Commonwealth of Kentucky Natural Resources and Environmental Protection Cabinet Department for Environmental Protection Division for Air Quality 803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

AIR QUALITY PERMIT

Permittee Name:	Kentucky Utilities Company
Mailing Address:	One Quality Street, Lexington, Kentucky 40507

is authorized to operate an electric power generating plant located at Ghent, Kentucky

Source Name: Mailing Address: Source Location:	Ghent Generating Station U.S. Highway 42, Ghent, Kentucky 41045 U.S. Highway 42, Ghent, Kentucky 41045
Permit Type:	Federally-Enforceable
Review Type:	Title V
Permit Number:	V-97-025
Log Number:	E997
Application	
Complete date:	February 14, 1997
KYEIS #:	079-0580-0010
AFS Plant ID#:	21-041-00010
FINDS Number:	KYD085052751
SIC Code:	4911
Region:	Metropolitan Cincinnati
County:	Carroll
Issuance Date: Expiration Date:	December 8, 1999 December 8, 2004

John E. Hornback, Director Division for Air Quality

DEP7001 (1-95) Revised (9-99)

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be complete on February 14, 1997, the Kentucky Division for Air Quality hereby authorizes the operation of the processing and air pollution control equipment described herein in accordance with the terms and conditions of this permit. This final permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any emission units without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

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

Emissions Unit: 01 (03) - Unit 1 Indirect Heat Exchanger

Description:

Unit 1 construction commenced before August 17, 1971 Pulverized coal-fired, dry bottom, tangentially-fired unit with electrostatic precipitator, wet limestone forced-oxidation sulfur dioxide scrubber, and low nitrogen oxides burner(s) Number two fuel oil used for startup and stabilization Maximum continuous rating: 5500 MMBTU/hour

APPLICABLE REGULATIONS:

Regulation 401 KAR 61:015, Existing indirect heat exchangers (State Effective Date: April 1, 1984) applicable to an emission unit with a capacity of more than 250 mm BTU per hour and commenced before August 17, 1971. This regulation is state-enforceable only until such time as the effective date of an EPA rulemaking, approving this regulation into the federally-approved Kentucky State Implementation Plan. and;

Regulation No. 7, Prevention and control of emissions of particulate matter from combustion of fuel in indirect-heat-exchangers.

1. <u>Operating Limitations:</u> None

2. <u>Emission Limitations:</u>

a) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, particulate emissions shall not exceed 0.2 lb/MMBtu based on a three-hour average.

b) Pursuant to Regulation 401 KAR 61:015, Section 4 (4), and Regulation No. 7, emissions shall not exceed 40 percent opacity based on a six-minute average except that a maximum of sixty (60) percent opacity is allowed for a period or aggregate of periods of not more than six minutes in any sixty minutes during building a new fire, cleaning the firebox, or blowing soot.

c) Pursuant to Regulation 401 KAR 61:015, Section 5 (1), sulfur dioxide emissions shall not exceed 5.67 lbs/MMBtu based on a twenty-four-hour average.

3. <u>Testing Requirements:</u>

a) The permittee shall submit a schedule within six months from the issuance date of this permit to conduct at least one performance test for particulate within one year following the issuance of this permit.

b) If no additional stack tests are performed pursuant to Condition 4. d), the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.

c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. <u>Specific Monitoring Requirements:</u>

a) Pursuant to Regulation 401 KAR 61:005, Section 3 and Regulation 401 KAR 50:035, Section 7(1)(c), continuous emission monitoring 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 Regulation 401 KAR 61:005, Section 3, particularly, performance specification 2 of Appendix B to 40 CFR 60 or 40 CFR 75, Appendix A.

b) In accordance with Regulation 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 Division.

c) In accordance with Regulation 401 KAR 61:015, Section 6 (3) the rate of each fuel burned shall be measured daily 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.

d) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, 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 condition Section G(a)(20) 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 Regulation 401 KAR 50:045, Performance tests.

e) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or COM system and make any necessary repairs. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9. If a Method 9 cannot be performed, the reason for not performing the test shall be documented.

f) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM) Excluding the startup and shut down periods, if any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or CEM system and make any necessary repairs as soon as practicable.

g) Pursuant to Regulation 401 KAR 61:005, Section 3, a continuous monitoring system for opacity shall conform to requirements of this section which include installing, calibrating, operating, and maintaining the continuous monitoring system for accurate opacity measurement, and demonstrating compliance with the applicable Performance Specification 1 of 40 CFR 60, Appendix B.

h) Pursuant to Regulation 401 KAR 61:005, Section 3(5), the Division may provide a temporary exemption from the monitoring and reporting requirements of Regulation 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.

5. <u>Specific Record Keeping Requirements:</u>

a) Records shall be kept in accordance with Regulations 401 KAR 61:005, Section 3(16) (f) and 61:015, Section 6, with the exception that the records shall be maintained for a period of five (5) years. Percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity standard in each calendar quarter shall be computed and recorded.

b) The permittee shall maintain the results of all compliance tests.

6. <u>Specific Reporting Requirements:</u>

a) Pursuant to Regulation 401 KAR 61:005, Section 3 (16), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division.

1. 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.

