40 CFR 60.45(a), 401 KAR 52:020, Section 10].

b. Notwithstanding 40 CFR 60.13(b), installation of a CEMS for NO_x may be delayed until after the initial performance tests under 40 CFR 60.8 have been conducted. If the permittee demonstrates during the performance test that emissions of NO_x are less than 70 percent of the applicable standards in 40 CFR 60.44, a CEMS for measuring NO_x emissions is not required. If the initial performance test results show that NO_x emissions are greater than 70 percent of the applicable standard, the permittee shall install a CEMS for NO_x within one year after the date of the initial performance tests under 40 CFR 60.8 and comply with all other applicable monitoring requirements under 40 CFR Part 60. If the permittee is not required to and elects not to install any CEMS for NO_x, a CEMS for measuring either O_2 or CO_2 is not required. [40 CFR 60.45(b)(3) and (b)(4)]

c. For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the applicable procedures of 40 CFR 60.45(c) shall be used. For CEMS installed under 40 CFR 60.45(a), the conversion procedures of 40 CFR 60.45(e) shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/MMBtu). The values used in the equations under 40 CFR 60.45(e)(1) and (2) are derived according to 40 CFR 60.45(f) [40 CFR 60.45(c), (e), and (f)]

d. The permittee shall monitor the monthly and the 12 month rolling total fuel heat input (MMBtu) and natural gas usage (MMscf). [401 KAR 52:010, Section 10]

5. Specific Recordkeeping Requirements:

a. The permittee shall keep records according to 40 CFR 63.7555(a)(1) and (2). [40 CFR 63.7555(a)]

i. A copy of each notification and report that was submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification of Compliance Status or semiannual compliance report submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7555(a)(2)

b. Records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7560(a)]

c. As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7560(b)]

d. The permittee shall keep each record on site, or they shall be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [40 CFR 63.7560(c)]

e. The permittee shall maintain records of the monthly and 12 month rolling total fuel heat input (MMBtu) and natural gas usage (MMscf). [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

a. Excess emission and monitoring system performance reports shall be submitted to the Administrator semiannually for each six-month period. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows: Excess emissions for affected facilities using a CEMS for measuring NO_x are defined as: [40 CFR 60.45(g) and (g)(3)]

i. For affected facilities electing not to comply with 40 CFR 60.44(e), any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards in 40 CFR 60.44, or [40 CFR 60.45(g)(3)(i)]

ii. For affected facilities electing to comply with 40 CFR 60.44(e), any 30 operating day period during which the average emissions (arithmetic average of all one-hour periods) during the 30 operating days) of NO_x as measured by a CEMS exceed the applicable standard in 40 CFR 60.44. Facilities complying with the 30-day NO_x standard shall use the most current associated NO_x compliance and monitoring requirements in 40 CFR 60.48Da and 60.49Da. [40 CFR 60.45(g)(3)(ii)]

b. The permittee shall submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 638.(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified. [40 CFR 63.7545(a)]

c. As specified in 40 CFR 63.9(b)(2), for startup of an affected source before January 31, 2013, the permittee shall submit an Initial Notification not later than 120 days after January 31, 2013, or no later than 120 days after the source becomes subject to 40 CFR 63, Subpart DDDDD, whichever is later. [40 CFR 63.7545(b)]

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. The permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report shall contain all the information specified in 40 CFR 63.7545(e)(1) through (8), as applicable. If an initial compliance demonstration as specified in 40 CFR 63.7530(a) is not required, the Notification of Compliance Status shall only contain the information in 40 CFR 63.7545(e)(1) and (8) and shall be submitted within 60 days of the compliance date specified at 40 CFR 63.7495(b). [40 CFR 63.7545(e)]

   i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or EPA through a petition process to be non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. [40 CFR 63.7545(e)(1)]

   ii. In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status shall include the following certification(s) of compliance, as applicable, and signed by a responsible official: [40 CFR 63.7545(e)(8)]

      1. "This facility completed the required initial tune-up for all the boilers and process heaters covered by 40 CFR Part 63 Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." [40 CFR 63.7545(e)(8)(i)]

      2. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." [40 CFR 63.7545(e)(8)(ii)]

e. The permittee shall submit each report in 40 CFR 63, Subpart DDDDD, Table 9 that applies. [40 CFR 63.7550(a)]

f. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee shall submit each report, according to 40 CFR 63.7550(h), by the date in 40 CFR 63, Subpart DDDDD, Table 9 and according to the requirements in 40 CFR 63.7550(b)(1) through (4). For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or 40 CFR 63, Subpart DDDDD, Table 4 operating limits, the permittee may submit only annual, biennial, or 5-year compliance report, as applicable, as specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report. For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70 or Part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

first and subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in 40 CFR 63.7550(b)(1) through (4). [40 CFR 63.7550(b) and (b)(5)]

g. A compliance report shall contain the following information depending on how the facility chooses to comply with the limits set in this rule. If the facility is subject to the requirements of a tune up, the permittee shall submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv), and (xvii). [40 CRF 63.7550(c) and (c)(1)]
   i. Company and Facility name and address. [40 CFR 63.7550(c)(5)(i)]

   ii. Process unit information, emissions limitations, and operating parameter limitations. [40 CFR 63.7550(c)(5)(ii)]

   iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7550(c)(5)(iii)]

   iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. [40 CFR 63.7550(c)(5)(xiv)]

   v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.7550(c)(5)(xvii)]

h. The permittee shall submit the reports according to the procedures specified in 40 CFR 63.7550(h)(1) through (3). The permittee shall submit all reports required by 40 CFR 63, Subpart DDDDD, Table 9 electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee shall use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html) , once the XML schema is available. If the reporting form specific to 40 CFR 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee shall submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee shall begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h) and (h)(3)]

i. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements**.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 03: Coal and Pet Coke Hauling and Storage Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU03(1)	Coal and Pet Coke Storage Piles	800 tons/hr	Wet Material, Compaction, Telescopic Chute	1975
EU03(2)	Haul Trucks on Unpaved Roads to Stockpiles	400 tons/hr	Wet Material, Water Suppression	1975
EU03(3)	Haul Trucks on Paved Road to Coal Pile or Receiving Hoppers (Coal)	400 tons/hr	Wet Material, Water Suppression	1975

APPLICABLE REGULATIONS:
401 KAR 63:010, Fugitive Emissions

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   a) Reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following [401 KAR 63:010, Section 3]:
      i) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land [401 KAR 63:010, Section 3(a)];
      ii) Application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces, which can create airborne dusts [401 KAR 63:010, Section 3(1)(b)];
      iii) Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne [401 KAR 63:010, Section 3(1)(d)];
      iv) The maintenance of paved roadways in a clean condition [401 KAR 63:010, Section 3(1)(e)]; and
      v) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water [401 KAR 63:010, Section 3(1)(f)].

   b) Additional Requirements, in addition to the requirements of Section 3 of this regulation, the following shall apply [401 KAR 63:010, Section 4]:
      i) Open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered at all times when in motion [401 KAR 63:010, Section 4(1)];
      ii) The provisions of 401 KAR 63:010, Section 3(1) and (2) shall not be applicable to temporary blasting or construction operations [401 KAR 63:010, Section 4(3)]; and
      iii) No one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway [401 KAR 63:010, Section 4(4)].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c) Once the Gas Conversion Project is completed or by September 1, 2022, whichever is sooner, Emission Unit 03 shall cease operation. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

2. Emission Limitations:
Discharge of visible fugitive dust emissions beyond the property line is prohibited [401 KAR 63:010, Section 3(2)].
Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)**.

3. Testing Requirements:
N/A

4. Specific Monitoring Requirements:
a) The permittee shall monitor the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) Visual observations shall be made on a daily basis during operation, to ensure that the fugitive air emissions are not being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with applicable requirements of 401 KAR 63:010 [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:
a) The permittee shall maintain the records of amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall maintain records of the daily visual observations performed and, if applicable, records of when water or other wetting agents were used to suppress fugitive emissions as noted in **4. Specific Monitoring Requirements: (b)** [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:
See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

7. Specific Control Equipment Operating Conditions:
a) Water suppression and compaction shall be operated to maintain compliance with applicable requirements, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) See **Section E – Source Control Equipment Requirements** for additional requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 04A: Coal and Pet Coke Crushing and Processing Equipment

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU04(1)	Receiving Hoppers (Coal) from Haul Trucks to Underground A1Conveyor	400 tons/hr	Wet Material, Partial Enclosure	1975
EU04(2)	Coal Conveyor & Transfer Points (30" x350')(A1 Conveyor)(From A1 to A Conveyors)	400 tons/hr	Partial Enclosure	1975
EU04(4)	Coal and Pet Coke from Green Barge Unloading	1,500 tons/hr	Baghouse	1975
EU04(5)	Coal and Pet Coke from Green Barge Transfer onto B1 Conveyors	1,500 tons/hr	Baghouse (Share with EU04 (4))	1975
EU04(6)	Coal and Pet Coke Conveyor & Transfer Points (54" x 542') (B1 Conveyor)	1,500 tons/hr	Bin Vent Filters	1975
EU04(8)	Coal/Pet Coke Conveyor & Transfer Points (2 at 30" x 1686')(1C & 2C Conveyors) (From 1C & 2C to Crusher)	800 tons/hr	Wet Material, Partial Enclosure	1975
EU04(9)	Crusher House Feeders (400 tons/hr per Crusher)	800 tons/hr	Wet Material, Complete Enclosure	1975
EU04(10)	Coal/Pet Coke Conveyor & Transfer Points (Crusher House)(From Crusher House to 2D Conveyor)	400 tons/hr	Bin Vent Filters	1975
EU04(11)	Coal/Pet Coke Conveyor & Transfer Points (Crusher House)(From Crusher House to 1D Conveyor)	400 tons/hr	Bin Vent Filters	1975
EU04(12)	Coal/Pet Coke Conveyor & Transfer Points (2 at 30" x 1014')(1D & 2D Conveyors)(From 1D & 2D Conveyors to Tripper Room)	800 tons/hr	Baghouse	1975
EU04(16)	Coal Conveyor & Transfer Points (42" x 843')(Stack-Out Conveyor)(From Stack-Out Conveyor to Radial Stacker)	400 tons/hr	Wet Material, Partial Enclosures	2000

Applicable Regulations:
401 KAR 59:010, New Process Operations

401 KAR 60:005, Section 2(2)(gg), 40 C.F.R. 60.250 to 60.258, (**Subpart Y**), *Standards of Performance for Coal Preparation Plants.*

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   Once the Gas Conversion Project is completed or by September 1, 2022, whichever is sooner, Emission Unit 04A shall cease operation. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

2. **Emission Limitations:**
   a) Particulate matter emissions into the open air from shall not exceed:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i) [$3.59(P)^{0.62}$] lbs/hr, where P is the processing rate in tons per hour, for P<30 tons/hr [401 KAR 59:010, Section 3(2)].
ii) [$17.31(P)^{0.16}$] lbs/hr, where P is the processing rate in tons per hour, for P>30 tons/hr [401 KAR 59:010, Section 3(2)].

Compliance Demonstration: These units are assumed to be in compliance with the particulate emission limit based on the AP-42 particulate matter emission factor.

b) Visible emissions shall not equal or exceed twenty 20% based on a six-minute average [401 KAR 59:010, Section 3(1)(a)].
Compliance Demonstration: **See 4. Specific Monitoring Requirements: (b).**

c) On and after the date on which the performance test is conducted or required to be completed under 40 CFR 60.8, whichever date comes first, the permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20% opacity or greater [40 CFR 60.254(a)].
Compliance Demonstration: See **3. Testing Requirements: (b**) and **4. Specific Monitoring Requirements: (b)**.

3. Testing Requirements:

a) Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4.

b) The permittee shall conduct opacity testing according to 40 CFR 60.257(a) by performing a U.S. EPA Reference Method 9 of Appendix A-4 of 40 CFR part 60, and shall follow the procedures as described in 40 CFR 60.11 when visible emissions are observed [40 CFR 60.257(a)].

4. Specific Monitoring Requirements:

a) The permittee shall monitor the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall perform a qualitative visible observation of the opacity from stacks on a daily basis and maintain a log of the observation. If visible emission from a stack are seen, then the opacity shall be determined by U.S. EPA Reference Method 9 and the permittee shall initiate an inspection of the control equipment for any necessary repairs. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

a) The permittee shall monitor the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall record and maintain a log of any U.S. EPA Reference Method 9 opacity observations made recording the date, time, and opacity reading. The permittee shall also document inspections and any repairs made [401 KAR 52:020, Section 10].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

7. Specific Control Equipment Operating Conditions:

a) The enclosure and baghouse at Green Station barge unloading, bin vent filters on the B1 Conveyor transfer point, enclosure on the Crusher House, bin vent filters on the crusher house to 2D conveyor transfer point, bin vent filters on the crusher house to 1D conveyor transfer point, baghouse on the tripper room and conveyor transfer points shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020 Section 10].

c) See **Section E – Source Control Equipment Requirement**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 04B: Coal and Pet Coke Crushing and Processing Equipment

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU04(3)	Coal Conveyor & Transfer Points (30" x 350')(A Conveyor)(From A Conveyor to Coal Stockpile)	400 tons/hr	Wet Material, Telescopic Chute	1975
EU04(7)	Coal / Pet Coke Conveyor & Transfer Point (54" x 1078')(B2 Conveyor)(From B2 Conveyor to Coal/Pet Coke Pile)	1,500 tons/hr	Wet Material, Telescopic Chute	1975
EU04(13)	Coal from Reid Barge Unloader	800 tons/hr	Partial Enclosure & Wet Material	1963
EU04(14)	Coal Conveyor & Transfer Points (Barge Unloader)(From Unloader to #1 River Conveyor)	800 tons/hr	Partial Enclosure & Wet Material	1963
EU04(15)	Coal Conveyor & Transfer Points (42" x 1318')(Transfer House)(From #1 River to Stack-Out Conveyors)	800 tons/hr	Wet Material, Partial Enclosure	1963
EU04(17)	Coal Conveyor & Transfer Points (36" x 400') (Radial Stacker)(From Radial Stacker to Coal Pile)	400 tons/hr	Wet Material	2000

Applicable Regulations:
401 KAR 63:010, Fugitive Emissions

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   a) Reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following [401 KAR 63:010, Section 3(1)]:
      i) Installation and use of hoods, fans, and enclosures to vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling; and/or
      ii) Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces, which can create airborne dusts.

   b) Once the Gas Conversion Project is completed or by September 1, 2022, whichever is sooner, Emission Unit 04B shall cease operation. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

2. **Emission Limitations:**
   No person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate [401 KAR 63:010, Section 3(2)].
   Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)**.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:
N/A

4. Specific Monitoring Requirements:

a) The permittee shall monitor the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) Visual observations shall be made on a daily basis during operation, to ensure that the fugitive air emissions are not being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with applicable requirements of 401 KAR 63:010. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

a) The permittee shall keep records of the amount of coal and pet coke received and processed in tons on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall maintain records of the daily visual observations and, if applicable, records of when water or other wetting agents were used to suppress fugitive emissions as noted in **4. Specific Monitoring Requirements: (b)** [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:
See **Section F – Monitoring Recordkeeping and Reporting Requirements**.

7. Specific Control Equipment Operating Conditions:

a) The partial enclosures on the conveyor transfer points, wetting, and telescopic chutes shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) See **Section E-Source Control Equipment Requirements**.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 05: Lime Conveying and Storage Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU05(1)	Lime Conveyor & Transfer Points (30" x 2450')(L1 Conveyor)(From L1 Conveyor to Lime Tower)	400 tons/hr	Baghouse	1975
EU05(2)	Lime Silos (Four (4) Silos with East & West Screw Conveyors)	400 tons/hr	Baghouse	1975
EU05(3)	Lime From Green Barge Unloading	400 tons/hr	Baghouse	1975
EU05(4)	Lime from Green Barge Unloading Transfer onto L1 Conveyor	400 tons/hr	Baghouse	1975

APPLICABLE REGULATIONS:
401 KAR 59:010, New Process Operations

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   Once the Gas Conversion Project is completed or by September 1, 2022, whichever is sooner, Emission Unit 05 shall cease operation. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

2. **Emission Limitations:**
   a) Particulate matter emissions into the open air from shall not exceed:
      i) $[3.59(P)^{0.62}]$ lbs/hr, where P is the processing rate in tons per hour, for P<30 tons/hr [401 KAR 59:010, Section 3(2)].
      ii) $[17.31(P)^{0.16}]$ lbs/hr, where P is the processing rate in tons per hour, for P>30 tons/hr [401 KAR 59:010, Section 3(2)].
      Compliance Demonstration: These units are assumed to be in compliance with the particulate emission limit based on the AP-42 particulate matter emission factor and the proper operation of the baghouse and dust collectors.

   b) Visible emissions shall not equal or exceed twenty 20% based on a six-minute average [401 KAR 59:010, Section 3(1)(a)].
      Compliance Demonstration: See **4. Specific Monitoring Requirements: (a)**.