2. For opacity measurements, 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.

3. For gaseous measurements the summary shall consist of hourly averages in the units of the applicable standard.

4. 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.

5. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

b) The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) 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

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

a) The electrostatic precipitator and wet limestone forced-oxidation sulfur dioxide scrubber shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the electrostatic precipitator and wet limestone forced-oxidation sulfur dioxide scrubber shall be maintained.

Emissions Unit: 02 (01) - Unit 2 Indirect Heat Exchanger

Description:

Unit 2 construction commenced: prior to September 18, 1978 Pulverized coal-fired, dry bottom, tangentially-fired unit with electrostatic precipitator and low nitrogen oxides burners Number two fuel oil used for startups and stabilization Maximum continuous rating: 5500 MMBTU/hour.

Applicable Regulations:

Regulation 401 KAR 59:015, New indirect heat exchangers, incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable for an emissions unit more than 250 MMBTU/hour and commenced after August 17, 1971

1. <u>Operating Limitations:</u>

None

2. <u>Emission Limitations:</u>

a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(b), particulate emissions shall not exceed 0.1 lb/MMBTU based on a three-hour average.

b) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes.

c) Pursuant to Regulation 401 KAR 59:015, Section 5(1)(b), sulfur dioxide emissions shall not exceed 1.2 lbs/MMBTU based on a three-hour average.

d) Pursuant to Regulation 401 KAR 59:015, Section 6(1)(c), nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.7 lb/MMBTU based on a three-hour average.

3. <u>Testing Requirements:</u>

a) The permittee shall submit a schedule within six months from the issuance date of this permit to conduct at least one performance test for particulate within one year following the issuance of this permit.

b) If no additional stack tests are performed pursuant to Condition 4. b), the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.

c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. <u>Specific Monitoring Requirements:</u>

a) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), Regulation 401 KAR 59:015, Section 7, and Regulation 401 KAR 59:005, Section 4, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of Regulation 401 KAR 59:005, Section 4.

b) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, 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 condition Section G(a)(20) 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 Regulation 401 KAR 50:045, Performance tests.

c) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9. If a Method 9 test cannot be performed, the reason for not performing the test shall be documented.

d) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM) Excluding the startup and shut down periods, if any 3-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.

e) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for nitrogen oxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 3-hour average nitrogen oxide 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.

f) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under Regulation 401 KAR 59:005, Section 4(3) and calibration checks as required under Regulation 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by Regulation 401 KAR 50:015.

g) Pursuant to Regulation 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxides (nitrogen oxides), as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in Regulation 401 KAR 50:015.

h) Pursuant to Regulation 401 KAR 59:015, Section 7(3), the span value of all continuous emission monitoring system measuring opacity of emissions shall be eighty (80), ninety (90), or one-hundred (100) percent and the span value for the continuous emission monitoring system measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with Regulation 401 KAR 59:015, Appendix C or 40 CFR 75, Appendix A.

i) Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in Regulation 401 KAR 59:015, Section 7(5).

j) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.

5. <u>Specific Record Keeping Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger 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 Regulation 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b) Pursuant to Regulation 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c) The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity standard in each calendar quarter.

d) The permittee shall maintain the results of all compliance tests.

6. <u>Specific Reporting Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

1) The magnitude of the excess emission computed in accordance with the Regulation 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

2) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

4) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b) Pursuant to Regulation 401 KAR 59:015, Section 7(7), for the purposes of reports required under Regulation 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

1) Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

2) Excess emissions of sulfur dioxide is defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable sulfur dioxide emissions standards.

3) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.

c) The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) 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.

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

a) The electrostatic precipitator and low nitrogen oxides burners shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the electrostatic precipitator shall be maintained.

Emissions Unit: 03 (02) - Unit 3 Indirect Heat Exchanger

Description:

Unit 3 construction commenced: prior to September 18, 1978 Pulverized coal-fired unit, dry bottom, wall-fired unit with electrostatic precipitator and low nitrogen oxides burners with overfire air Number two fuel oil used for startups and stabilization Maximum continuous rating: 5500 MMBTU/hour.

Applicable Regulations:

Regulation 401 KAR 59:015, New indirect heat exchangers, incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable for an emissions unit more than 250 MMBTU/hour and commenced after August 17, 1971, and;

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality.

1. <u>Operating Limitations:</u>

None

2. <u>Emission Limitations:</u>

a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(b), and Regulation 401 KAR 51:017, particulate emissions shall not exceed 0.1 lb/MMBTU based on a three-hour average.

b) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes.

c) Pursuant to Regulation 401 KAR 59:015, Section 5(1)(b), and Regulation 401 KAR 51:017, the sulfur dioxide emissions shall not exceed 1.2 lbs/MMBTU based on a three-hour average.

d) Pursuant to Regulation 401 KAR 59:015, Section 6(1)(c), nitrogen oxides emissions shall not exceed 0.7 lb/MMBTU based on a three-hour average.

3. <u>Testing Requirements:</u>

a) The permittee shall submit a schedule within six months from the issuance date of this permit to conduct at least one performance test for particulate within one year following the issuance of this permit.

b) If no additional stack tests are performed pursuant to Condition 4. b), the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.

c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. <u>Specific Monitoring Requirements:</u>

a) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), Regulation 401 KAR 59:015, Section 7, and Regulation 401 KAR 59:005, Section 4, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of Regulation 401 KAR 59:005, Section 4.

b) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, 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 condition Section G(a)(20) 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 Regulation 401 KAR 50:045, Performance tests.

c) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM). Excluding the startup and shut down periods, if any six minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9. If a Method 9 test cannot be performed, the reason for not performing the test shall be documented.

d) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM) Excluding the startup and shut down periods, if any 3-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.

e) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for nitrogen oxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 3-hour average nitrogen oxide 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.

f) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under Regulation 401 KAR 59:005, Section 4(3) and calibration checks as required under Regulation 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by Regulation 401 KAR 50:015.

g) Pursuant to Regulation 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxides (nitrogen oxides), as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in Regulation 401 KAR 50:015.

h) Pursuant to Regulation 401 KAR 59:015, Section 7(3), the span value of all continuous emission monitoring system measuring opacity of emissions shall be eighty (80), ninety (90), or one-hundred (100) percent and the span value for the continuous emission monitoring system measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with Regulation 401 KAR 59:015, Appendix C or 40 CFR 75, Appendix A.

i) Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in Regulation 401 KAR 59:015, Section 7(5).

j) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.

5. <u>Specific Record Keeping Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger 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 Regulation 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b) Pursuant to Regulation 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c) The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity standard in each calendar quarter.

d) The permittee shall maintain the results of all compliance tests.

6. <u>Specific Reporting Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

1) The magnitude of the excess emission computed in accordance with the Regulation 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

2) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

4) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b) Pursuant to Regulation 401 KAR 59:015, Section 7(7), for the purposes of reports required under Regulation 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

1) Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

2) Excess emissions of sulfur dioxide is defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable sulfur dioxide emissions standards.

3) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.

c) The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) 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.

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

a) The electrostatic precipitator and low nitrogen oxides burners shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the electrostatic precipitator shall be maintained.

Emissions Unit: 04 (02) - Unit 4 Indirect Heat Exchanger

Description:

Unit 4 construction commenced: prior to September 18, 1978 Pulverized coal-fired unit, dry bottom, wall-fired unit with electrostatic precipitator and low nitrogen oxides burners with overfire air Number two fuel oil used for startups and stabilization Maximum continuous rating: 5500 MMBTU/hour

Applicable Regulations:

Regulation 401 KAR 59:015, New indirect heat exchangers, incorporating by reference 40 CFR 60, Subpart D, Standards of performance for fossil-fuel-fired steam generators applicable for an emissions unit more than 250 MMBTU/hour and commenced after August 17, 1971, and;

Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality.

1. <u>Operating Limitations:</u> None

2. <u>Emission Limitations:</u>

a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(b), and Regulation 401 KAR 51:017, particulate emissions shall not exceed 0.1 lb/MMBTU based on a three-hour average.

b) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes.

c) Pursuant to Regulation 401 KAR 59:015, Section 5(1)(b), and Regulation 401 KAR 51:017, the sulfur dioxide emissions shall not exceed 1.2 lbs/MMBTU based on a three-hour average.

d) Pursuant to Regulation 401 KAR 59:015, Section 6(1)(c), nitrogen oxides emissions shall not exceed 0.7 lb/MMBTU based on a three-hour average.

3. <u>Testing Requirements:</u>

a) The permittee shall submit a schedule within six months from the issuance date of this permit to conduct at least one performance test for particulate within one year following the issuance of this permit.

b) If no additional stack tests are performed pursuant to Condition 4. b), the permittee shall conduct a performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the applicable standard.

c) The permittee shall determine the opacity of emissions from the stack by EPA Reference Method 9 annually, or more frequently if requested by the Division.

4. <u>Specific Monitoring Requirements:</u>

a) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), Regulation 401 KAR 59:015, Section 7, and Regulation 401 KAR 59:005, Section 4, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of Regulation 401 KAR 59:005, Section 4.

b) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for particulate, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If five (5) percent or greater of COM data (excluding startup, shut down, and malfunction periods, data averaged over six minute period) recorded in a calendar quarter show excursions above the opacity standard, 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 condition Section G(a)(20) 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 Regulation 401 KAR 50:045, Performance tests.

c) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for opacity, the permittee shall use a continuous opacity monitor (COM). Excluding the startup, shut down, and once per hour exemption periods, if any six minute average opacity value exceeds the opacity standard, the permittee shall, as appropriate, initiate an inspection of the control equipment and/or the COM system and make any necessary repairs. If visible emissions from the stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9. If a Method 9 test cannot be performed, the reason for not performing the test shall be documented.

d) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for sulfur dioxide, the permittee shall use a continuous emission monitor (CEM) Excluding the startup and shut down periods, if any 3-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.

e) Pursuant to Regulation 401 KAR 50:035, Section 7(1)(c), to meet the periodic monitoring requirement for nitrogen oxide, the permittee shall use a continuous emission monitor (CEM). Excluding the startup and shut down periods, if any 3-hour average nitrogen oxide 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.

f) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under Regulation 401 KAR 59:005, Section 4(3) and calibration checks as required under Regulation 401 KAR 59:005, Section 4(4), Reference Methods 6 or 7 shall be used as applicable as described by Regulation 401 KAR 50:015.

g) Pursuant to Regulation 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxides (nitrogen oxides), as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in Regulation 401 KAR 50:015.

h) Pursuant to Regulation 401 KAR 59:015, Section 7(3), the span value of all continuous emission monitoring system measuring opacity of emissions shall be eighty (80), ninety (90), or one-hundred (100) percent and the span value for the continuous emission monitoring system measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with Regulation 401 KAR 59:015, Appendix C or 40 CFR 75, Appendix A.

i) Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in Regulation 401 KAR 59:015, Section 7(5).

j) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.