3. **Testing Requirements:**
   N/A

4. **Specific Monitoring Requirements:**
   a) The permittee shall perform a qualitative visual observation of the opacity from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity by U.S. EPA Reference Method 9 and the permittee shall initiate an inspection of the control equipment for any necessary repairs. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b) The permittee shall monitor the amount of lime received and conveyed on a weekly basis [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

a) The permittee shall keep records of the amount of lime received and conveyed on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall record and maintain a log of U.S. EPA Reference Method 9 opacity observations made recording the date, time, and opacity reading. The permittee shall also document inspections and any repairs made. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

7. Specific Control Equipment Operating Conditions:

a) The baghouses and dust collectors at storage silos and conveyor transfer points shall be operated to maintain compliance with applicable requirements, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020 Section 10].

c) See **Section E - Source Control Equipment Requirements**.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06: Lime Handling and Processing Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU06	Lime Slurry Slaker System	400 tons/hr	Enclosed	1975

APPLICABLE REGULATIONS:
401 KAR 63:010, Fugitive Emissions

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   a) Reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the installation and use of hoods, fans, and enclosure to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling [401 KAR 63:010, Section 3(1)(c)].

   b) Once the Gas Conversion Project is completed or by September 1, 2022, whichever is sooner, Emission Unit 06 shall cease operation. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

2. **Emission Limitations:**
   a) No person shall cause or permit the discharge of visible fugitive dust emissions beyond the property line on which the emissions originate [401 KAR 63:010, Section 3(2)].

   b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the Secretary may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gasborne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air [401 KAR 63:010, Section 3(3)].
   Compliance Demonstration: See **4. Specific Monitoring Requirements**.

3. **Testing Requirements:**
   N/A

4. **Specific Monitoring Requirements:**
   Visual observations shall be made on a daily basis each day of operation, to ensure the control equipment is functioning while the associated equipment is in operation and to determine if any fugitive air emissions are being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with applicable requirements of 401 KAR 63:010 [401 KAR 52:020, Section 10].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:
The permittee shall maintain records of the daily visual observations and, if applicable, records of when water or other wetting agents were used to suppress fugitive emissions as noted in **4. Specific Monitoring Requirements: (b)** [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:
See **Sections F – Monitoring Recordkeeping and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 07A: Ash and Sludge Handling Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU07(1)	Ash Truck Loadout Stations	200 tons/hr	N/A	1975
EU07(4)	Sludge Conveyor	250 tons/hr	Inherent Moisture	1975
EU07(5)	Sludge Stockpile	250 tons/hr	Inherent Moisture	1975
EU07(6)	Sludge Truck Loadout	250 tons/hr	Inherent Moisture	1975
EU07(7)	Paved Haul Road	250 tons/hr	Chemical/Water Suppression	1975
EU07(8)	Unpaved Haul Road	250 tons/hr	Chemical/Water Water Suppression	1975
EU07(9)	Truck Dumping of Sludge to Landfill	250 tons/hr	Inherent Moisture	1975
EU07(10)	Landfill	250 tons/hr	Inherent Moisture	1975

APPLICABLE REGULATIONS:
401 KAR 63:010, Fugitive Emissions

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   a) Reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:
      i) Application and maintenance of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces, which can create airborne dusts 401 KAR 63:010, Section 3(1)(b)];
      ii) The maintenance of paved roadways in a clean condition [401 KAR 63:010, Section 3(1)(e)]; and
      iii) The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water [401 KAR 63:010, Section 3(1)(f)]

   b) Once the Gas Conversion Project is completed or by September 1, 2022, whichever is sooner, Emission Units 07(1), 07(4), 07(5), and 07(6) shall cease operation. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

2. **Emission Limitations:**
   Discharge of visible fugitive dust emissions beyond the property line is prohibited [401 KAR 63:010, Section 3].
   Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)**.

3. **Testing Requirements:**
   N/A

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

a) The permittee shall monitor the amount of fly ash and sludge processed on a weekly basis [401 KAR 52:020, Section 10].

b) Visual observations shall be made on a daily basis during operations, to ensure that the fugitive air emissions are not being generated in such a manner as to cause a nuisance or to cross the property line. If such a condition develops, water or another wetting agent shall be applied to suppress the fugitive air emissions so as to comply with applicable requirements of 401 KAR 63:010. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain the records of the amount of flyash and sludge on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall maintain records of the daily visual observations and, if applicable, records of when water or other wetting agents were used to suppress fugitive emissions as noted in **4. Specific Monitoring Requirements: (b)** [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 07B: Ash and Sludge Handling Operations

Description:

Emission Unit	Description	Maximum Rated Capacity	Controls	Commenced Construction
EU07(2)	Pug Mills	200 tons/hr	Baghouse	1975
EU07(3)	Fly Ash Silos	200 tons/hr	Baghouse	1975

APPLICABLE REGULATIONS:
401 KAR 59:010, New Process Operations

40 CFR 52.21, (a) through (i) and (s) through (w), Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979

1. **Operating Limitations:**
   Once the Gas Conversion Project is completed or by September 1, 2022, whichever is sooner, Emission Unit 07B shall cease operation. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

2. **Emission Limitations:**
   a) Particulate matter emissions into the open air from shall not exceed:
      i) [3.59(P)0.62] lbs/hr, where P is the processing rate in tons per hour, for P<30 tons/hr [401 KAR 59:010, Section 3(2)].
      ii) [17.31(P)0.16] lbs/hr, where P is the processing rate in tons per hour, for P>30 tons/hr [401 KAR 59:010, Section 3(2)].

      Compliance Demonstration: These units are assumed to be in compliance with the particulate emission limit based on the AP-42 particulate matter emission factor and the proper operation of the baghouse and dust collectors.

   b) Visible emissions shall not equal or exceed 20% opacity based on a six minute average [401 KAR 59:010, Section 3(1)(a)].
      Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)**.

3. **Testing Requirements:**
   Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4.

4. **Specific Monitoring Requirements:**
   a) The permittee shall monitor the amount of fly ash and sludge processed on a weekly basis [401 KAR 52:020, Section 10].

   b) The permittee shall perform a qualitative visual observation of the opacity from the pug mill stack and slurry storage silo stacks on a daily basis and maintain a log of the observations. If visible emissions from any stack are seen, the permittee shall determine the opacity by U.S. EPA Reference Method 9 and the permittee shall initiate an inspection of the control equipment for any necessary repairs [401 KAR 52:020, Section 10].

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain the records of amount of fly ash and sludge processed on a weekly basis [401 KAR 52:020, Section 10].

b) The permittee shall record and maintain a log of any U.S. EPA Reference Method 9 opacity observations made recording the date, time, and opacity reading. The permittee shall also document inspections and any repairs made [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

7. Specific Control Equipment Operating Conditions:

a) The baghouse on the pug mills and fly ash silos shall be operated to maintain compliance with applicable requirements, consistent with manufacturer's specifications and standard operating practices [401 KAR 50:055].

b) Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020, Section 10].

c) See Section E-Source Control Equipment Requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 08: Two Cooling Towers

Description:

Emission Unit	Description	Operating Rate	Commenced Construction
EU08(1)	Cooling Tower	6.3 MMgal/hr	1975
EU08(2)	Cooling Tower	6.3 MMgal/hr	1975

APPLICABLE REGULATIONS:
401 KAR 59:010, New Process Operations

1. **Operating Limitations:**
   N/A

2. **Emission Limitations:**
   a) Particulate matter emissions into the open air from shall not exceed: [401 KAR 59:010, Section 3(2)]
      i) 2.34 lb/hr, when the processing rate is less than or equal to 0.5 tons/hr.
      ii) [3.59(P)0.62] lbs/hr, where P is the processing rate in tons per hour, for P<30 tons/hr.
      iii) [17.31(P)0.16] lbs/hr, where P is the processing rate in tons per hour, for P>30 tons/hr

   b) Visible emissions shall not equal or exceed twenty 20% based on a six-minute average [401 KAR 59:010, Section 3(1)(a)].

   Compliance Demonstration Method:
   The permittee is assumed to be in compliance with the applicable opacity and particulate matter emission standard. [401 KAR 50:045, Section 4(3)(c)1.]

3. **Testing Requirements:**
   Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 4.

4. **Specific Monitoring Requirements:**
   The permittee shall monitor total dissolved solids content of the circulating water on a monthly basis. [401 KAR 52:020, Section 10]

5. **Specific Recordkeeping Requirements:**
   The permittee shall maintain records of the maximum pumping capacity and monthly records of the total dissolved solids content. [401 KAR 52:020, Section 10]

6. **Specific Reporting Requirements:**
   See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 09: Diesel Emergency Fire Pump Engine

Description:

Emission Unit	Description	Model Year	Maximum Engine Rating	Fuel	Control Equipment
EU09	Cummins Model N-855-F, Serial # 10770141	1978	215 HP	Diesel	N/A

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(eeee), 40 CFR 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (**Subpart ZZZZ**), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Note: DC Circuit Court [*Delaware v. EPA*, 785 F. 3d 1 (DC Cir. 2015)] has vacated the provisions in 40 CFR 63, Subpart ZZZZ that contain the 100-hour exemption for operation of emergency engines for purposes of emergency demand response under 40 CFR 63.6640(f)(2)(ii)-(iii). The DC Circuit Court issued the mandate for the vacatur on May 4, 2016.

1. **Operating Limitations:**
   a) For the existing emergency fire pump unit the permittee shall [40 CFR 63.6602, 40 CFR 63.6625(e), 40 CFR 63.6595(a), and 40 CFR 63.6625(h), and 40 CFR 63, Subpart ZZZZ, Table 2c, Item 1]:
      i) Change oil and filter every 500 hours of operation or annually, whichever comes first, or change oil utilizing an oil analysis program according to the methods and requirements in order to extend the specified oil change requirements [40 CFR 63, Subpart ZZZZ, Table 2c, Item 1.a.];
      ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first [40 CFR 63, Subpart ZZZZ, Table 2c, Item 1.b.]; and
      iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary [40 CFR 63, Subpart ZZZZ, Table 2c, Item 1.c.].
      iv) Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply [40 CFR 63, Subpart ZZZZ, Table 2c, Item 1.d.].

   b) The permittee shall install a non-resettable hour meter if one is not already installed [40 CFR 63.6625(f)].

   c) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement of Table 2c, Item 1 to 40 CFR 63 Subpart ZZZZ, as provided for in 40 CFR 63.6625(i). The oil analysis shall be performed at the same frequency as specified for changing the oil [40 CFR 63.6625(i)].

   d) The permittee shall operate and maintain the engine according to the manufacturer's emission-related operating and maintenance instructions, or develop and follow own maintenance plan which shall provide, to the extent practicable, for the maintenance and

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 63.6625(e)].

e) The permittee shall operate the emergency engine according to the requirements in **1. Operating Limitations: (e)(i)** through **(iii)**. In order for the engine to be considered an emergency engine under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (3), is prohibited. If the engine is not operated according to the requirements in 40 CFR 63.6640(f)(1) through (iii), the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and shall meet all requirements for non-emergency [40 CFR 63.6640(f)].
   i) There is no time limit on the use of emergency engine in emergency situations [40 CFR 63.6640(f)(1)].
   ii) The permittee may operate the emergency engine for any combination of the purposes specified in 40 CFR 63.6640(f)(2) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). The emergency engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the emergency engine beyond 100 hours per calendar year [40 CFR 63.6640(f)(2)].
   iii) The emergency engine located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 63.6640(f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity [40 CFR 63.6640(f)(3)].

f) The permittee shall be in compliance with the emission limitations and operating limitations in 40 CFR 63, Subpart ZZZZ that apply at all times [40 CFR 63.6605(a)].

2. Emission Limitations:
N/A

3. Testing Requirements:
Testing shall be conducted at such time as may be requested by the cabinet in accordance with 401 KAR 50:045, Section 4.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of fuel usage and hours of operation on a monthly basis [401 KAR 52:020, Section 10].

5. Specific Recordkeeping Requirements:

a) The permittee shall keep records of each notification and report that is submitted, the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment, records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii), records of all required maintenance performed on the air pollution control and monitoring equipment, and records of action taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)]

b) The permittee shall maintain records of the maintenance conducted on the engine in order to demonstrate that the engine was operated and maintained, including any after-treatment control device, according to the maintenance plan for the engine[40 CFR 63.6655(e)].

c) The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation [40 CFR 63.6655(f)(1)].

d) The permittee shall maintain records for fuel usage on a monthly basis [401 KAR 52:020, Section 10].

6. Specific Reporting Requirements:

a) The permittee shall report each instance in which the operating limitations in **1. Operating Limitations: (a)** have not been met. These instances are deviations from the emission and operating limitation in 40 CFR 63 Subpart ZZZZ and shall be reported according to 40 CFR 63.6650. [40 CFR 63.6640(b)]

b) The permittee shall report each instance in which the requirements of Table 8 to 40 CFR 63 Subpart ZZZZ, that apply, have not been met. The notifications listed 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (f)(6), 40 CFR 63.9(b) through (e) and (g) are not required. [40 CFR 63.6645(a)(5)]

c) See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 10: Diesel Fired Emergency Generator (new stationary RICE)

Description:

Emission Unit	Description	Model Year	Maximum Engine Rating	Fuel
EU10	Generac Model SD500 Engine Model TAD1641GE, Serial # 56815	2011	757 HP	Diesel

Applicable Regulations:
401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 to 60.4219, Tables 1 to 8 (**Subpart IIII**), Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

401 KAR 63:002, Section 2(4)(eeee) 40 C.F.R. 63.6580 to 63.6675, Tables 1a to 8, and Appendix A (**Subpart ZZZZ**), National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Note: DC Circuit Court [*Delaware v. EPA*, 785 F. 3d 1 (DC Cir. 2015)] has vacated the provisions in 40 CFR 63, Subpart ZZZZ and 40 CFR 60 Subpart IIII that contain the 100-hour exemption for operation of emergency engines for purposes of emergency demand response under 40 CFR 63.6640(f)(2)(ii)-(iii) and 60.4211(f)(2)(ii)-(iii). The DC Circuit Court issued the mandate for the vacatur on May 4, 2016.

1. **Operating Limitations:**
   a) The permittee shall submit an initial notification requirement and include the information in 40 CFR 63.9(b)(2)(i) through (v), and a statement that the emergency engine has no additional requirements and explain the basis for the exclusion [40 CFR 63.6645(f)].

   b) The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel [40 CFR 60.4207(b)].
   ***Compliance Demonstration*:** The permittee shall demonstrate compliance by using fuel supplier certification.

   c) The permittee must operate the emergency engine according to the requirements in 40 CFR 60.6640(f)(1) through (4). In order for the engine to be considered an emergency engine under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.6640(f)(1) through (4), is prohibited. If the permittee do not operate the engine according to the requirements in 40 CFR 60.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and shall meet all requirements for non-emergency engines [40 CFR 60.4211(f)]:
      i) There is no time limit on the use of emergency engine in emergency situations [40 CFR 60.4211(f)(1)].
      ii) The permittee may operate the emergency engine for any combination of the purposes specified in 40 CFR 60.6640(f)(2) for a maximum of 100 hours per calendar year.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Any operation for non-emergency situations as allowed by paragraph 40 CFR 60.6640(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.6640(f)(2). The emergency engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency engine beyond 100 hours per calendar year.

iii) Emergency engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 60.6640(f)(2). Except as provided in 40 CFR 60.6640(f)(ii), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;

C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;

D) The power is provided only to the facility itself or to support the local transmission and distribution system;

E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

d) The permittee shall operate and maintain each of the stationary CI internal combustion engines according to the manufacturer's emission-related settings that are permitted by the manufacturer [40 CFR 60.4211(a)].

e) The permittee shall meet the requirements of 40 CFR parts 89, 94, and/or 1068, as they apply [40 CFR 60.4211(a)(3)].

2. Emission Limitations:

The engines shall meet the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

all pollutants [40 CFR 60.4202(a)(2), 40 CFR 60.4205(b)]. Each engine shall meet the emission standards over the life of the engine [40 CFR 60.4206].