5. <u>Specific Record Keeping Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger 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 Regulation 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b) Pursuant to Regulation 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

c) The permittee shall compute and record percentage of the COM data (excluding startup, shut down, and malfunction data) showing excursions above the opacity standard in each calendar quarter.

d) The permittee shall maintain the results of all compliance tests.

6. <u>Specific Reporting Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

1) The magnitude of the excess emission computed in accordance with the Regulation 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

2) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

4) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b) Pursuant to Regulation 401 KAR 59:015, Section 7(7), for the purposes of reports required under Regulation 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

1) Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

2) Excess emissions of sulfur dioxide is defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable sulfur dioxide emissions standards.

3) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.

c) The permittee shall report the number of excursions (excluding startup, shut down, malfunction data) 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.

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

a) The electrostatic precipitator and low nitrogen oxides burners shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the electrostatic precipitator shall be maintained.

Emissions Unit: 05-01 (06) - Coal Receiving Operations

Description:

Construction commenced: prior to November 15, 1973 Equipment includes: barge unloading operations (Barge unloader itself is not enclosed) Maximum Operating Rate: 3600 tons/hour

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions

Applicable Requirements

a) Pursuant to Regulation 401 KAR 63:010, Section 3, 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:

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

2. installation and use of hoods, fans, and fabric filters 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.

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

1. <u>Operating Limitations:</u> None

- 2. <u>Emission Limitations:</u> None
- 3. <u>Testing Requirements:</u> None

4. <u>Specific Monitoring Requirements:</u>

See Section F.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the coal received (tonnages).

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The air pollution control equipment (including but not limited to enclosures) shall be used as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

Emissions Unit: 05-02 (10) - Limestone Handling and Receiving

Description:

Construction commenced: 1992 Equipment includes: Barge unloading operations (Barge unloader itself is not enclosed) Maximum Operating Rate (Receiving): 1800 Tons/hour

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions

Applicable Requirements:

a) Pursuant to Regulation 401 KAR 63:010, Section 3, 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:

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

2. installation and use of hoods, fans, and fabric filters 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.

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

- 1. <u>Operating Limitations:</u> None
- 2. <u>Emission Limitations:</u> None
- 3. <u>Testing Requirements:</u> None

4. <u>Specific Monitoring Requirements:</u>

See Section F.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the limestone received (tonnages).

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The air pollution control equipment (including but not limited to enclosures) shall be used as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

Emissions Unit: 06 (09) - Coal crushing operations (crusher #1)

Description:

Crusher #1 construction commenced: before October 24, 1974 Equipment includes: one crusher and two surge bins Maximum Operating Rate: 1800 tons/hour

Applicable Regulations:

Regulation 401 KAR 61:020, Existing process operations, for emissions unit commenced before July 2, 1975

1. <u>Operating Limitations:</u>

None

2. <u>Emission Limitations:</u>

a) Pursuant to Regulation 401 KAR 61:020, Section 3(2), particulate matter emissions into the open air shall not exceed [55 (P)^{0.11} - 40] pounds per hour based on a three-hour average where P is the hourly operating rate in tons per hour.

b) Pursuant to Regulation 401 KAR 61:020, Section 3(1)(a), any continuous emission(s) into the open air shall not equal or exceed forty (40) percent opacity based on a six-minute average.

3. <u>Testing Requirements:</u>

The permittee shall use EPA Reference Method 9 to determine opacity of emissions from each stack which shall be performed upon the Division's request, but not less frequently than annually.

4. <u>Specific Monitoring Requirements:</u>

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

b) The permittee shall monitor the operating rate and hours of operation on a daily basis.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the coal processed (tonnages) and hours of operation on a daily basis.

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The enclosures and baghouse shall be used and operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the enclosures and baghouse shall be maintained.

Emissions Unit: 07 (08 and 07) - Coal handling operations (stockpile and conveying operations)

Description:

Construction commenced: before October 24, 1974 Equipment includes: (below)

Operation	Maximum Operating Rate (Tons/hour)
Stockpile Operations	3600
Conveyors 1D, 1E, 1F and Transfer Points	3600 each
Conveyor 1J, and Transfer Points	900 each
Conveyor 1G, and Transfer Points	1500 each
Conveyors 1H, and Transfer Points	1800 each

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions

Applicable Requirements

a) Pursuant to Regulation 401 KAR 63:010, Section 3, 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:

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

2. installation and use of hoods, fans, and fabric filters 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.