3. Testing Requirements:
Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 50:045, Section 4.

4. Specific Monitoring Requirements:

a) The permittee shall monitor the fuel usage (gallons) and hours of operation on a monthly basis [401 KAR 52:020, Section 10].

b) If an engine does not meet the standards applicable to non-emergency engines, the permittee shall install a non-resettable hour meter prior to startup of the engine [40 CFR 60.4209(a)].

c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter shall be installed with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached [40 CFR 60.4209(b)].

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain records necessary to demonstrate compliance with the applicable emission limits, according to the method specified [401 KAR 52:020, Section 10].

b) The permittee shall maintain records of fuel usage (gallons) and hours of operation on a monthly basis and fuel supplier certification according to the fuel requirements in subsection 1(b) [401 KAR 52:020, Section 10].

c) Records of performance tests shall report emission limits and actual emissions in the unit of the applicable standard [401 KAR 52:020, Section 10].

d) If the emergency engine does not meet the emission standards specified in 2. Operating Limitations: (c), the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

e) If the engine is equipped with a diesel particulate filter, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached [40 CFR 60.4214(c)].

6. Specific Reporting Requirements:

a) The permittee is required to submit an initial notification as required in 40 CFR 63.9(b)(1)(i) [40 CFR 63.6645(f)].

b) See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 11: Natural Gas-Fired Indirect Heat Exchanger

Description:
Gas-fired heater utilized to heat natural gas supplied to combustion units at the plant
Construction Commenced: Projected September 2021
Rated Capacity: 18.8 MMBtu/hr
Primary Fuel: Natural Gas

Applicable Regulations:
401 KAR 59:015, New indirect heat exchangers

401 KAR 60:005, Section 2(2)(d) 40 C.F.R. 60.40c through 60.48c **(Subpart Dc),** Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

401 KAR 63:002, Section 2.(4)(iiii), 40 C.F.R 63.7480 through 63.7575, Tables 1 to 13, (**Subpart DDDDD**), *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*

1. **Operating Limitations**
   a. During a startup period or shutdown period, the permittee shall comply with the work practice standards established in 401 KAR 59:015, Section 7. The permittee shall meet the work practice standards established in 40 CFR Part 63, Table 3 to Subpart DDDDD, as established in 401 KAR 63:002, Section 2(4)(iiii) [401 KAR 59:015, Section 7 and 401 KAR 59:015, Section 7(2)(a)].

   b. The permittee shall comply with 40 CFR 63, Subpart DDDDD upon startup of the boiler. [40 CFR 63.7495(a)]

   c. The permittee shall meet the requirements in 40 CFR 63.7500(a)(1) through (3), except as provided in 40 CFR 63.7500(b) through (e). The permittee shall meet these requirements at all times the affected unit is operating, except as provided in 40 CFR 63.7500(f). The permittee shall meet each emission limit and work practice standard in 40 CFR 63, Subpart DDDDD Tables 1 through 3, and 11 through 13 that applies to the boiler or process heater, for each boiler or process heater at the source, except as provided under 40 CFR 63.7522. [40 CFR 63.7500(a) and (a)(1)]

   d. At all times, the permittee shall operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

   e. The permittee shall conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10). Each annual tune-up specified in 40 CFR 63.7540(a)(10) shall be no

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

more than 13 months after the previous tune-up. The first annual tune-up shall be no later than 13 months after the initial startup of the new affected source. [40 CFR 63.7515(d)].

f. The permittee shall conduct an annual tune-up of the boiler to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (bi). The permittee shall conduct the tune-up while burning the type of fuel (or fuels in the case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. [40 CFR 63.7540(a)(10)]

i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment [40 CFR 63.7540(a)(10)(i)];

ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available [40 CFR 63.7540(a)(10)(ii)];

iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown) [40 CFR 63.7540(a)(10)(iii)];

iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the units are subject [40 CFR 63.7540(a)(10)(iv)];

v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [40 CFR 63.7540(a)(10)(v)]

vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C) [40 CFR 63.7540(a)(10)(vi)],

1. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater [40 CFR 63.7540(a)(10)(vi)(A)];

2. A description of any corrective actions taken as part of the tune-up; and [40 CFR 63.7540(a)(10)(vi)(B)]

3. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit [40 CFR 63.7540(a)(10)(vi)(C)].

g. If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

2. Emission Limitations

a. PM emissions from the stack shall not exceed 0.10 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(b)]

b. Visible emissions from each stack shall not exceed 20% opacity, except: [401 KAR 59:015, Section 4(2)]

i. A maximum of 40 percent opacity shall be allowed for a maximum of 6 consecutive minutes in any 60 consecutive minutes during fire box cleaning or soot blowing. [401 KAR 59:015, Section 4(2)(b)]

ii. Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]

c. SO_2 emissions from each stack shall not exceed 0.8 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(b)1.]

Compliance Demonstration: The permittee is assumed to be in compliance with the applicable 401 KAR 59:015 PM, opacity, and SO_2 standards.

d. See **Section D – Source Emission Limitations and Testing Requirements.**

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the cabinet in accordance with 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1.

4. Specific Monitoring Requirements:

The permittee shall monitor fuel usage (MMscf) on a monthly basis [401 KAR 52:020, Section 10 and 40 CFR 60.48c(g)(2)].

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of fuel usage (MMscf) on a monthly basis [401 KAR 52:020, Section 10 and 40 CFR 60.48c(g)(2)].

b. The permittee shall keep records according to 40 CFR 63.7555(a)(1) and (2). [40 CFR 63.7555(a)]

i. A copy of each notification and report that was submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification of Compliance Status or semiannual compliance report submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.7555(a)(2)

c. Records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7560(a)]

d. As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7560(b)]

e. The permittee shall keep each record on site, or they shall be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [40 CFR 63.7560(c)]

6. Specific Reporting Requirements:

a. The permittee shall submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 638.(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified. [40 CFR 63.7545(a)]

b. As specified in 40 CFR 63.9(b)(4) and (5), for startup of a new or reconstructed affected source on or after January 31, 2013, the permittee shall submit an Initial Notification not later than 15 days after the actual date of startup of the affected source. [40 CFR 63.7545(c)]

c. The permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report shall contain all the information specified in 40 CFR 63.7545(e)(1) through (8), as applicable. If an initial compliance demonstration as specified in 40 CFR 63.7530(a) is not required, the Notification of Compliance Status shall only contain the information in 40 CFR 63.7545(e)(1) and (8) and shall be submitted within 60 days of the compliance date specified at 40 CFR 63.7495(b). [40 CFR 63.7545(e)]

i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or EPA through a petition process to be non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3,

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

and justification for the selection of fuel(s) burned during the compliance demonstration. [40 CFR 63.7545(e)(1)]

ii. In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status shall include the following certification(s) of compliance, as applicable, and signed by a responsible official: [40 CFR 63.7545(e)(8)]

1. "This facility completed the required initial tune-up for all the boilers and process heaters covered by 40 CFR Part 63 Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." [40 CFR 63.7545(e)(8)(i)]

2. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." [40 CFR 63.7545(e)(8)(ii)]

d. The permittee shall submit each report in 40 CFR 63, Subpart DDDDD, Table 9 that applies. [40 CFR 63.7550(a)]

e. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee shall submit each report, according to 40 CFR 63.7550(h), by the date in 40 CFR 63, Subpart DDDDD, Table 9 and according to the requirements in 40 CFR 63.7550(b)(1) through (4). For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or 40 CFR 63, Subpart DDDDD, Table 4 operating limits, the permittee may submit only annual, biennial, or 5-year compliance report, as applicable, as specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report. For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70 or Part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in 40 CFR 63.7550(b)(1) through (4). [40 CFR 63.7550(b) and (b)(5)]

f. A compliance report shall contain the following information depending on how the facility chooses to comply with the limits set in this rule. If the facility is subject to the requirements of a tune up, the permittee shall submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv), and (xvii). [40 CRF 63.7550(c) and (c)(1)]

i. Company and Facility name and address. [40 CFR 63.7550(c)(5)(i)]

ii. Process unit information, emissions limitations, and operating parameter limitations. [40 CFR 63.7550(c)(5)(ii)]

iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7550(c)(5)(iii)]

iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. [40 CFR 63.7550(c)(5)(xiv)]

v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.7550(c)(5)(xvii)]

g. The permittee shall submit the reports according to the procedures specified in 40 CFR 63.7550(h)(1) through (3). The permittee shall submit all reports required by 40 CFR 63, Subpart DDDDD, Table 9 electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee shall use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html) , once the XML schema is available. If the reporting form specific to 40 CFR 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee shall submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee shall begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h) and (h)(3)]

h. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 12: Combustion Turbine

Description:
Natural Gas/No. 2 Fuel Oil-Fired unit
Rated Capacity: 803 MMBtu/hr
Construction commenced: 1970

Applicable Regulations:
401 KAR 63:002, Section 2(4)(dddd), 40 C.F.R. 63.6080 through 63.6175, Tables 1 through 7 (**Subpart YYYY**), *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*

1. **Operating Limitations:**
   Existing stationary combustion turbines in all subcategories do not have to meet the requirements of 40 CFR 63, Subpart YYYY and of 40 CFR 63, Subpart A. No initial notification is necessary for any existing stationary combustion turbine, even if a new or reconstructed turbine in the same category would require an initial notification. [40 CFR 63.6090(b)(4)]

2. **Emission Limitations:**
   N/A

3. **Testing Requirements:**
   N/A

4. **Monitoring Requirements:**
   The permittee shall monitor the fuel usage (in MMscf for natural gas and Mgal for No.2 fuel oil) on a monthly basis [401 KAR 52:020, Section 10].

5. **Recordkeeping Requirements:**
   The permittee shall maintain records of the fuel usage (in MMscf for natural gas and Mgal for No.2 fuel oil) on a monthly basis [401 KAR 52:020, Section 10].

6. **Reporting Requirements:**
   Refer to **Section C - General Conditions** for additional reporting requirements.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee shall comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

Description	Generally Applicable Regulation
1. Kerosene tanks (500 gallons)	N/A
2. Kerosene tanks (340 gallons)	N/A
3. Unleaded gasoline tank (500 gallons)	N/A
4. Gasoline tank (300 gallons)	N/A
5. Diesel fuel oil storage tank (500 gallons)	N/A
6. No. 2 fuel storage tank (50,000 gallons)	N/A
7. Diesel fuel tank for emergency fire pump (500 gal)	N/A
8. Diesel fuel tank for emergency generator (797 gal)	N/A
9. Diesel fuel storage tank (500 gallons)	N/A
10. Closed cooling water system	N/A
11. Demineralizer process operation	N/A
12. Freeze protection operation for coal conveyors	N/A
13. Wastewater treatment plant operations	N/A
14. Pneumatic flyash conveyors and storage silos	401 KAR 63:010
15. PAC Storage Silos (2)	401 KAR 59:010
16. Hydrated Lime Storage Silos (2)	401 KAR 59:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. Particulate matter, sulfur dioxide, nitrogen oxides, and visible (opacity) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. To preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration of air quality, total emissions of NO_x from Emissions Units 01, 02, and 11 shall not exceed 3,657 tons during any consecutive 12 month period after completion of the Gas Conversion Project. [401 KAR 52:020, Section 10]

Compliance Demonstration:

i) The permittee shall use the NO_x continuous emission monitoring system (CEMS) to determine the monthly and twelve consecutive rolling month emissions from Emission Units 01 and 02.

ii) The permittee shall calculate and record the NO_x emission from Emission Unit 11 and total NO_x emissions from Emission Units 01, 02, and 11 on a monthly and 12 consecutive month basis.

iii) The permittee shall submit a report of NO_x emissions for the previous twelve consecutive month period every six months in accordance with Section F.5. Exceedances of the emission limitation specified above shall be reported within 30 days following the date when the exceedance is determined.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
   a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
   b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
   c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.

9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality
Owensboro Regional Office
3032 Alvey Park Dr. W STE 700
Owensboro, KY 42303-2191

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St. SW
Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
      (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit shall be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
      (4) New requirements become applicable to a source subject to the Acid Rain Program.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements [Section 1a-15 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)b.].

l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the Cabinet Provisions and Procedures for Issuing Title V Permits incorporated by reference in 401 KAR 52:020, Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)d.].

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)a.].

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and

SECTION G - GENERAL PROVISIONS (CONTINUED)

incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
   (1) Applicable requirements that are included and specifically identified in this permit; and
   (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

   a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

   b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

3. Permit Revisions

   a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

   b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements
   Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission units 01, 02, and 11 in accordance with the terms and conditions of this permit (V-19-020 R2).

SECTION G - GENERAL PROVISIONS (CONTINUED)

a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, notification of the following:
(1) The date when construction commenced.
(2) The date of start-up of the affected facilities listed in this permit.
(3) The date when the maximum production rate specified in the permit application was achieved.

c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

d. Pursuant to 401 KAR 50:055, Section 2(1)(a), an owner or operator of any affected facility subject to any standard within the administrative regulations of the Division for Air Quality shall demonstrate compliance with the applicable standard(s) within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility. Pursuant to 401 KAR 52:020, Section 3(3)(c), sources that have not demonstrated compliance within the timeframes prescribed in 401 KAR 50:055, Section 2(1)(a), shall operate the affected facility only for purposes of demonstrating compliance unless authorized under an approved compliance plan or an order of the cabinet.

e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.

f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

5. Testing Requirements

a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of 60 days

SECTION G - GENERAL PROVISIONS (CONTINUED)

prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least 30 days prior to the test.

b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within 45 days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NO_x compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
   (1) An emergency occurred and the permittee can identify the cause of the emergency;
   (2) The permitted facility was at the time being properly operated;
   (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
   (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(5) This requirement does not relieve the source of other local, state or federal notification requirements.

b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156 and 82.157.
   (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
   (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
   (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 82.157.
   (6) 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.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP* eSubmit software.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

Emissions Units 1 and 2: Identical Pulverized Coal-fired, Dry Bottom, Wall-fired Boilers

Description:
Controls: Low NO_x burner (LNB), dry electrostatic precipitator (ESP), wet (scrubber) flue gas desulfurization (FGD) (dolomitic lime), coal re-burn technology, dry sorbent injection (DSI) (hydrated lime), activated carbon injection (ACI)
Monitoring Equipment: Continuous Opacity Monitoring System (COMS), Continuous Emissions Monitoring (CEMS) Mercury (Hg), Sulfur Dioxide (SO_2), Nitrogen Oxides (NO_x), Carbon Dioxide (CO_2)
No. 2 fuel oil used for startup and stabilization
Secondary Fuel: Petroleum Coke
Maximum Continuous Rating: 2,660 MMBtu/hour, each
Construction Commenced: June 1976
Commercial Operation: December 1979 (EU 1) January 1981 (EU 2)

APPLICABLE REGULATIONS:
401 KAR 51:160, *NO_x Requirements for Large Utility and Industrial Boilers*
401 KAR 51:210, *CAIR NO_x annual trading program*
401 KAR 51:220, *CAIR NO_x Ozone Season Group 2 trading program*
401 KAR 51:230, *CAIR SO_2 Trading Program*
401 KAR 51:240, *Cross-State Air Pollution Rule (CSAPR) NO_x annual trading program*
401 KAR 52: 260, *Cross-State Air Pollution Rule (CSAPR) SO_2 group 1 trading program*
401 KAR 52:060, *Acid Rain Permits*
401 KAR 59:015, *New Indirect Heat Exchangers*
401 KAR 60:005, Section 2(2)(a), 40 C.F.R. 60.40 to 60.46, (**Subpart D**), *Standards of Performance for Fossil-Fuel-Fired Steam Generators*
401 KAR 63:002, Section 2(4)(yyyy), 40 C.F.R. 63.9980 to 63.10042, (**Subpart UUUUU)**, *National Emission Standards for Hazardous Air Pollutants: Coal and Oil-fired Electric Utility Steam Generating Units*
40 CFR 52.21, (a) through (i) and (s) through (w), *Prevention of Significant Deterioration of Air Quality applicable to major construction or modification commenced before August 7, 1979*
40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*
40 CFR Part 75, *Continuous Emissions Monitoring (CEM)*
40 CFR 97, Subpart GGGGG, *CSAPR NO_x Ozone Season Group 3 Trading Program*