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

1. <u>Operating Limitations:</u> None

2. <u>Emission Limitations:</u> None

3. <u>Testing Requirements:</u> None

4. Specific Monitoring Requirements:

_ _ _

See Section F.

5. <u>Specific Record Keeping Requirements:</u> The permittee shall maintain records of the coal processed (tonnage).

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The air pollution control equipment (including but not limited to enclosures, and wet suppression) shall be used as necessary to maintain compliance with the applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and use of the air pollution control equipment (including but not limited to enclosures, and wet suppression) shall be maintained.

Emissions Unit: 08-01 (07) - Coal Conveying and Handling Operations

Description:

Construction commenced: before October 24, 1974 Equipment includes: Conveyors 1A, 1B, 1C, and transfer points Maximum Operating Rate: 3600 tons/hour, each

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions

Applicable Requirements

a) Pursuant to Regulation 401 KAR 63:010, Section 3, 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:

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

2. installation and use of hoods, fans, and fabric filters 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.

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

- 1. <u>Operating Limitations:</u> None
- 2. <u>Emission Limitations:</u> None
- 3. <u>Testing Requirements:</u> None

4. <u>Specific Monitoring Requirements:</u>

See Section F.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the coal processed (tonnage).

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The air pollution control equipment (including but not limited to enclosures) shall be used as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

Emissions Unit: 08-02 (11) - Limestone Handling and Processing

Description:

Equipment includes: Conveyors 1A, 1B, 1C, and transfer points Construction commenced: 1992 Maximum Operating Rate: 1800 Tons per hour, each

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983

1. <u>Operating Limitations:</u> None

2. <u>Emission Standards:</u>

a) Pursuant to Regulation 401 KAR 59:310, adopting by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:

- 1. Contain particulate matter in excess of 0.05 g/dscm; or
- 2. Exhibit greater than seven (7) percent opacity.

3. <u>Testing Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

Records of the limestone (tonnages) processed shall be maintained.

6. <u>Specific Reporting Requirements:</u>

Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

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

a) The fabric filter shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the fabric filter shall be maintained.

Emissions Unit: 09-01 (07) - Coal Conveying and Handling Operations

Description:

Equipment includes: Conveyor 2H and transfer points Construction commenced before 1977 (operational in 1977) Maximum Operating Rate: 1800 tons/hour

Applicable Regulations:

Regulation 401 KAR 60:005, Section 3(aa), which incorporates by reference 40 CFR 60, Subpart Y, Standards of performance for coal preparation plants, for emission units commenced after October 24, 1974

1. <u>Operating Limitations:</u> None

2. <u>Emission Limitations:</u>

Pursuant to Regulation 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

3. <u>Testing Requirements:</u>

Pursuant to Regulation 40 CFR 60.254, EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity at least annually, or more frequently if requested by the Division.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from control equipment on a daily basis and maintain a log of the observations. If visible emissions are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment making necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the coal processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The air pollution control equipment (including but not limited to enclosures) shall be used as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.
Emissions Unit: 09-02 (11) - Limestone Handling and Processing

Description:

Equipment includes: Conveyors 2H and transfer points Construction commenced: 1992 Operating rate: 1800 Tons per hour

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983

1. <u>Operating Limitations:</u> None

2. <u>Emission Standards:</u>

a) Pursuant to Regulation 401 KAR 59:310, adopting by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:

- 1. Contain particulate matter in excess of 0.05 g/dscm; or
- 2. Exhibit greater than seven (7) percent opacity.

3. <u>Testing Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the limestone processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

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

a) The fabric filter shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the fabric filter shall be maintained.

Emissions Unit: 10-01 (07) - Coal Handling and Conveying

Description:

Equipment includes: Conveyor 6H and transfer points Construction commenced before 1981 (operational in 1981) Maximum Operating Rate: 1800 tons/hour

Applicable Regulations:

Regulation 401 KAR 60:005, Section 3(aa), which incorporates by reference 40 CFR 60, Subpart Y, Standards of performance for coal preparation plants, for emission units commenced after October 24, 1974

1. <u>Operating Limitations:</u> None

2. <u>Emission Limitations:</u>

Pursuant to Regulation 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

3. <u>Testing Requirements:</u>

Pursuant to Regulation 40 CFR 60.254, EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity at least annually, or more frequently if requested by the Division.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from control equipment on a daily basis and maintain a log of the observations. If visible emissions are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment making necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the coal processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The air pollution control equipment (including but not limited to enclosures) shall be used as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

Emissions Unit: 10-02 (11) - Limestone Handling and Processing

Description:

Equipment includes: Conveyors 6H and transfer points Construction commenced: 1992 Maximum Operating Rate: 1800 Tons per hour

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983

1. <u>Operating Limitations:</u> None

2. <u>Emission Standards:</u>

a) Pursuant to Regulation 401 KAR 59:310, adopting by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:

- 1. Contain particulate matter in excess of 0.05 g/dscm; or
- 2. Exhibit greater than seven (7) percent opacity.