1. **Operating Limitations:**
   a) Once the Gas Conversion Project is completed or by September 1, 2022, whichever is sooner, Emission Units 1 and 2 shall no longer utilize coal, petroleum coke, or No. 2 fuel oil and shall only utilize natural gas as a fuel. [401 KAR 52:020, Section 10, to preclude 401 KAR 51:017]

   b) The permittee is required to meet work practice requirements specified in 40 CFR 63, Subpart UUUUU, Table 3, Items 3 and 4 at all times except during periods of startup per paragraph **1. Operating Limitations: (a)(i)** and **(ii)** and shutdown requirements per **1. Operating Limitations: (a)(iii)** [40 CFR 63.9991(a) and 40 CFR 63.10000(a)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

i) The permittee shall comply with the following because they have chosen to comply using paragraph (1) of the definition of "startup" in 40 CFR 63.10042: [Startup means the first-ever firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use). Any fraction of any hour in which startup occurs constitutes a full hour of startup] [40 CFR 63.10000(a)and 40 CFR 63, Subpart UUUUU, Table 3, Item 3a].
   A) The Permittee shall operate all Continuous Monitoring System(s) (CMS) during startup [40 CFR 63, Subpart UUUUU, Table 3, Item 3a].
   B) For startup of a unit, the permittee shall use clean fuels as defined in 40 CFR 63.10042 for ignition [40 CFR 63, Subpart UUUUU, Table 3, Item 3a].
   C) Once the permittee converts to firing coal the permittee shall engage all of the applicable control technologies except dry scrubber and SCR. The permittee shall start the dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation [40 CFR 63, Subpart UUUUU, Table 3, Item 3a].
   D) The permittee shall comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in 40 CFR 63, Subpart UUUUU [40 CFR 63, Subpart UUUUU, Table 3, Item 3a].
   E) The permittee shall collect monitoring data during startups as specified in 40 CFR 63.10020(a) and (e) and maintain records during startup periods, as specified in 40 CFR 63.10032 and 63.10021(h). The permittee shall provide reports concerning activities and startup periods, as specified in 40 CFR 63.10011(g), 63.10021(i), and 63.10031 [40 CFR 63, Subpart UUUUU, Table 3, Item 3a and 3d].
   F) The permittee shall provide reports concerning activities and startup periods, as specified in 40 CFR 63.10011(g) and 40 CFR 63.10021(h) and (i) and 40 CFR 63.10031 [40 CFR 63, Subpart UUUUU, Table 3 Item 3(1)(a) and Item 3(2)(d)].
   G) To satisfy the initial and continuous compliance requirements of 40 CFR 63.10011(g) and 63.10021(h), respectively, the permittee may use diluent cap and default gross output values, as described in 40 CFR 63.10007(f), during startup periods.
   H) The permittee shall provide reports concerning activates and startup periods, as specified in 40 CFR 63.10011(g) and 40 CFR 63.10021(h) and (i), and 40 CFR 63.10031.

ii) The permittee has the option of using either definition of startup defined in 40 CFR 63, Subpart UUUUU, Table 3 Item 3(a)(1) or Item 3(a)(2) for demonstrating initial compliance. The permittee may switch from Item 3(a)(1) to Item 3(a)(2) of 40 CFR 63, Subpart UUUUU, Table 3 (or vice-versa) provided that all the Notification, Reporting and Recordkeeping requirements of 40 CFR 63.10030(e)(8)(iii)(A) through (E) are fulfilled [40 CFR 63.10030(e)(8)].

iii) The permittee shall comply with the following during a shutdown [shutdown means the period in which cessation of operation of an EGU is initiated for any purpose. Shutdown begins when the EGU no longer generates electricity or makes useful thermal energy (such as heat or steam) for industrial, commercial, heating, or cooling purposes or when no coal, liquid gas, syngas, or solid oil-derived fuel is being fired in the EGU, whichever is earlier. Shutdown ends when the EGU no longer generates

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

electricity or makes useful thermal energy (such as steam or heat) for industrial commercial, heating, or cooling purposes, and no fuel is being fired in the EGU. Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown.] [40 CFR 63.10000(a) and 40 CFR 63, Subpart UUUUU, Table 3, Item 4.]

A) The permittee shall operate all CMS during shutdown [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 1st Paragraph].

B) The permittee shall also collect appropriate data, and the permittee shall calculate the pollutant emission rate for each hour of shutdown for these pollutants for which a CMS is used [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 1st Paragraph].

C) While firing coal during shutdown, the permittee shall vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal fuel being fed into the EGU and for as long as possible thereafter considering operational and safety concerns [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 2nd Paragraph].

D) In any case, the permittee shall operate the controls when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than 40 CFR 63, Subpart UUUUU and that require operation of the control devices [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 2nd Paragraph].

E) If, in addition to the fuel used prior to initiation of shutdown, another fuel shall be used to support the shutdown process, that additional fuel shall be one or a combination of the clean fuels defined in 40 CFR 63.10042 and shall be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 3rd Paragraph].

F) The permittee shall comply with all applicable emission limits at all times except during shutdown periods at which time the permittee shall meet this work practice [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 5th Paragraph].

G) The permittee shall collect monitoring data during shutdown periods, as specified in 40 CFR 63.10020(a) [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 5th Paragraph].

H) The permittee shall maintain records during shutdown periods as provided in 40 CFR 63.10032 and 40 CFR 63.10021(h) [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 5th Paragraph].

I) To satisfy the initial and continuous compliance requirements of 40 CFR 63.10011(g) and 63.10021(h), respectively, the permittee may use diluent cap and default gross output values, as described in 40 CFR 63.10007(f), during shutdown periods.

J) The permittee shall provide reports concerning shutdown periods, as specified in 40 CFR 63.10011(g), 40 CFR 63.10021(h), 40 CFR 63.10021(i), and 40 CFR 63.10031 [40 CFR 63, Subpart UUUUU, Table 3, Item 4, 5th Paragraph].

Compliance Demonstration: See **1. Operating Limitations: (c)** and **(g)**, **5. Specific Recordkeeping Requirements: (b), (h)**, and **(k)** through **(m)**.

c) The permittee shall conduct periodic performance tune-ups for each EGU, as specified in 40 CFR 63.10021(e)(1) through (9). Subsequently the permittee shall perform an inspection of the burner at least once every 36 calendar months. If an EGU is offline

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

when a deadline to perform the tune-up passes, the permittee shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit [40 CFR 63.10021(e)].

i) Inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows [40 CFR 63.10021(e)(1)]:
   A) Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO shall be installed within three calendar months after the burner inspection [40 CFR 63.10021(e)(1)(i)];
   B) Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the operator [40 CFR 63.10021(e)(1)(ii)];

ii) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type [40 CFR 63.10021(e)(2)];

iii) As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors [40 CFR 63.10021(e)(3)];

iv) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors [40 CFR 63.10021(e)(4)];

v) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O_2 probes and/or sensor, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary [40 CFR 63.10021(e)(5)];

vi) Optimize combustion to minimize generation of CO and NO_x. The optimization should be consistent with the manufacturer's specification, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burner, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles [40 CFR 63.10021(e)(6)];

vii) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppm, by volume, and oxygen in volume percent, before and after the tune-up adjustments are made (measurements

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). The permittee may use portable CO, NO_x and O_2 monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system [40 CFR 63.10021(e)(7)];

viii) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information specified here-in including [40 CFR 63.10021(e)(8)];
   A) The concentrations of CO and NO_x in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems [40 CFR 63.10021(e)(8)(i)];
   B) A description of any corrective actions taken as a part of the combustion adjustment [40 CFR 63.10021(e)(8)(ii)]; and
   C) The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period [40 CFR 63.10021(e)(8)(iii)]; and

ix) Report the dates of the initial and subsequent tune-ups in hard copy, as specified in 40 CFR 63.10031(f)(5), through June 30, 2020. On or after July 1, 2020, report the date of all tune-ups electronically, in accordance with 40 CFR 63.10031(f). The tune-up report date is the date when tune-up requirements in 40 CFR 63.10021(e)(6) and (e)(7) are completed [40 CFR 63.10021(e)(9)].

Compliance Demonstration: See **5. Specific Recordkeeping Requirements: (d)** and **(h)**.

d) If the permittee elects to (or is required to) use CEMS to continuously monitor Hg, HCl, HF, SO_2, or PM emissions (or, if applicable, sorbent trap monitoring systems to continuously collect Hg emissions data), the following default values are available for use in the emission rate calculations during startup periods or shutdown periods (as defined in 40 CFR 63.10042). For the purposes of 40 CFR 63, Subpart UUUUU, these default values are not considered to be substitute data.

   i) *Diluent cap values.* If the permittee uses CEMS (or, if applicable, sorbent trap monitoring systems) to comply with a heat input-based emission rate limit, the permittee may use the following diluent cap values for a startup or shutdown hour in which the measured CO_2 concentration is below the cap value or the measured O_2 concentration is above the cap value. The permittee may use 5% for CO_2 or 14% for O_2 [40 CFR 63.10007(f)].

   ii) *Default gross output.* If the permittee uses CEMS to continuously monitor Hg, HCl, HF, SO_2, or PM emissions (or, if applicable, sorbent trap monitoring systems to continuously collect Hg emissions data), the following default value is available for use in the emission rate calculations during startup periods or shutdown periods (as defined in 40 CFR 63.10042). For the purposes of 40 CFR 63, Subpart UUUUU, this default value is not considered to be substitute data. For a startup or shutdown hour in which there is heat input to an affected EGU but zero gross output, the permittee shall calculate the pollutant emission rate using a value equivalent to 5% of the maximum sustainable gross output, expressed in megawatts, as defined in 40 CFR 75, Appendix A, section 6.5.2.1(a)(1). This default gross output is either the nameplate capacity of the EGU or the highest gross output observed in at least four representative quarters of EGU operation. For a monitored common stack, the default gross output is used

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

only when all EGUs are operating (*i.e.,* combusting fuel) are in startup or shutdown mode, and have zero electrical generation. Under those conditions, a default gross output equal to 5% of the combined maximum sustainable gross output of the EGUs that are operating but have a total of zero gross output must be used to calculate the hourly gross output-based pollutant emissions rate [40 CFR 63.10007(f)(2)].

e) The permittee shall either install the required CEMS, PM CPMS, and sorbent trap monitoring systems in the stack or at a location in the ductwork downstream of all emissions control devices, where the pollutant and diluents concentrations are representative of the emissions that exit to the atmosphere [40 CFR 63.10010(a)(1)].

f) The permittee shall comply with the applicable General Provisions in 40 CFR 63.1 through 40 CFR 63.15 that are provided in Table 9 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10040].

g) The permittee shall comply with all applicable notification and recording requirements in 40 CFR 60.10030 through 40 CFR 63.10033 according to the schedule in 40 CFR 63.10030 and Subpart A of 40 CFR 63, Subpart UUUUU, no later than April 16, 2016. The permittee shall demonstrate compliance no later than one-hundred-eighty (180) days after April 16, 2016 (October 13, 2016).

h) During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in 40 CFR 63, Subpart UUUUU. An affected facility subject to 40 C.F.R. 63.9991 shall meet the work practice standards established in 40 C.F.R. Part 63, Table 3 to Subpart UUUUU, as established in 401 KAR 63:002, Section 2(4)(yyyy). [401 KAR 59:015, Section 7 and Section 7(2)(b)]

2. Emission Limitations:

a) Particulate matter (PM) emissions from each stack shall not exceed 0.10 lb/MMBtu, based on a 3-hour average [40 CFR 60.42(a)(1) and 40 CFR 52.21].
Compliance Demonstration: Compliance with **2. Emission Limitations: (b)** substantiates compliance with this PM emission limitation.

b) Visible emissions shall not exceed twenty 20% opacity based on a six-minute average, except that a maximum of 27% opacity shall be allowed for one six-minute period in any 60 consecutive minutes [40 CFR 60.42(a)(2)].
Compliance Demonstration: See **3. Testing Requirements: (a)** and **4. Specific Monitoring Requirements: (a)** and **6. Specific Reporting Requirements: (a).**

c) SO_2 emissions from each stack shall not exceed 1.2 lb/MMBtu based on a three-hour average [40 CFR 60.43(a)(2)].
Compliance Demonstration: Compliance with **2. Emission Limitations: (d)** substantiates compliance with this emission limitation.

d) SO_2 emissions from each stack shall not exceed 0.8 lb/MMBtu based on a three-hour average [40 CFR 52.21].
Compliance Demonstration: See **4. Specific Monitoring Requirements: (c)** through **(f).**

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e) NO_x emissions from each stack shall not exceed 0.70 lb/MMBtu based on a three-hour average [40 CFR 60.44(a)(3)].
Compliance Demonstration: See **4. Specific Monitoring Requirements: (c)** through **(f)**.

f) For filterable PM, emissions shall not exceed 3.0E-2 lb/MMBtu based on the appropriate requirements in Table 2 of 40 CFR 63, Subpart UUUUU and shall apply at all times except during periods of startup or shutdown [40 CFR 63.9991(a), 40 CFR 63, Subpart UUUUU Table 2, Item 1.a, and 40 CFR 63.10000(a)].
Compliance Demonstration: See **3. Testing Requirements: (b)**, **(e)** though **(h),** and **(j)** and **6. Specific Reporting Requirements: (c)**.

g) For hydrogen chloride (HCl), emissions shall not exceed 2.0E-3 lb/MMBtu based on the appropriate requirements in Table 2 of 40 CFR 63, Subpart UUUUU and shall apply at all times except during periods of startup or shutdown [40 CFR 63.9991(a), 40 CFR 63, Subpart UUUUU Table 2, Item 1.b., and 40 CFR 63.10000(a)].
Compliance Demonstration: See **3. Testing Requirements: (c)**, **(e)** through **(j),** and **6. Specific Reporting Requirements: (c)**.

h) For mercury (Hg), emissions shall not exceed 1.2 lb/TBtu based on calculating the 30-boiler operating day rolling arithmetic average emissions rate in units of the applicable emissions standard basis at the end of each boiler operating day using all of the quality assured hourly average CEMS data for the previous 30-boiler operating days, excluding data recorded during periods of startup or shut down [40 CFR 63.9991(a), 40 CFR 63. Subpart UUUUU, Table 2, Item 1.c.].
Compliance Demonstration: See **3. Testing Requirements: (d)** and **(e)** through **(j)**, **4. Specific Monitoring Requirements: (g)** through **(l)**, and **5. Specific Recordkeeping Requirements: (f)** and **(g)**.

3. Testing Requirements:

a) If no U.S. EPA Reference Method 9 tests are performed pursuant to paragraph **4. Specific Monitoring Requirements: (a)**, then the permittee shall determine the opacity from the stack by U.S. EPA Reference Method 9 at least once every 14 boiler operating days, or more frequently if requested by the Division, to demonstrate compliance with the opacity standard. If no U.S. EPA Reference Method 9 test is completed during the time period, the reason for not completing a test shall be documented and the permittee may use the COM system for assuring compliance with the visible emission limitation during that period.

b) Since the coal-fired EGU's have not qualified as LEEs for filterable particulate matter (PM), the permittee shall demonstrate compliance through initial and periodic quarterly performance stack test for PM according to Table 5 and 40 CFR 63.10007, except as otherwise provided in 40 CFR 63.10021(d)(1) [40 CFR 63.10000(c)(1)(iv), 40 CFR 63.10006(c) and 40 CFR 63.10011(a)].

c) Since the coal-fired EGUs have not qualified as LEEs for hydrogen chloride (HCl), the permittee shall demonstrate initial and continuous compliance by conducting initial and periodic quarterly performance stack test for HCl according to Table 5 and 40 CFR 63.10007, except as otherwise provided in 40 CFR 63.10021(d)(1) [40 CFR

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63.10000(c)(1)(v), 40 CFR 63.10006(d), and 40 CFR 63.10011(a)].

d) Since the coal-fired EGUs have not qualified as LEEs for Hg, the permittee shall demonstrate initial and continuous compliance through use of a Hg CEMS, in accordance with appendix A of 40 CFR 63, Subpart UUUUU. The initial performance test shall consist of a 30-boiler operating day rolling average emissions rate obtained with a certified CEMS, expressed in units of the standard. If the monitoring system is certified prior to the applicable compliance date, the initial averaging period shall either begin with: The first boiler operating day on or after the compliance date; or 30 boiler operating days prior to that date, as described in 40 CFR 63.10005(b). In all cases, the initial 30-operating day averaging period shall be completed on or before the date that compliance shall be demonstrated, in accordance with 40 CFR 63.9984(f). Initial compliance is demonstrated if the results of the performance test meet the applicable emission limit in Table 2 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10000(c)(1)(vi) and 40 CFR 63.10011(c)(1)].

e) For complying with emission standards under 40 CFR 63, Subpart UUUUU, the permittee may skip performance testing in those quarters during which less than 168 boiler operating hours occur, except that a performance test shall be conducted at least once every calendar year [40 CFR 63.10021(d)(1)].

f) The permittee shall conduct all required performance tests according to 40 CFR 63.7(d), (e), (f), and (h). The permittee shall also develop a site-specific test plan according to the requirements in 40 CFR 63.7(c) [40 CFR 63.10007(a)].
   i) For Hg CEMS, to determine compliance with a 30-boiler operating day rolling average emission limit, the permittee shall collect data for all nonexempt unit operating conditions (see 40 CFR 63.10011(g) and Table 3 of 40 CFR 63, Subpart UUUUU) [40 CFR 63.10007(a)(1)].
   ii) For PM and HCl performance testing, maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of site specific normal operations during each test run [40 CFR 63.10007(a)(2)].

g) The permittee shall conduct each performance test (including traditional 3-run stack tests, 30-boiler operating day tests based on CEMS data) according to the requirements in Table 5 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10007(b)].

h) The permittee shall conduct a minimum of three separate test runs for each performance tests, as specified in 40 CFR 63.7(e)(3). Each test run shall comply with the minimum applicable sampling time or volume specified in Table 2 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10007(d)].

i) The permittee is required to (or elects to) demonstrate initial compliance using a CMS, for a particular emission or operating limit, the CMS shall pass a performance evaluation prior to the initial compliance demonstration. If a CMS has been previously certified under another state or federal program and is continuing to meet the on-going quality-assurance (QA) requirements of that program, then, provided that the certification and QA provisions of that program meet the applicable requirement of 40 CFR 63.10010(b) through (h), an additional performance evaluation of the CMS is not required under 40

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CFR 63, Subpart UUUUU. To demonstrate compliance with the applicable Hg emission limit specified in **2. Emission Limitations: (h)**, using Hg CEMS, initial compliance shall be demonstrated no later than the applicable date specified in 40 CFR 63.9984(f). Initial compliance is achieved if the arithmetic average of 30-boiler operating days of quality-assured CEMS data, expressed in units of the standard (see section 6.2 of appendix A of 40 CFR 63, Subpart UUUUU), meets the applicable Hg emission limit in Table 2 of 40 CFR 63, Subpart UUUUU [40 CFR 63.10005(d)].

j) The permittee shall complete performance tests for the EGU at least 45 calendar days, measured from the test's end date, shall separate performance tests conducted every quarter. For units demonstrating compliance through quarterly emission testing, the permittee shall conduct a performance test in the 4th quarter of a calendar year if the EGU has skipped performance tests in the first 3 quarters of the calendar year. If the EGU misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next test period, the permittee shall complete an additional performance test in that period as follows[40 CFR 63.10006(f)]:
   i) At least 15 calendar days shall separate two performance tests conducted in the same quarter [40 CFR 63.10006(f)(1)];
   ii) At least 107 calendar days shall separate two performance tests conducted in the same calendar year [40 CFR 63.10006(f)(2)]; and
   iii) At least 350 calendar days shall separate two performance tests conducted in the same 3 year period [40 CFR 63.10006(f)(3)].

4. Specific Monitoring Requirements:

a) A continuous opacity monitoring (COM) system shall conform to requirements of these sections which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement. Excluding exempted time periods, if any three consecutive six-minute average opacity values exceed the applicable opacity standard, the permittee shall, as appropriate [40 CFR 60.45(a), 401 KAR 59:005, Section 4(3)(a)(1), 40 CFR 64.5(c)(1), and 401 KAR 52:020, Section 10]:
   1) Accept the readout from the COM as an indicator of equipment performance and perform an inspection of the COM and/or the control equipment and make any repairs or;
   2) Within 30 minutes after the third consecutive COM indicated exceedance of the opacity standards, if emissions are visible, initiate a determination of opacity using U.S. EPA Reference Method 9 test. Also within 30 minutes after the third consecutive COM indicated exceedance, inspect the COM and/or the control equipment, and initiate any repairs. If a U.S. EPA Reference Method 9 cannot be performed, the reason for not performing the test shall be documented.

b) The permittee shall monitor the voltage and amperage readings of the ESP transformer/rectifier sets once per shift. Corrective action shall be initiated when an excursion occurs outside the indicator ranges established in the approved CAM plan for those parameters [401 KAR 52:020, Section 10].

c) Continuous emission monitoring systems (CEMS) shall be installed, calibrated, maintained, and operated for SO_2 emissions, NO_x emissions, and either oxygen (O_2) or carbon dioxide (CO_2) emissions [40 CFR 60.45(a), 401 KAR 52:020, Section 10]. The

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continuous emission monitoring systems shall be used to satisfy CAM requirements for SO_2 and NO_x [40 CFR 64.3(d)].

1) NO_x and SO_2 CEMS shall comply with Performance Specification 2 of Appendix B to 40 CFR Part 60 and 40 CFR Part 75 [40 CFR 64.3(d)(2)(ii) and (d)(2)(iv)].
2) O_2 or CO_2 CEMS shall comply with Performance Specification 3 of Appendix B to 40 CFR Part 60 and 40 CFR Part 75 [40 CFR 64.3(d)(2)(ii) and (d)(2)(iv)].
3) The continuous emission monitoring systems shall be used to satisfy CAM requirements for SO_2 and NO_x [40 CFR 64.3(d)].

d) To meet the monitoring requirement for SO_2 and NO_x, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shutdown periods, if any three-hour average nitrogen oxide or sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable [401 KAR 52:020, Section 10].

e) Performance evaluations of CEMS required under 40 CFR 60.13(c) and calibration checks required under 40 CFR 60.13(d), shall be completed based on the procedures in 40 CFR 60.45(c) and listed below [40 CFR 60.45(c)]:
   1) Methods 6, 7, and 3B of appendix A of this part, as applicable, shall be used for the performance evaluations of SO_2 and NO_x continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B in Appendix A of 40 CFR 60 are given in 40 CFR 60.46(d). [40 CFR 60.45(c)(1)]
   2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60 [40 CFR 60.45(c)(2)].
   3) The span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent. The span value for a continuous monitoring system measuring sulfur oxides or NO_x shall be determined based on the table in 40 CFR 60.45(c)(3)(i) or the permittee may elect to use the span values for SO_2 and NO_x according to section 2.1.1 and 2.1.2 in Appendix A of 40 CFR 75 [40 CFR 60.45(c)(3)].

f) Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described 40 CFR 60.45(e) and 40 CFR 60.45(f) [40 CFR 60.45(e)].

g) The permittee shall install, certify, maintain, and operate a Hg CEMS for Emission Unit 01 and 02, in accordance with Appendix A of 40 CFR 63, Subpart UUUUU [40 CFR 63, Subpart UUUUU, Table 5, Item 4].

h) If the permittee demonstrates compliance with any applicable emissions limit through use of a continuous monitoring system (CMS) where a CMS includes a continuous parameter monitoring system (CPMS) as well as a continuous emissions monitoring system (CEMS), the permittee shall develop a site-specific monitoring plan and submit this site-specific monitoring plan, if requested, at least 60 days before the initial performance evaluation (where applicable) of the CMS. This requirement also applies to the permittee if the permittee petitions the Administrator for alternative monitoring parameters under

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40 CFR 63.8(f). This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS and CPMS prepared under Appendix B to 40 CFR part 60 or 40 CFR part 75, and meet the requirements of 40 CFR 63.10010. Using the process described in 40 CFR 63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified, if approved, include those in the site-specific monitoring plan [40 CFR 63.10000(d)(1)].

i) The site-specific monitoring plan shall include the information specified in 40 CFR 63.10000 (d)(5)(i) through (d)(5)(vii). Alternatively, the requirements of 40 CFR 63.10000 (d)(5)(i) through (d)(5)(vii) are considered to be met for a particular CMS [40 CFR 63.10000(d)(2)]:
   A) The CMS is installed, certified, maintained, operated, and quality-assured either according to 40 CFR 75, or appendix A or B of 40 CFR 63, Subpart UUUUU [40 CFR 63.10000(d)(2)(i)]; and
   B) The recordkeeping and reporting requirements of 40 CFR 75, or appendix A or B of 40 CFR 63, Subpart UUUUU, that pertain to CMS are met [40 CFR 63.10000(d)(2)(ii)].

ii) If requested by the Administrator, the permittee shall submit the monitoring plan (or relevant portion of the plan) at least 60 days before the initial performance evaluation of a particular CMS, except where the CMS has already undergone a performance evaluation that meets the requirements of 40 CFR 63.10010 (e.g., if the CMS was previously certified under another program) [40 CFR 63.10000(d)(3)].

iii) The permittee shall operate and maintain the CMS according to the site-specific monitoring plan [40 CFR 63.10000(d)(4)].

iv) The provisions of the site-specific monitoring plan shall address the following items [40 CFR 63.10000(d)(5)]:
   A) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). See 40 CFR 63.10010(a) for further details [40 CFR 63.10000(d)(5)(i)];
   B) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems [40 CFR 63.10000(d)(5)(ii)];
   C) Schedule for conducting initial and periodic performance evaluations [40 CFR 63.10000(d)(5)(iii)];
   D) Performance evaluation procedures and acceptance criteria (e.g., calibrations), including the quality control program in accordance with the general requirements of 40 CFR 63.8(d) [40 CFR 63.10000(d)(5)(iv)];
   E) On-going operation and maintenance procedures, in accordance with the general requirements of 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii) [40 CFR 63.10000(d)(5)(v)];
   F) Conditions that define a CMS that is out of control consistent with 40 CFR 63.8(c)(7)(i) and for responding to out of control periods consistent with 40 CFR 63.8(c)(7)(ii) and (c)(8) [40 CFR 63.10000(d)(5)(vi)];

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G) On-going recordkeeping and reporting procedures, in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i), or as specifically required under 40 CFR 63, Subpart UUUUU [40 CFR 63.10000(d)(4)(vii)].

i) The permittee shall operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see 40 CFR 63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. The permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable [40 CFR 63.10020(b)].

j) The permittee shall not use data recorded during EGU startup or shutdown in calculations used to report emissions. In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. The permittee shall use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system [40 CFR 63.10020(c)].

k) Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activates including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation from the monitoring requirements [40 CFR 63.10020(d)].

l) Since the permittee use a CEMS to measure Hg emissions, the permittee shall demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS and the other required monitoring systems (e.g., flow rate, CO_2, O_2, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day rolling average basis, updated at the end of each new boiler operating day [40 CFR 63.10021(b)].

m) See **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

5. Specific Recordkeeping Requirements:

a) The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 40 CFR 60. All information shall be recorded in a permanent form suitable for inspection [40 CFR 60.7(f)].

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b) The permittee shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the emission unit; any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative [40 CFR 60.7(b)].

c) Records of primary/secondary voltage and current shall be maintained with long-term operational records for a period of five years [40 CFR 64 and 401 KAR 52:020, Section 10].

d) The permittee shall maintain adequate records of the accounts of each tune-up and provide documentation that all tune-up meet all rule requirements [40 CFR 63.10005(f)].

e) Upon request, the permittee shall make available to the EPA Administrator such records as may be necessary to determine whether the performance tests have been done according to the requirements in 40 CFR 63, Subpart UUUUU [40 CFR 63.10007(g)].

f) For Hg, the permittee shall maintain records according to Appendix A of 40 CFR 63, Subpart UUUUU and the following [40 CFR 63.10032(a)]:
   i) A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv) [40 CFR 63.10032(a)(1)];
   ii) Records of performance stack tests, fuel analysis, or other compliance demonstrations and performance evaluations, as required in 40 CFR 63.10(b)(2)(viii) [40 CFR 63.10032(a)(2)].

g) For each CEMS, the permittee shall maintain the following [40 CFR 63.10032(b)]:
   i) Records described in 40 CFR 63.10(b)(2)(vi) through (xi) [40 CFR 63.10032(b)(1)];
   ii) Previous versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3) [40 CFR 63.10032(b)(2)];
   iii) Request for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i) [40 CFR 63.10032(b)(3)];
   iv) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during the period of startup, shutdown, or malfunction or during another period [40 CFR 63.10032(b)(4)].

h) The permittee shall maintain the records required in Table 7 of 40 CFR 63, Subpart UUUUU to show continuous compliance with each emission limit and operating limit that applies to the permittee [40 CFR 63.10032(c)].

i) The permittee shall maintain the following:
   i) Records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used [40 CFR 63.10032(d)(1)];
   ii) If the permittee combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the permittee shall maintain a record which documents how the secondary material meets each of the legitimacy criteria. If the permittee combust a fuel that has been processed from a

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discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(2), the permittee shall maintain records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the permittee shall maintain a record which documents how the fuel satisfies the requirements of the petition [40 CFR 63.10032(d)(2)].

j) The permittee shall maintain records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.10032(g)].

k) The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR 63.10032(h)].

l) The records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1) [40 CFR 63.10033(a)].

m) As specified in 40 CFR 63.10(b)(1), the permittee shall maintain each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record [40 CFR 63.10033(b)].

n) The permittee shall maintain each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years [40 CFR 63.10033(c)].

o) The permittee shall keep visible observation records and U.S. EPA Reference Method 9 observations in a designated logbook and/or an electronic format. Records shall be maintained for five years [KAR 52:020, Section 10].

6. Specific Reporting Requirements:

a) Excess emission and monitoring system performance reports shall be submitted to the Administrator semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows [40 CFR 60.45(g)]:

1) Excess emissions for opacity are defined as any six-minute period during which the average opacity exceeds twenty percent, except that one six-minute average per hour of up to 27% opacity need not be reported [40 CFR 60.45(g)(1)].
2) Excess emissions of sulfur dioxide are defined as any three hour period during which the average emissions (arithmetic average of three contiguous one hour periods) as measure by CEMS exceed the applicable sulfur dioxide emissions standards [40 CFR 60.45(g)(2)].
3) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three hour period during which the

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average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards [40 CFR 60.45(g)(3)].

b) The permittee shall submit all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6) and 40 CFR 63.9(b) through (h) that apply to the permittee [40 CFR 63.10030(a)].

c) The permittee shall submit Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin [40 CFR 63.10030(d)].

d) The permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that [40 CFR 63.10021(i) and 40 CFR 63.10030(e)(8)(iii)]:
   i) The permittee submits a request that identifies for each EGU or EGU emissions averaging group involved in the proposed switch both the current definition of "startup" relied on and the proposed definition you plan to rely on;
   ii) The request arrives to the Administrator at least 30 calendar days prior to the date that the switch is proposed to occur;
   iii) The permittee revises and submits all other applicable plans, e.g., monitoring and emissions averaging, with your submission;
   iv) The permittee maintains records of all information regarding your choice of the definition of "startup"; and
   v) The permittee begins to use the revised definition of "startup" in the next reporting period after receipt of written acknowledgement from the Administrator of the switch.

e) The permittee shall submit each report according to Table 8 of 40 CFR 63, Subpart UUUUU that applies. For continuously monitoring Hg emissions, the permittee shall also submit the electronic reports required under appendix A, at the specified frequency [40 CFR 63.10031(a)].

f) Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee shall submit each report by the date in Table 8 of 40 CFR 63, Subpart UUUUU and according to the requirements specified [40 CFR 63.10031(b)]:
   i) The first compliance report shall cover the initial period (April 16, 2016) and end on December 31, 2017 (at least 180 days after the applicable start date) [40 CFR 63.10031(b)(1)];
   ii) The first compliance report shall be postmarked or submitted electronically no later than January 31, 2017 [40 CFR 63.10031(b)(2)];
   iii) Each subsequent compliance report shall cover the semiannual reporting period from January 1 to June 30 or July 1 through December 31 [40 CFR 63.10031(b)(3)];
   iv) Each subsequent compliance report shall be postmarked or submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period [40 CFR 63.10031(b)(4)];
   v) For each affected source that is subject to permitting regulations pursuant 40 CFR 70 or 71 and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the

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dates the permitting authority has established instead of according to the dates specified in 40 CFR 63.10031(b)(1) through (4) [40 CFR 63.10031(b)(5)].