3. <u>Testing Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the limestone processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

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

a) The fabric filter shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the fabric filter shall be maintained

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

Emissions Unit: 11 (07 and 09) - Coal Handling and Conveying

Description:

Construction commenced before 1981 (operational in 1981), Except, conveyor 2J construction commenced before 1977 (operational in 1977) Equipment includes: (below)

Operation	Maximum Operating Rate (Tons/hour)
Crusher House #2 (one crusher with two surge bins)	1800
Conveyors 2J, 3J, 4J, 3M, 4M and Transfer Points	900 each
Conveyors 2G, and Transfer Points	1500 each
Conveyors 5G, 6G, 7G, 8G, 3H, 4H, 5H, Coal Silo, and	1800 each
Transfer Points	
Conveyors 3G, 4G and Transfer Points	2400 each

Applicable Regulations:

Regulation 401 KAR 60:005, Section 3(aa), which incorporates by reference 40 CFR 60, Subpart Y, Standards of performance for coal preparation plants, for emission units commenced after October 24, 1974

1. <u>Operating Limitations:</u> None

2. <u>Emission Limitations:</u>

Pursuant to Regulation 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

3. <u>Testing Requirements:</u>

Pursuant to Regulation 40 CFR 60.254, EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity at least annually, or more frequently if requested by the Division.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from control equipment on a daily basis and maintain a log of the observations. If visible emissions are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment making necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the coal processed (tonnage).

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The air pollution control equipment (including but not limited to enclosures and fabric filters) shall be used as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

Emissions Unit: 12 (11) - Limestone Handling and Processing

Description:

Construction commenced: 1992 Equipment includes: Conveyor BF1 and transfer points Maximum Operating Rate: 140 Tons per hour

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983

1. <u>Operating Limitations:</u> None

2. <u>Emission Standards:</u>

a) Pursuant to Regulation 401 KAR 59:310, adopting by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:

- 1. Contain particulate matter in excess of 0.05 g/dscm; or
- 2. Exhibit greater than seven (7) percent opacity.

3. <u>Testing Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the limestone processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

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

a) The fabric filter shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the fabric filter shall be maintained.

Emissions Unit: 13 (14) - Limestone Crushing and Processing

Description:

Construction commenced: 1992 Equipment Includes: Hammermill crushing operations Maximum Operating Rate: 140 Tons per hour

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983

1. <u>Operating Limitations:</u> None

2. <u>Emission Standards:</u>

a) Pursuant to Regulation 401 KAR 59:310, adopting by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:

- 1. Contain particulate matter in excess of 0.05 g/dscm; or
- 2. Exhibit greater than seven (7) percent opacity.

3. <u>Testing Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the limestone processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

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

a) The fabric filter shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the fabric filter shall be maintained.

Emissions Unit: 14 (11) - Limestone Handling and Conveying

Description:

Construction commenced: 1992 Equipment includes: Conveyor L1 and transfer points Maximum Operating Rate: 140 Tons per hour

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983

1. <u>Operating Limitations:</u> None

2. <u>Emission Standards:</u>

a) Pursuant to Regulation 401 KAR 59:310, adopting by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:

- 1. Contain particulate matter in excess of 0.05 g/dscm; or
- 2. Exhibit greater than seven (7) percent opacity.

3. <u>Testing Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the limestone processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

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

a) The fabric filter shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the fabric filter shall be maintained.

Emissions Unit: 15 (13) - Limestone Handling Day Silo

Description:

Construction commenced: 1992 Equipment includes: Limestone day silo receiving and processing Maximum Operating Rate: 140 Tons per hour

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983

1. <u>Operating Limitations:</u> None

2. <u>Emission Standards:</u>

a) Pursuant to Regulation 401 KAR 59:310, adopting by reference 40 CFR 60.672(a), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any stack emissions which:

- 1. Contain particulate matter in excess of 0.05 g/dscm; or
- 2. Exhibit greater than seven (7) percent opacity.

3. <u>Testing Requirements:</u>

a) Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.675(b)(2), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually.

b) EPA Reference Method 5 or Method 17 shall be performed as required by the Division to determine particulate matter concentration.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the limestone processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672, including reports of opacity observations made using EPA Reference Method 9.

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

a) The fabric filter shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the fabric filter shall be maintained.

Emissions Unit: 16 (15) - Limestone Secondary Crushing Operations

Description:

Construction commenced: 1992 Equipment includes: two ball mills secondary crushing operations Maximum Operating Rate: 28.6 Tons per hour, each

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983

1. <u>Operating Limitations:</u> None

2. <u>Emission Standards:</u>

Pursuant to Regulation 401 KAR 59:310, adopting by reference 40 CFR 60.672(b), no owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any fugitive emissions which exhibit greater than ten (10) percent opacity.

3. <u>Testing Requirements:</u>

Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.675(c), the owner and/or operator shall use EPA Reference Method 9 and the procedures in 40 CFR 60.11 to determine opacity, annually. As appropriate, additions for Method 9 testing procedures from 40 CFR 60.675 (c) shall be followed.

4. <u>Specific Monitoring Requirements:</u>

The permittee shall perform a qualitative visual observation of the opacity of emissions from control equipment on a daily basis and maintain a log of the observations. If visible emissions are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment making necessary repairs.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the limestone processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

Pursuant to Regulation 401 KAR 59:310, specifically 40 CFR 60.676, the owner and/or operator shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 and Regulation 401 KAR 59:310, including reports of opacity observations made using EPA Reference Method 9.

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

a) The air pollution control equipment (including but not limited to enclosures) shall be used as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the air pollution control equipment (including but not limited to enclosures) shall be maintained.

Emissions Unit: 17 (12) - Limestone Handling Stockpile Operations

Description:

Construction commenced: 1992 Maximum Operating Rate: 1800 Tons/hour

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions

Applicable Requirements:

a) Pursuant to Regulation 401 KAR 63:010, Section 3, 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:

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

2. installation and use of hoods, fans, and fabric filters 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.

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

1. <u>Operating Limitations:</u> None

- 2. <u>Emission Limitations:</u> None
- 3. <u>Testing Requirements:</u> None

4. <u>Specific Monitoring Requirements:</u>

See Section F.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain records of the limestone processed (tonnages).

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The air pollution control measures (including but not limited to wet suppression) shall be used as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and use of the air pollution control measures (including but not limited to wet suppression) shall be maintained

Emissions Unit: 20 (05) - Dry Fly Ash Handling

Description:

Construction commenced: 1981 Equipment includes: Dry flyash collection system, with a flyash silo, and pulse jet fabric filter dust collector Maximum Operating Rate: 35 Tons/hour

Applicable Regulations:

Regulation 401 KAR 59:010, New process operations

1. <u>Operating Limitations:</u>

None

2. <u>Emission Limitations:</u>

a) Pursuant to Regulation 401 KAR 59:010, Section 3(2), particulate matter emissions into the open air shall not exceed $[17.31 (P)^{0.16}]$ pounds per hour based on a three hour average where P is the hourly operating rate in tons per hour.

b) Pursuant to Regulation 401 KAR 59:010, Section 3(1)(a), any continuous emission(s) into the open air shall not equal or exceed twenty (20) percent opacity based on a six-minute average.

3. <u>Testing Requirements:</u>

The permittee shall use EPA Reference Method 9 to determine opacity of emissions from each stack which shall be performed upon the Division's request, but not less frequently than annually.

4. <u>Specific Monitoring Requirements:</u>

a) The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a daily basis, when the unit is operating, and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment for any necessary repairs.

b) The permittee shall monitor the operating rate and hours of operation on a daily basis.

5. <u>Specific Record Keeping Requirements:</u>

The permittee shall maintain the records of material processed (tonnage) and hours of operation on a daily basis.

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

a) The fabric filter shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and operation of the fabric filter shall be maintained.

Emissions Unit: 22 (-) - Two Cooling Towers

Description:

Construction commenced: prior to 1992Maximum Operating Rate (Gallons per Minute)3172,0004172,000

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions

Applicable Requirements:

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

- 1. <u>Operating Limitations:</u> None
- 2. <u>Emission Limitations:</u> None
- 3. <u>Testing Requirements:</u> None
- 4. <u>Specific Monitoring Requirements:</u>

See Section F.

5. <u>Specific Record Keeping Requirements:</u>

Records of the water circulation rates shall be maintained for emissions inventory purposes.

6. <u>Specific Reporting Requirements:</u>

See Section F.

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

NA

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation(s). Process and emission control equipment at each insignificant activity subject to a generally applicable regulation shall be inspected monthly and a qualitative visible emissions evaluation made. The results of the inspections and observations shall be recorded in a log, noting color, duration, density (heavy or light), cause and any corrective actions taken for any abnormal visible emissions.

Description	Generally Applicable Regulation
1. The following fuel oil storage tanks:525,000gallons100,000gallons20,000gallons1000gallonsthree 500gallon tankstwo 150gallon tanks.	None
2. 1000 gallon unleaded gasoline storage tank	401 KAR 59:050
3. The following lubricating oil storage tanks: four 15,000 gallon tanks four 11,500 gallon tanks.	None
4. Emergency electrical generator.	None
5. Sodium sulfate injection system	401 KAR 61:020 or 401 KAR 59:010
6. Infrequent evaporation of boiler cleaning solutions.	
7. Paved and unpaved roadways	401 KAR 63:010
8. Infrequent burning of deminimis quantities of used oil for energy recovery.	
9. Cooling towers 1 and 2 subject	401 KAR 63:010
Tower NumberMaximum Operating Rate (Gallons per Minute)1191,0002197,000	

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. Particulate, sulfur dioxide, nitrogen oxides, and visible (opacity) emissions, as measured by methods referenced in Regulation 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein. Compliance with the visible emission limitations for the indirect heat exchanger (emissions unit 01) shall be determined using continuous opacity monitoring data.