g) The semiannual compliance report shall contain the following [40 CFR 63.10011(g), Table 3, 40 CFR 63.10021(f) through (i) 40 CFR 63.10031(c) and 40 CFR 63, Subpart UUUUU, Table 8, Item 1]:
   i) The information required by the summary report located in 40 CFR 63.10(e)(3)(vi) [40 CFR 63.10031(c)(1)];
   ii) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited, to , a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure [40 CFR 63.10031(c)(2)];
   iii) Indicate whether the permittee burned new types of fuel during the reporting period. If new type of fuel was burned, the permittee shall include the date of the performance test where that fuel was in use[40 CFR 63.10031(c)(3)];
   iv) Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in 40 CFR 63.10021(e)(6) and (7) where completed [40 CFR 63.10031(c)(4)];
   v) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test[40 CFR 63.10031(c)(7)];
   vi) A certification [40 CFR 63.10031(c)(8)];
   vii) For deviations from any emission limit, work practice standard, or operating limit, the permittee shall also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation [40 CFR 63.10031(c)(9)];
   viii) If there are no deviations from any emission limitations (emission limit and operating limit) that apply and there are no deviations from the requirements for work practice standards, the permittee shall provide a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMS were out-of-control as specified in 40 CFR 63.8(c)(7), the permittee shall provide a statement that there were no periods during which the CMS were out-of-control during the reporting period [40 CFR 63, Subpart UUUUU, Table 8 Item 1(b)];
   ix) If the permittee has a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report shall contain the information in 40 CFR 63.10031(d). If there were periods during which the CMS were out-of-control, as specified in 40 CFR 63.8(c)(7), the report shall control the information in 40 CFR 63.10031(e). [40 CFR 63, Subpart UUUUU, Table 8 Item 1(c)].

h) For each excess emissions occurring where the permittee is using a CMS to comply with that emission limit or operating limit, the permittee shall include the information required in 40 CFR 63.10(e)(3)(v) in the compliance report specified in 40 CFR 63.10031(c) [40 CFR 63.10031(d)].

i) The permittee shall report all deviations as defined in 40 CFR 63, Subpart UUUUU, in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 8 along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority [40 CFR 63.10031(e)].

j) If the permittee has a malfunction during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have cause any applicable emission limitation to be exceeded [40 CFR 63.10031(g)].

k) On or after July 1, 2020, within 60 days after the date of completing each performance test, you must submit the performance test reports required by this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov*). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see *https://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using those test methods on the ERT website are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority [40 CFR 63.10031(f)].
   i) On or after July 1, 2020, within 60 days after the date of completing each CEMS (SO_2, PM, HCl, HF, and Hg) performance evaluation test, as defined in §63.2 and required by this subpart, you must submit the relative accuracy test audit (RATA) data (or, for PM CEMS, RCA and RRA data) required by this subpart to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (*https://cdx.epa.gov*). The RATA data shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (*https://www.epa.gov/ttn/chief/ert/index.html*). Only RATA data compounds listed on the ERT website are subject to this requirement. Owners or operators who claim that some of the information being submitted for RATAs is confidential business information (CBI) shall submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) by registered letter to EPA and the same ERT file with the CBI omitted to EPA via CDX as described earlier in this paragraph.

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

The compact disk or other commonly used electronic storage media shall be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. At the discretion of the delegated authority, owners or operators shall also submit these RATAs to the delegated authority in the format specified by the delegated authority. Owners or operators shall submit calibration error testing, drift checks, and other information required in the performance evaluation as described in §63.2 and as required in this chapter [40 CFR 63.10031(f)(1)].

ii) On or after July 1, 2020, for a PM CEMS, PM CPMS, or approved alternative monitoring using a HAP metals CEMS, within 60 days after the reporting periods ending on March 31st, June 30th, September 30th, and December 31st, you must submit quarterly reports to the EPA's WebFIRE database by using the CEDRI that is accessed through the EPA's CDX (*https://cdx.epa.gov*). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format. For each reporting period, the quarterly reports must include all of the calculated 30-boiler operating day rolling average values derived from the CEMS and PM CPMS. [40 CFR 63.10031(f)(2)].

iii) Reports for an SO_2 CEMS, a Hg CEMS or sorbent trap monitoring system, an HCl or HF CEMS, and any supporting monitors for such systems (such as a diluent or moisture monitor) shall be submitted using the ECMPS Client Tool, as provided for in Appendices A and B to this subpart and 40 CFR 63.10021(f) [40 CFR 63.10031(f)(3)].

iv) On or after July 1, 2020, submit the compliance reports required under paragraphs (c) and (d) of this section and the notification of compliance status required under 40 CFR 63.10030(e) to the EPA's WebFIRE database by using the CEDRI that is accessed through the EPA's CDX (*https://cdx.epa.gov*). You must use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format [40 CFR 63.10031(f)(4)].

v) All reports required by this subpart not subject to the requirements in paragraphs (f) introductory text and (f)(1) through (4) of this section must be sent to the Administrator at the appropriate address listed in §63.13. If acceptable to both the Administrator and the owner or operator of an EGU, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to paragraphs (f) introductory text and (f)(1) through (4) of this section in paper format [40 CFR 63.10031(f)(5)].

vi) Prior to July 1, 2020, all reports subject to electronic submittal in paragraphs (f) introductory text, (f)(1), (2), and (4) of this section shall be submitted to the EPA at the frequency specified in those paragraphs in electronic portable document format (PDF) using the ECMPS Client Tool. Each PDF version of a submitted report must include sufficient information to assess compliance and to demonstrate that the testing was done properly. The following data elements must be entered into the ECMPS Client Tool at the time of submission of each PDF file [40 CFR 63.10031(f)(6)]:

A) The facility name, physical address, mailing address (if different from the physical address), and county [40 CFR 63.10031(f)(6)(i)];

B) The ORIS code (or equivalent ID number assigned by EPA's Clean Air Markets Division (CAMD)) and the Facility Registry System (FRS) ID [40 CFR

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

63.10031(f)(6)(ii)];

C) The EGU (or EGUs) to which the report applies. Report the EGU IDs as they appear in the CAMD Business System [40 CFR 63.10031(f)(6)(iii)];

D) If any of the EGUs in paragraph (f)(6)(iii) of this section share a common stack, indicate which EGUs share the stack. If emissions data are monitored and reported at the common stack according to part 75 of this chapter, report the ID number of the common stack as it is represented in the electronic monitoring plan required under §75.53 of this chapter [40 CFR 63.10031(f)(6)(iv)];

E) If any of the EGUs described in paragraph (f)(6)(iii) of this section are in an averaging plan under §63.10009, indicate which EGUs are in the plan and whether it is a 30- or 90-day averaging plan [40 CFR 63.10031(f)(6)(v)];

F) The identification of each emission point to which the report applies. An "emission point" is a point at which source effluent is released to the atmosphere, and is either a dedicated stack that serves one of the EGUs identified in paragraph (f)(6)(iii) of this section or a common stack that serves two or more of those EGUs. To identify an emission point, associate it with the EGU or stack ID in the CAMD Business system or the electronic monitoring plan (e.g., "Unit 2 stack," "common stack CS001," or "multiple stack MS001") [40 CFR 63.10031(f)(6)(vi)];

G) The rule citation (e.g., 40 CFR 63.10031(f)(1), 40 CFR 63.10031(f)(2), etc.) for which the report is showing compliance [40 CFR 63.10031(f)(6)(vii)];

H) The pollutant(s) being addressed in the report [40 CFR 63.10031(f)(6)(viii)];

I) The reporting period being covered by the report (if applicable) [40 CFR 63.10031(f)(6)(ix)];

J) The relevant test method that was performed for a performance test (if applicable) [40 CFR 63.10031(f)(6)(x)];

K) The date the performance test was conducted (if applicable) [40 CFR 63.10031(f)(6)(xi)]; and

L) The responsible official's name, title, and phone number [40 CFR 63.10031(f)(6)(xii)].

7. Specific Control Equipment Operating Conditions:

a) The electrostatic precipitator (ESP), wet flue gas desulfurization unit (FGD), and low NO_x burner system shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and good operating practices [401 KAR 50:055].

b) Records regarding the maintenance of the control equipment shall be maintained [401 KAR 52:020 Section 10 and 40 CFR 63.10032].

c) See **Section E-Source Control Equipment Requirements** for further requirements.

d) At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures,

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

review of operation and maintenance records, and inspection of the source [40 CFR 63.10000(b)].

Compliance Demonstration: See **4. Specific Monitoring Requirements: (b)** and **(i)** through **(k)**; **5. Specific Recordkeeping Requirements: (a)** through **(c)**, and **(j)** through **(n)**.

SECTION I - COMPLIANCE SCHEDULE

NA

SECTION J - ACID RAIN PERMIT

1. **Statutory and Regulatory Authority:**
   In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to 401 KAR 52:020, Permits, 401 KAR 52:060, Acid Rain Permit, and 40 CFR Part 52:060, Acid Rain Permit, and Federal Regulation 40 CFR Part 76.

2. **Permit Requirements:**
   This Acid Rain Permit covers Acid Rain Units 1-2 (Emission Units 01-02) at the R.D. Green Generating Station (ORIS Code: 6639). Units 1-2 are coal-fired based load electric generating units. The Acid Rain Permit Application and NO_x Compliance Plan received on December 27, 2011, for Phase II are hereby incorporated into and made part of this permit and the permittee shall comply with the standard requirements and special provisions set forth in the application [40 CFR 72.9(a)(2)].

3. **Acid Rain Program Emission and Operating Limitations:**
   The applicable Acid Rain emission limitations for the permittee are set in 40 CFR 73.10, Table 2, 40 CFR 76.5, and 40 CFR 76.11 and they are tabulated in the table below:

Affected Unit: Green River Generation Station (Emissions Unit 01)					
Year for SO_2 Allowances	2019	2020	2021	2022	2023
40 CFR Part 73.10	5,303*	5,303*	5,303*	5,303*	5,303*
NO_x Limits and Requirements					
Big Rivers Electric Corporation terminated the NO_x averaging plan in accordance with 40 CFR 72.40 via a letter dated September 25, 2018, reverting to the NO_x emission rate specified under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers. This unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.					

*** The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).**

SECTION J - ACID RAIN (CONTINUED)

Affected Unit: Green River Generation Station (Emissions Unit 02)					
Year for SO_2 Allowances	2019	2020	2021	2022	2023
40 CFR Part 73.10	6,389*	6,389*	6,389*	6,389*	6,389*
NO_x Limit and Requirements					
Big Rivers Electric Corporation terminated the NOx averaging plan in accordance with 40 CFR 72.40 via a letter dated September 25, 2018, reverting to the NO_x emission rate specified under 40 CFR 76.5(a)(2), of 0.50 lb/MMBtu for dry bottom wall-fired boilers. This unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.					

* **The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).**

SECTION K – CLEAN AIR INTERSTATE RULE (CAIR)

1. **Statutory and Regulatory Authority:**
   In accordance with KRS 224.10-100, the Kentucky Energy and Environmental Cabinet issues this permit pursuant to 401 KAR 52:020, Title V permits, 401 KAR 51:210, CAIR NO_x Annual Trading Program, 401 KAR 51:220, CAIR NO_x ozone season trading program, and 401 KAR 51:230, CAIR SO_2 Trading Program.

2. **Application and Requirements:**
   The CAIR application for two (2) electrical generating units was submitted to the Division and received on September 10, 2007. The standard requirements and special provisions set forth in the application are hereby incorporated into and made part of this CAIR Permit. [401 KAR 51:210, 401 KAR 51:220, and 401 KAR 51:230]. Pursuant to 401 KAR 52:020, Section 3, the source shall operate in compliance with those requirements.

3. **Unit Description:**
   The affected units are two dry bottom wall fired boiler each rated at 2,660 MMBtu/hour (EU 01-02). Each unit has a capacity to generate 25 megawatts or more of electricity, which is offered for sale. The units use coal and pet coke as a fuel source, and are used as base load electric generating units.

4. **Summary of Actions:**
   The CAIR Permit is being issued as part of the Title V permit for this source. Public, affected state and U.S. EPA review will follow procedures specified in 401 KAR 52:100.

   CSAPR implementation is now in place and replaces requirements under EPA's 2005 Clean Air Interstate Rule.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR)

The CSAPR subject unit, and the unit-specific monitoring provisions at this source, are identified in the following table. The unit is subject to the requirements for the CSAPR NO_x Annual Trading Program, CSAPR NO_x Ozone Season Group 3 Trading Program, and CSAPR SO_2 Group 1 Trading Program

Unit ID: 1 and 2, Pulverized Coal Fired Boilers					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, Subpart B (for SO_2 monitoring) and 40 CFR part 75, Subpart H (for NO_x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, Subpart E
SO_2	X				
NO_x	X				
Heat input	X				

Unit ID: 1 and 2, Natural Gas Fired Boilers					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, Subpart B (for SO_2 monitoring) and 40 CFR part 75, Subpart H (for NO_x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, Subpart E
SO_2		X			
NO_x	X				
Heat input		X			

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

Unit ID: RT, Peaking Natural Gas-Fired Combustion Turbine					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, Subpart B (for SO_2 monitoring) and 40 CFR part 75, Subpart H (for NO_x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, Subpart E
SO_2				X	
NO_x				X	
Heat input			X		

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30) (CSAPR NO_x Annual Trading Program), 40 CFR 97.1030 through 40 CFR 97.1035 (CSAPR NO_x Ozone Season Group 3 Trading Program), and 401 KAR 51:260 Section 3(25) through 401 KAR 51:260, Section 3(30) (CSAPR SO_2 Group 1 Trading Program). The monitoring, recordkeeping, and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.

2. Owners and operators shall submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website: http://www.epa.gov/airmarkets.

3. Owners and operators that want to use an alternative monitoring system shall submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR 75, Subpart E, 40 CFR 75.66, 401 KAR 51:240, Section 3(30) (CSAPR NOX Annual Trading Program), 40 CFR 97.1035 (CSAPR NOX Ozone Season Group 3 Trading Program), and/or 401 KAR 51:260, Section 3(30) (CSAPR SO2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at: http://www.epa.gov/airmarkets/part-75-petition-responses.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirements under 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(29) (CSAPR NO_x Annual Trading Program), 40 CFR 97.1030 through 40 CFR 97.1034 (CSAPR NO_x Ozone Season Group 3 Trading Program), and/or 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(29) (CSAPR SO_2 Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 401 KAR 51:240, Section 3(30) (CSAPR NO_x Annual Trading Program), 40 CFR 97.1035 (CSAPR SO_2 Group 1 Trading Program), and 401 KAR 51:260, Section 3(30) (CSAPR NO_x Ozone Season Group 3 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at https://www.epa.gov/airmarkets/data-resources.

5. The descriptions of monitoring applicable to the unit included above meet the requirement of 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(29) (CSAPR NO_x Annual Trading Program), 40 CFR 97.1030 through 40 CFR 97.1034 (CSAPR NO_x Ozone Season Group 3 Trading Program), and 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(29) (CSAPR SO_2 Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B), may be used to add or change this unit's monitoring system description.

CSAPR NO_X Annual Trading Program requirements (401 KAR 51:240, Section 3(4))

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 401 KAR 51:240, Section 3(10) through 401 KAR 51:240, Section 3(15).

b) Emissions monitoring, reporting, and recordkeeping requirements.

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 401 KAR 51:240, Section 3(25) (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 401 KAR 51:240, Section 3(26) (initial monitoring system certification and recertification procedures), 401 KAR 51:240, Section 3(27) (monitoring system out-of-control periods), 401 KAR 51:240, Section 3(28) (notifications concerning monitoring), 401 KAR 51:240, Section 3(29) (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 401 KAR 51:240, Section 3(30) (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

2) The emissions data determined in accordance with 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30) shall be used to calculate allocations of CSAPR NO_x Annual allowances under 401 KAR 51:240, Section 3(8) (40 CFR 97.411(a)(2) and (b)) and 401 KAR 51:240, Section 3(9) and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

compliance shall be the mass emissions amount for the monitoring location determined in accordance with 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30) 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 401 KAR 51:240, Section 3(20) (40 CFR 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) above, 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 401 KAR 51:240, Section 3(20) (40 CFR 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 401 KAR 51:240 (40 CFR 97, Subpart AAAAA) 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 the 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 Annual allowances available for deduction for such control period under 401 KAR 51:240, Section 3(21) (40 CFR 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 401 KAR 51:240, Section 3(21) (40 CFR 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 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 for such control period exceed the state assurance level.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

ii) The owners and operators shall hold the CSAPR NO_x Annual allowances required under paragraph (c)(2)(i) above, 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 such control period.

iii) Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the 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 401 KAR 51:240, Section 3(7)(a)(1) and the state's variability limit under 401 KAR 51:240, Section 3(7)(a)(3).

iv) It shall not be a violation of 401 KAR 51:240, 40 CFR 97, Subpart AAAAA, 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 the 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 the 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) above,

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) above and each day of such control period shall constitute a separate violation of 401 KAR 51:240, 40 CFR 97, Subpart AAAAA, 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) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:240, Section 3(25) (40 CFR 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) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:240, Section 3(25) (40 CFR 97.430(b)) and for each control period thereafter.

4) Vintage of allowances held for compliance.

i) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year shall be a CSAPR NO_x Annual allowance that was allocated 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) above for a control period in a given year shall be a CSAPR NO_x Annual allowance that was allocated 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 401 KAR 51:240.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 40 CFR 97, 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.

d) Title V permit revision 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 401 KAR 51:240.
2) This permit incorporates the CSAPR emissions monitoring, recordkeeping, and reporting requirements pursuant to 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(30), and the requirements for a continuous emission monitoring system (pursuant to 40 CFR 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with 401 KAR 51:240, Section 3(4) (40 CFR 97.406(d)(2)) and 70.7(e)(2)(i)(B).

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 maintain 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 401 KAR 51:240, Section 3(13) 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 401 KAR 51:240, Section 3(13) changing the designated representative.
   ii) All emissions monitoring information, in accordance with 401 KAR 51:240.
   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 401 KAR 51:240, Section 3(15). This requirement does not change, create an exemption from, or otherwise affect the

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

responsible official submission requirements under a Title V operating permit program in 40 CFR 70.

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 401 KAR 51:240, Section 3(3) 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.

CSAPR NO_x Ozone Season Group 3 Trading Program Requirements (40 CFR 97.1006)

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 40 CFR 97.1013 through 40 CFR 97.1018.

b) Emissions monitoring, reporting, and recordkeeping requirements.

a) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 3 source and each CSAPR NO_x Ozone Season Group 3 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.1030 through 40 CFR 97.1035.
b) The emissions data determined in accordance with 40 CFR 97.1030 through 40 CFR 97.1035 shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 3 allowances under 40 CFR 97.1011(a)(2) and (b) and 40 CFR 97.1012 and to determine compliance with the CSAPR NO_x Ozone Season Group 3 emissions limitation and assurance provisions under paragraph (c) below, 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 40 CFR 97.1030 through 40 CFR 97.1035 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 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 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 40 CFR 97.1024(a) in an amount not less than the tons of

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 3 units at the source.

ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 3 units at a CSAPR NO_x Ozone Season Group 3 source are in excess of the CSAPR NO_x Ozone Season Group 3 emissions limitation set forth in paragraph (c)(1)(i) above, 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 40 CFR 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 40 CFR 97, Subpart GGGGG, 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 CSAPR NO_x Ozone Season Group 3 sources in the 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 40 CFR 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 40 CFR 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 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 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) above, 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 Ozone Season Group 3 units at CSAPR NO_x Ozone Season Group 3 sources in the 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 40

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

CFR 97.1010(a), the state's variability limit under 40 CFR 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 40 CFR 97.1010(d).

iv) It shall not be a violation of 40 CFR 97, Subpart GGGGG, 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 the 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 the 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) above,

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) above and each day of such control period shall constitute a separate violation of 40 CFR 97, Subpart GGGGG 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) above for the control period starting on the later of May 1, 2021 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 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) above for the control period starting on the later of May 1, 2021 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.

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) above for a control period in a given year shall 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 (2)(i) through (iii) above for a control period in a given year shall 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 40 CFR 97, Subpart GGGGG.

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:

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 40 CFR 97, Subpart GGGGG, 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 40 CFR 97, Subpart GGGGG.
2) A description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (pursuant to 40 CFR 75, Subpart H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), or an alternative monitoring system (pursuant to 40 CFR 75, Subpart E) in accordance with 40 CFR 97.1030 through 40 CFR 97.1035 may be added to, or changed in, this Title V permit using minor permit modification procedures in accordance with 40 CFR 70.7(e)(2) and 40 CFR 71.7(e)(1), 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 40 CFR 70.7(e)(2)(i)(B) and 40 CFR 71.7(e)(1)(i)(B).

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 maintain 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 40 CFR 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 40 CFR 97.1016 changing the designated representative.
   ii) All emissions monitoring information, in accordance with 40 CFR 97, Subpart GGGGG.
   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

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

provided in 40 CFR 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 40 CFR Parts 70 and 71.

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 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 40 CFR 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.

CSAPR SO_2 Group 1 Trading Program requirements (401 KAR 51:260, Section 3(4))

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 401 KAR 51:260, Section 3(10) through 401 KAR 51:260, Section 3(15).

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 401 KAR 51:260, Section 3(25) (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 401 KAR 51:260, Section 3(26) (initial monitoring system certification and recertification procedures), 401 KAR 51:260, Section 3(27) (monitoring system out-of-control periods), 401 KAR 51:260, Section 3(28) (notifications concerning monitoring), 401 KAR 51:260, Section 3(29) (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 401 KAR 51:260, Section 3(30) (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
2) The emissions data determined in accordance with 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30) shall be used to calculate allocations of CSAPR SO_2 Group 1 allowances under 401 KAR 51:260, Section 3(8) (40 CFR 97.611(a)(2)) and (b)) and 401 KAR 51:260, Section 3(9) and to determine compliance with the CSAPR SO_2 Group 1 emissions limitation and assurance provisions under paragraph (c) below, 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

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

accordance with 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30) and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

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 401 KAR 51:260, Section 3(20) (40 CFR 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) above, 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 401 KAR 51:260, Section 3(20) (40 CFR 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 401 KAR 51:260, 40 CFR 97, Subpart CCCCC, 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 the 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 401 KAR 51:260, Section 3(21) (40 CFR 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 401 KAR 51:260, Section 3(21) (40 CFR 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 for such control period, by which each common designated representative's share of such SO_2 emissions exceeds the respective common designated representative's assurance level; and

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 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) above, 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 such control period.

iii) Total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in the 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 401 KAR 51:260, Section 3(7)(a)(1) and the state's variability limit under 401 KAR 51:260, Section 3(7)(a)(3).

iv) It shall not be a violation of 401 KAR 51:260, 40 CFR 97, Subpart CCCCC, 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 the 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 the 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) above,

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) above and each day of such control period shall constitute a separate violation of 401 KAR 51:260, 40 CFR 97, Subpart CCCCC 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) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:260, Section 3(25) (40 CFR 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) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:260, Section 3(25) (40 CFR 97.630(b)) and for each control period thereafter.

4) Vintage of allowances held for compliance.

i) A CSAPR SO_2 Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year shall be a CSAPR SO_2 Group 1 allowance that was allocated 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) above for a control period in a given year shall be a CSAPR SO_2 Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

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 401 KAR 51:260.
6) Limited authorization. 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 401 KAR 51:260, 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. CSAPR SO_2 Group 1 allowance does not constitute a property right.

d) Title V permit revision 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 401 KAR 51:260.
2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30), and the requirements for a continuous emission monitoring system (pursuant to 40 CFR 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 75, Subpart E), Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with 401 KAR 51:260, Section 3(4) (40 CFR 97.606(d)(2)) and 70.7(e)(2)(i)(B).

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 maintain 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 401 KAR 51:260, Section 3(13) 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 40 CFR 97.616 changing the designated representative.
   ii). All emissions monitoring information, in accordance with 401 KAR 51:260.
   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 401 KAR 51:260, Section 3(15). This

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR) (CONTINUED)

requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a Title V operating permit program in 40 CFR 70.

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 401 KAR 51:260, Section 3(3) shall be construed as exempting or excluding the owners and operators, and the designated 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.

APPENDIX C

BREC HMP&L Station 2 Retirement Letter

BREC Green Station Natural Gas Conversion Letter

HMP&L Henderson Municipal Power & Light

VIA E-MAIL: Melissa.duff@ky.gov

December 28, 2018

Ms. Melissa Duff, Director
Kentucky Division for Air Quality
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601

Re: ***Henderson Station II Generating Station Title V Permit; Source I.D. #21-233-00001; Permit #V-11-003 R1; Agency Interest #4196***

Dear Ms. Duff:

Henderson Municipal Power & Light (HMP&L) currently owns Henderson Station II, which is located in Henderson County, Kentucky and regulated under Title V permit #V-11-003 R1. The Title V permit was issued by the Kentucky Division for Air Quality on September 28, 2011 and last revised June 15, 2015.

Henderson Station II is scheduled to be retired effective February 1, 2019. The ownership of the station after January 31, 2019 is in dispute. Nevertheless, both parties intend to cease operations at the plant. The conditions of the Title V permit related to Emission Unit 02 (referred to as Henderson Station Unit 1) and Emission Unit 03 (referred to as Henderson Station Unit 2) will no longer be applicable upon the retirement of this electric generating station. This includes all secondary emission units within the Title V permit (i.e. Emission Unit 4-Coal Handling Operation, Emission Unit 5-Cooling Towers, and Emission Unit 07-08 Emergency Generator and Fire Pump).

Sincerely,

Chris Heimgartner
General Manager
Henderson Municipal Power & Light

Bob Berry
CEO
Big Rivers Electric Cooperative

cc: Mac Cann, KDAQ-Owensboro (mac.cann@ky.gov)
Rick Shewekah, KDAQ-Frankfort (rick.shewekah@ky.gov)
Michael Kennedy, KDAQ-Frankfort (michael.kennedy@ky.gov)
Ken Brooks, HMP&L (kbrooks@hmpl.net)
Mike Pullen, BREC (mike.pullen@bigrivers.com)

Big Rivers
ELECTRIC CORPORATION

Sebree Station
9000 Highway 2096
Robards, KY 42452
www.bigrivers.com

July 29, 2022

Kentucky Division for Air Quality
Department of Environmental Protection
300 Sower Boulevard
Second Floor
Frankfort, KY 40601

Re: Green Station (AI 44411), Unit 1 - Quarterly Reporting for the 2nd Quarter of 2022.

To Whom It May Concern:

Green Station, Unit One is owned and operated by Big Rivers Electric Corporation. This electric generating unit converted from coal-fired to natural gas-fired on May 26, 2022.

Please find enclosed the following quarterly reports for Green Unit 1:

- Excess Emissions and Continuous Monitoring System (CMS) Downtime Summary Reports
- SO_2 and NOx Hourly Emission Rate Report
- Opacity Excess Emissions Report

I certify that, based on the information and belief formed after reasonable inquiry, the statements and information contained in the documents referenced above are true, accurate, and complete.

Please contact Mark Bertram at (270) 844-5708 if you have any questions or require further information.

Sincerely,

Heather Todd
Plant Manager

Commonwealth of Kentucky
Natural Resources & Environmental Protection Cabinet
Department for Environmental Protection
DIVISION FOR AIR QUALITY

Pollutant: (SO2) NOX TRS H2S CO OPACITY
(circle one)

*FOR OPACITY-RECORD ALL TIMES IN MINUTES. FOR GASES-RECORD ALL TIMES IN HOURS.

(Type or Print Legibly)

Reporting Period Date: From: 4/1/2022 To: 6/30/2022
Emission Limitation: > 0.8 lbs/mmBtu - 3 Hour Average
Company Name: Big Rivers Electric Corp.
Address: 201 3rd St., P.O. Box 24
Henderson, Kentucky 42419-0024
Monitor Manufacture: Thermo Electron Model #: 43I
Date of Latest: CMS CERTIFICATION: 6/7/22 CMS AUDIT:
Process Unit(s) Description: Green Station Unit 1 - Natural Gas Fired Power Plant

Total Source Operating Time In Reporting Period?* 540 HOURS

EMISSION DATA SUMMARY*

(HOURS)

1.Duration of Excess Emission Report Period Due to:

A. Startup/Shutdown:	0
B. Control Equipment Problems:	0
C. Process Problems:	0
D. Other Known Causes:	0
E. Unknown Causes:	0
2. Total Duration of Excess Emission:	0
3. (Total Duration of Excess Emissions) (Total Source Operating Time) X 100 =	0.00%

CMS PERFORMANCE SUMMARY*

(HOURS)

1. CMS Downtime in Reporting Due to:

A. Monitor Equipment Malfunctions:	0
B. Non-Monitor Equipment Malf:	0
C. Quality Assurance Calibration:	0
D. Other Known Causes:	0
E. Unknown Causes:	0
2. Total CMS Downtime:	0
3. (Total CMS downtime) (Total Source On Time) X 100 =	0.00%

Describe any changes which have occurred since the last quarterly submittal concerning CMS, PROCESS, or CONTROL: G-1 stopped operating on coal as of 4/4/22 and began operating on natural gas as of 5/26/22.

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

NAME: Heather Todd

TITLE: Plant Manager

SIGNATURE: Heather Todd DATE: 7-29-22

Commonwealth of Kentucky
Natural Resources & Environmental Protection Cabinet
Department for Environmental Protection
DIVISION FOR AIR QUALITY

Pollutant: SO2 **(NOX)** TRS H2S CO OPACITY
(circle one)

*FOR OPACITY-RECORD ALL TIMES IN MINUTES. FOR GASES-RECORD ALL TIMES IN HOURS.

(Type or Print Legibly)

Reporting Period Date: From: 4/1/2022 To: 6/30/2022
Emission Limitation: > 0.20 lbs/mmBtu - 3-Hour Ave
Company Name: Big Rivers Electric Corp.
Address: 201 3rd St., P.O. Box 24
Henderson, Kentucky 42419-0024
Monitor Manufacture: Thermo Electron Model #: 42iQ-ABANN
Date of Latest: CMS CERTIFICATION: 06/07/22 CMS AUDIT: 06/07/22
Process Unit(s) Description: Green Station Unit 1 - Natural Gas Fired Power Plant

Total Source Operating Time In Reporting Period?* 540 HOURS

EMISSION DATA SUMMARY*

(HOURS)

1.Duration of Excess Emission Report Period Due to:

A. Startup/Shutdown:	0
B. Control Equipment Problems:	0
C. Process Problems:	0
D. Other Known Causes:	0
E. Unknown Causes:	0
2. Total Duration of Excess Emission:	0
3. (Total Duration of Excess Emissions) (Total Source Operating Time) X 100 =	0.00%

CMS PERFORMANCE SUMMARY*

(HOURS)

1. CMS Downtime in Reporting Due to:

A. Monitor Equipment Malfunctions:	0
B. Non-Monitor Equipment Malf:	0
C. Quality Assurance Calibration:	4
D. Other Known Causes:	9
E. Unknown Causes:	0
2. Total CMS Downtime:	13
3. (Total CMS downtime) (Total Source On Time) X 100 =	2.41%

Describe any changes which have occurred since the last quarterly submittal concerning CMS, PROCESS, or CONTROL: G-1 stopped operating on coal as of 4/4/22 and began operating on natural gas as of 5/26/22. A new NOx CEMS was certified on 6/7/22.

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

NAME: Heather Todd

TITLE: Plant Manager

SIGNATURE: Heather Todd DATE: 7-29-22

Commonwealth of Kentucky
Natural Resources & Environmental Protection Cabinet
Department for Environmental Protection
DIVISION FOR AIR QUALITY

Pollutant: SO2 NOX TRS H2S CO **OPACITY**
(circle one)

*FOR OPACITY-RECORD ALL TIMES IN MINUTES. FOR GASES-RECORD ALL TIMES IN HOURS.

(Type or Print Legibly)

Reporting Period Date: From: 4/1/2022 To: 6/30/2022
Emission Limitation: > 20% Opacity - Allowed One Exceedence per Hour (Up to 27%)
Company Name: Big Rivers Electric Corp.
Address: 201 3rd St., P.O. Box 24
Henderson, Kentucky 42419-0024
Monitor Manufacture: Spectrum Systems Model #: SP41
Date of Latest: CMS CERTIFICATION: 3/10/2000 CMS AUDIT: 12/09/21
Process Unit(s) Description: Green Station Unit 1 - Coal Fired Power Plant

Total Source Operating Time In Reporting Period?* 32400 MINUTES

EMISSION DATA SUMMARY*

(MINUTES)

1.Duration of Excess Emission Report Period Due to:

A. Startup/Shutdown:	0
B. Control Equipment Problems:	0
C. Process Problems:	0
D. Other Known Causes:	0
E. Unknown Causes:	0
2. Total Duration of Excess Emission:	0
3. (Total Duration of Excess Emissions) (Total Source Operating Time) X 100 =	0.00%

CMS PERFORMANCE SUMMARY*

(MINUTES)

1. CMS Downtime in Reporting Due to:

A. Monitor Equipment Malfunctions:	0
B. Non-Monitor Equipment Malf:	0
C. Quality Assurance Calibration:	198
D. Other Known Causes:	0
E. Unknown Causes:	0
2. Total CMS Downtime:	198
3. (Total CMS downtime) (Total Source Time) X 100 =	0.61%

Describe any changes which have occurred since the last quarterly submittal concerning CMS, PROCESS, or CONTROL: G-1 stopped operating on coal as of 4/4/22 and began operating on natural gas as of 5/26/22.