SECTION E - SOURCE CONTROL EQUIPMENT OPERATING REQUIREMENTS

1. Pursuant to Regulation 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 emissions unit 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, RECORD KEEPING, AND REPORTING REQUIREMENTS

- 1. 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 years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]
- 3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or authorized representatives to perform the following:
 - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
 - b. Have access to and copy, at reasonable times, any records required by the permit:
 - i. During normal office hours, and
 - ii. During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
 - iii. During an emergency; and
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
 - i. During all hours of operation at the source,
 - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, andiii Device on any angle of the source of
 - iii. 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.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- 5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Division's Florence Regional Office at least every six (6) months during the life of this permit, unless otherwise stated in this permit. The reports are due within 30 days after the end of each six month reporting period which commences on the initial issuance date of this permit. The permittee may shift to semi-annual reporting on a calendar year basis upon approval of the regional office. If calendar year reporting is approved, the semi-annual reports are due January 30th and July 30th of each year. Data from the continuous emission and opacity monitors shall be reported to the Technical Services Branch in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3(3). All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.
- 6. a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Florence Regional Office concerning startups, shutdowns, or malfunctions as follows:
 - 1. 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.
 - 2. 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 cause written notice upon request.
 - b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions to the Division for Air Quality's Florence Regional Office. Prompt reporting shall be defined as quarterly for any deviation related to emission standards (other than emission exceedances covered by condition 6(a) above) and semi-annually for all other deviations from the permit requirements if not otherwise specified in the permit.
- 7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date or by January 30th of each year if calendar year reporting is approved by the regional office, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Florence Regional Office and the U.S. EPA in accordance with the following requirements:
 - a. Identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status regarding each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent; and
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c),(d), and (e).

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

e.. The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date, or by January 30th of each year if calendar year reporting is approved by the regional office. **Annual compliance certifications should be mailed to the following addresses:**

Division for Air Quality Florence Regional Office 8020 Ewing Boulevard, Suite 110 Florence, KY 41042

Division for Air Quality Central Files 803 Schenkel Lane Frankfort, KY 40601 U.S. EPA Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth St. Atlanta, GA 30303-8960

- 8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee.
- 9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), 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 after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS

a) General Compliance Requirements

- 1. The permittee shall comply with all conditions of this permit. Noncompliance shall be (a) violation(s) of State Regulation 401 KAR 50:035, Permits, Section 7(3)(d) and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and are grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
- 2. 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.
- 3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a) 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 Regulation 401 KAR 50:035, Section 12(2)(c);
 - b) If any additional applicable requirements of the Acid Rain Program become applicable to the source;
 - c) The Division 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; or
 - d) The Division or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

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.

- 4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
- 5. 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.

- 6. 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.
- 7. 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. [401 KAR 50:035, Permits, Section 7(3)(e)]
- 8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
- 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within ninety (90) days after the date of notice as specified in Regulation 401 KAR 50:038, Section 3(6).
- 10. 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.
- 11. This permit shall not convey property rights or exclusive privileges.
- 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
- 13. Nothing in this permit shall alter or affect the authority of the U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- 14. Nothing in this permit shall alter or affect the authority of the U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.
- 15. Permit shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the emissions units listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of the issuance of this permit.
- 16. The permittee may conduct test burns of materials other than those listed in the permit without a construction permit or a reopening of this permit provided that:
 - a) Notification is provided to the Division at least thirty (30) days prior to initiation of the test burning of the material;
 - b) The source complies with all applicable regulations and emission limitations;
 - c) The permittee agrees to perform such additional testing as may be required by the Division.

- 17. The permanent burning of any material (addressed in above condition) shall be allowed upon completion of testing provided that:
 - a) The Division determines that a permit is not required. Such determination shall be made within sixty (60) days of the application receipt along with the test results;
 - b) The permittee keeps records of the date and time of burn;
 - c) The permittee keeps records of analysis and feed rate of material;
 - d) Burning any of those materials shall not be subject to any new applicable regulation and the source shall comply with all applicable regulation and emission limitations.
- 18. Fugitive emissions shall be controlled in accordance with Regulation 401 KAR 63:010.
- 19. Emission limitations listed in this permit shall apply at all times except during periods of startup, shutdown, or malfunctions in accordance with Regulation 401 KAR 50:055, as long as the permittee follows the requirements of Regulation 401 KAR 50:055.
- 20. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to Regulation 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
- 21. All previously issued construction and operating permits are hereby subsumed into this permit.

b) Permit Expiration and Reapplication Requirements

1. 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 months prior to the expiration date of the permit. Upon a timely and complete application 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.

c) Permit Revisions

1. 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 or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.

2. 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 thirty (30) days in advance of the transfer.

d) Acid Rain Program Requirements

- 1. 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.
- 2. The permittee shall comply with all requirements and conditions of the Title IV, Acid Rain Permit (A-98-016, ATTACHMENT C) and the Phase II permit application (including the Phase II NO_x compliance plan and averaging plan, if applicable) 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.

e) Emergency Provisions

- 1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a) An emergency occurred and the permittee can identify the cause of the emergency;
 - b) The permitted facility was at the time being properly operated;
 - c) 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,
 - d) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of Regulation 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
- 2. Emergency conditions listed in General Condition (e)1., above, are in addition to any emergency or upset provision(s) contained in an applicable requirement.
- 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

f) Risk Management Provisions under CAA 112(r)

1. The permittee shall comply with all applicable requirements of 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 3346 Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information by the division or the U.S. EPA.

g) Ozone Depleting Substances

- 1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provide for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards of recycling and recovery equipments contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined in 40 CFR 82.152) shall comply with the record keeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- 2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozonedepleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None