I CERTIFY THAT THE INFORMATION CONTAINED IN THIS REPORT IS TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

NAME: Heather Todd

TITLE: Plant Manager

SIGNATURE: Heather Todd DATE: 7-29-22

Big Rivers
ELECTRIC CORPORATION

EXCESS OPACITY EMISSIONS REPORT
GREEN STATION 1 1st QUARTER 2022

Date	Time	Reading	Code	Comments
				No Opacity Exceedances

APPENDIX D

MOVES Data

	SO_2 Onroad Pounds/Year			
County	**2017**	**2021**	**2026**	**2033**
Henderson	287	171	172	166
Webster	91	57	58	57
Total Pounds	378	228	230	223

	SO_2 Onroad Tons/Year			
County	**2017**	**2021**	**2026**	**2033**
Henderson	0.144	0.086	0.086	0.083
Webster	0.046	0.029	0.029	0.029
Total Tons	0.189	0.114	0.115	0.112

Summary of Emissions Modeling Decisions

The Kentucky Division for Air Quality (KYDAQ) performed an air quality analyses using the U.S. EPA MOVES3.0.4 mobile emissions simulator. The model demonstration generated SO_2 emissions from Onroad activities in Kentucky counties (Henderson and Webster) for State Implementation Plan (SIP) inclusion. The base year selected to model was 2017 along with the projected years 2021, 2026 and 2033. The MOVES results are presented in tons per year.

Inventory

The raw Fleet data, utilized in the demonstration, was provided by Kentucky Transportation Cabinet (KYTC). The values, in the VMT_VHT spreadsheet, were generated using Kentucky's 5,999 zone Statewide Model. The model ran in Caliper's TransCAD version 8.

The Louisville Metro Air Pollution Control District (LMAPCD) of Jefferson County, Kentucky supplied the Vehicle Type VMT, Road Type Distribution and Source Type Population inventory. RoadTypeDistrib.csv, VehTypeVMT.csv and SourceTypePop.csv files developed using VMT data from KYDAQ (from Evansville MPO) and Fleet data from KYTC. All processed with LMAPCD workbooks that made use of MOVES default data and FHWA methodology to account for heavy duty pass-through traffic. Oldham County KY was used as a surrogate to assist the development of the input data files for Henderson and Webster counties, scaling the fleet population with county population ratios. All data used included the most recent MOVES input data developed to date by LMAPCD.

Technical Parameters

The parameter selections for the MOVES run specifications and the inputs for the County Data Manager are given in Tables 1 and 2. Run specifications were performed individually by county and year, which resulted in 8 unique iterations of MOVES outputs for this demonstration.

Table 1. Run Specification Parameters

MOVES Version	MOVES3.0.4
Scale	Model: Onroad Domain/Scale: County Calculation Type: Inventory
Time Spans	Years: 2017, 2021, 2026, 2033 Month: All Months Day: Weekdays, Weekends Hours: All Hours
Geographic Bounds	Region: County State: Kentucky County: Henderson, Webster
Onroad Vehicles	All fuels, source use types and combinations
Road Type	All available road types
Pollutants and Processes	SO_2, and Total energy consumption
General Output	Mass Units: Pounds Energy Units: Joules Distance Units: Miles
Output Emissions	Time: Hour Location: County

Table 2. County Data Manager Inputs

Age Distribution	Default
Average Speed Distribution	Default
Fuel	Default
Meteorology Data	Default
Road Type Distribution	Data developed and received from LMAPCD
Source Type Population	Data developed and received from LMAPCD
Vehicle Type VMT	Data developed and received from LMAPCD, KYTC
I/M Programs	No I/M Program

Please see attached spreadsheet:
“VMT_VHT Summaries_fix_042623”

APPENDIX E

Public Notice
and
Statement of Consideration

KENTUCKY DIVISION FOR AIR QUALITY
PUBLIC NOTICE FOR PROPOSED KENTUCKY STATE IMPLEMENTATION PLAN REVISION BASE YEAR EMISSIONS INVENTORY FOR THE PARTIAL COUNTIES OF HENDERSON AND WEBSTER LOCATED WITHIN THE KENTUCKY 2010 1-HOUR SULFUR DIOXIDE NONATTAINMENT AREA

The Kentucky Energy and Environment Cabinet (Cabinet) is requesting EPA's approval that the proposed State Implementation Plan (SIP) revision satisfies the base year emissions inventory requirements for the Henderson-Webster County, Kentucky 2010 1-hour SO_2 nonattainment area. The draft SIP revision provides an accurate base year emissions inventory for all sources of SO_2 within the nonattainment area.

In accordance with 40 CFR 51.102, the Cabinet is making this proposed plan available for public inspection and provides the opportunity for public comment concerning Kentucky's base year emissions inventory for the Henderson-Webster County, KY nonattainment area. The proposed plan can be found at https://eec.ky.gov/Environmental-Protection/Air/Pages/Public-Notices.aspx. The public comment period will be open from September 19, 2023 through October 25, 2023. Comments should be submitted in writing to the contact person by either mail or email.

The Cabinet will conduct a virtual public hearing on October 25, 2023, at 10:00 a.m. (Eastern Time). This hearing will be held to receive comments on the proposed SIP revision. This hearing is open to the public and all interested persons will be given the opportunity to present testimony. To assure that all comments are accurately recorded, the Division requests that oral comments presented at the hearing are also provided in written form, if possible. It is not necessary that the hearing be held or attended in order for persons to comment on the proposed SIP revision. If no request for a public hearing is received by October 18, 2023, the hearing will be cancelled, and notice of the cancellation will be posted at https://eec.ky.gov/Environmental-Protection/Air/Pages/Public-Notices.aspx. Written comments should be sent to the contact person and must be received by October 25, 2023, to be considered part of the public record.

Please note that registration is required to participate in this hearing. You must either email your name and mailing address to claire.oyler@ky.gov or mail this information to Claire Oyler, Division for Air Quality, 300 Sower Building, 2nd Floor, Frankfort, KY 40601. Please put "Registration for comment on the base year emissions inventory for the partial counties of Henderson and Webster public hearing" as the subject line, and state in the body of the message if you plan to speak during the hearing.

CONTACT PERSON: Claire Oyler, Environmental Scientist II, Evaluation Section, Division for Air Quality, 300 Sower Boulevard, Frankfort, Kentucky 40601. Phone: (502) 782-3930; Email: claire.oyler@ky.gov

STATEMENT OF CONSIDERATION
Relating to Proposed SIP

Base Year Emissions Inventory for the Partial Counties of Henderson and Webster Located within the Kentucky 2010 1-Hour Sulfur Dioxide Nonattainment Area

Energy and Environment Cabinet
Kentucky Department for Environmental Protection
Division for Air Quality

From September 19, 2023, until October 25, 2023, the Kentucky Division for Air Quality (Division) provided an opportunity for comments on the proposed State Implementation Plan (SIP) revision regarding the Base Year Emissions Inventory for the Partial Counties of Henderson and Webster located within the Kentucky 2010 1-Hour Sulfur Dioxide Nonattainment Area. The public notice announcing the public comment period included an opportunity to request a virtual public hearing. No request for a public hearing was received; therefore, the scheduled virtual public hearing was cancelled by the Division on October 19, 2023.

During the public comment period, the Division received comments from Sanghyun Lee with the Environmental Integrity Project (EIP). All comments and responses are listed below. The Environmental Protection Agency (EPA) sent the Division a letter stating its review of the submittal was completed and they did not have any comments to offer.

Response to Comments for the proposed SIP revision regarding the Base Year Emissions Inventory for the Partial Counties of Henderson and Webster Located within the Kentucky 2010 1-Hour Sulfur Dioxide Nonattainment Area

1. Comment: EEC should provide the underlying data used to calculate the annual emissions of SO_2 from the Century Sebree facility.

Nonattainment plan submissions must include a "comprehensive, accurate, current inventory of actual emissions." 42 U.S.C. § 7502(c)(3). The Proposed Revision states that SO_2 emissions from Century Sebree are estimated on a monthly basis using a mass balance approach, termed the "SO_2 Calculation Engine," based on data on the sulfur content of the petroleum coke and pitch provided by Century Sebree's suppliers. Proposed Revision at 5. The Proposed Revision provides an example of this calculation for SO_2 emissions for the month of September 2018, as well as reported annual actual emission totals for 2017-2019 determined using this mass balance approach. Id. at 6. However, neither the Proposed Revision nor the "Henderson-Webster Base Year Emissions Inventory" Microsoft Excel document, which is included as Appendix A to the Proposed Revision, provide the monthly sulfur content and production data used to calculate the annual actual emission totals for 2017, 2018, or 2019. EEC should revise the Proposed Revision to include the underlying data used to calculate annual emissions of SO_2 from the Century Sebree for the selected three-year period. The inclusion of this information is important for several reasons.

First—disclosing this information would give the public and EPA an opportunity to independently verify that the annual emissions reported by the facility are being correctly calculated. This not only serves the important purposes of transparency and accountability, but also provides another opportunity for any potential errors to be identified and corrected at a

relatively early stage in the nonattainment plan development process.

Second—in the event that EEC intends to use this baseline emissions data as the basis for any air dispersion modeling or attainment demonstration, this input information will necessarily have to be disclosed in order for the Agency to support the validity of its model and/or proposal. The 2010 SO_2 standard is a short-term, 1-hour standard, and as EPA's *2016 SO_2 NAAQS Designations Modeling Technical Assistance Document*[1] ("2016 TAD") emphasizes, when performing any modeling using an "actual emissions" approach, it "is necessary to provide as accurate a representation as possible of the actual emissions history of the source of the relevant time period." *Id.* at 11. The 2016 TAD further emphasizes that:

> Given the short-term nature of the SO_2 standard, it is important to characterize peak emissions that may occur due to production, changes in sulfur content of fuels, or operating schedules. In the absence of readily available temporally varying emissions or a predefined methodology, varying emissions should be calculated using the most detailed available information such as production logs, fuel usage information, operating schedules, etc.

Id. at 14. Any inputted assumptions regarding temporal variations in peak emissions due to production or sulfur content changes, as well as the underlying data on the same, will invariably have a very significant impact on the results of any air models performed to demonstrate attainment with a 1-hour standard, and members of the public (and EPA) will not be able to adequately evaluate any potential air modeling demonstration without these underlying assumptions and data inputs.

Ensuring an accurate representation of any potential variations in peak emissions is also particularly important in this case because, as the Proposed Revision notes, Century Sebree's Title V operating permit currently only requires compliance with a 12-month rolling average emission limit of 5,853 tons for SO_2 emissions. Proposed Revision at 5; Operating Permit No. V-19-010 R2, Condition D.3. The Proposed Revision acknowledges that "control measures will be necessary to reduce point source emissions and bring the Area into attainment for the 2010 SO_2 NAAQS." Proposed Revision at 14. To the extent that these proposed control measures will ultimately include additional enforceable emission limits, EEC will need to provide sufficient information regarding the variability of emissions from Century Sebree in order for the public and EPA to evaluate the adequacy of those limits in meeting the SO_2 NAAQS. *See* EPA 2014 *Guidance for 1-Hour SO_2 Nonattainment Area SIP Submissions*[2] at 9 (stating that "to the extent that an air agency is adopting longer term emissions limits for variable emissions sources under the approach laid out later in this guidance, the air agency should submit the information necessary to characterize the variability in these sources' emissions over time.").

(Sanghyun Lee, Environmental Integrity Project)

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[1] Available at: https://www.epa.gov/sites/default/files/2016-06/documents/so2modelingtad.pdf

[2] Available at: https://www.epa.gov/sites/default/files/2016-06/documents/20140423guidance_nonattainment_sip.pdf

Response: The Division acknowledges this comment. Although not required by Section 172(c)(3) of the Clean Air Act (CAA) or any SIP development guidance from the EPA, the Division chose to provide a sample of how Century Aluminum's emissions were calculated in a given month during the 2018 base year due to the complex nature of how it is reported.

In the proposed SIP, the Division clearly listed annual SO_2 emissions for each facility in the Area, including Century Aluminum, from 2017 - 2019. All emissions reported in the SIP have been quality-assured by the Emissions Inventory Section (EIS) at the Division, which annually verifies all data reported from all facilities in the state of Kentucky. The EPA also reviews this data to ensure its validity.

The comment also asks the Division to provide the monthly sulfur content and production data used to calculate the annual actual emission totals for Century Aluminum. Since the Division is not required to provide the sulfur content and production data in this SIP, as it is beyond the scope of the base year emissions inventory, the Division encourages the commentor to submit an open records request by emailing EEC.KORA@ky.gov if they are still interested in obtaining this information. The Division has reported all the necessary data to fulfill the base year emissions inventory requirements for this nonattainment area under Section 172(c)(3) of the CAA.

Furthermore, in regard to the use of this baseline emissions data as the basis for any air dispersion modeling or attainment demonstration, the Division was accepting comments only on the base year emissions inventory during this comment period. The modeling analysis will be available for public comment at a later date.

2. Comment: EEC should clarify whether and how EEC intends to use the designated "base years" in the State's upcoming attainment demonstration modeling analysis and projected attainment year emissions inventory.

The Proposed Revision states that EEC has chosen to use the 2018 National Emissions Inventory Data to represent base year emission levels for the point source category in the area, and 2017 data to represent base year emission levels for nonpoint, onroad, and nonroad categories. Proposed Revision at 1. The Proposed Revision also states that the Agency intends to submit a third SIP revision, which will consist of the State's attainment demonstration modeling analysis and projected attainment year emissions inventory for the area as required by 42 U.S.C. § 7502(c), at a later date. *Id.* at 14.

EPA's 2014 Guidance, as well its past SO_2 modeling guidance and prior regulations regarding modeling for other programs, make clear that any air modeling submitted for attainment demonstration in a nonattainment plan must be conducted using maximum allowable emissions, and not actual emissions. See 2014 Guidance at 9-10 ("The attainment plan for the affected area should also demonstrate, through the use of air quality dispersion modeling, using allowable emissions and supplemental analyses as appropriate, that the area will attain the standard by its attainment date."); see also id. at A-10 ("Consistent with past SO_2 modeling guidance… and regulatory modeling for other programs… dispersion modeling for the purposes of SIP development should be based on the use of maximum allowable emissions or federally enforceable permit limits at 100 percent load…").

Since the attainment demonstration modeling analysis required by 42 U.S.C. § 7502(c) must be performed using maximum allowable emissions and not actual emissions, it is unclear to us what the purpose of the designated "base year emission levels" are, and the Proposed Revision does not state how EEC intends to use these "base year" data. EEC should clarify whether and how EEC intends to use the designated "base years" in the State's upcoming attainment demonstration modeling analysis and projected attainment year emissions inventory.

(Sanghyun Lee, Environmental Integrity Project)

Response: The Division acknowledges this comment. Normally, the base year emissions inventory requirements would be submitted at the same time as the entire attainment demonstration, including a modeling analysis showing that the enforceable emissions limitations and other control measures taken by the Division will provide for expeditious attainment of the NAAQS for SO_2, as well as a projected attainment year emissions inventory. However, the Division chose to partition this SIP revision into three separate submittals so that EPA could act on (approval/disapproval) each component as they were completed and submitted. This SIP revision only accounts for the base year emissions inventory requirement.

Additionally, the Division recognizes the concerns raised in the comment regarding how the modeling analysis will be performed. The modeling analysis that the Division will include in the future attainment demonstration will follow EPA's guidance regarding using maximum allowable emissions and not actual emissions.

Furthermore, the purpose of this base year emissions inventory is to characterize emissions for the Henderson-Webster Nonattainment Area when it first became nonattainment for the 2010 SO_2 NAAQS. In this proposed base year emissions inventory SIP revision, the Division has sufficiently characterized base year emission levels for the Henderson-Webster Nonattainment Area. Additionally, the Division is not obligated under Section 172(c)(3) of the CAA to expand upon how the base year emissions inventory will be used for future SIP development. However, the Division has stated throughout this SIP revision that it will use the base year emissions inventory to determine to what extent, if any, emissions reductions are necessary in the Area.