

AIR EMISSION PERMIT NO. 13700028- 008
Major Amendment

IS ISSUED TO

CITY OF VIRGINIA
Laurentian Energy Authority LLC
Virginia Department of Public Utilities
618 2nd Street South
Virginia, St. Louis County, MN 55792

The emission units, control equipment and emission stacks at the stationary source authorized in this permit amendment are as described in the Permit Applications Table.

This permit amendment supersedes Air Emission Permit No. 13700028-007, and authorizes the Permittee to operate and modify the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220, and as such as are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: Federal; Pt 70/Major for NSR

Operating Permit Issue Date: June 30, 2005

Major Amendment Issue Date: July 9, 2010

Expiration Date: June 30, 2010* – Title I Conditions do not expire.

* The Permittee may continue to operate this facility after the expiration date of the permit, per the provision under Minn. R. 7007.0450, subp. 3. (Title V Reissuance Application was timely.)

Don Smith, P.E., Manager
Air Quality Permits Section
Industrial Division

for Paul Eger
Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit Reissuance	1/29/2004	005
Major Amendment	9/20/2006	006
Administrative Amendment	6/27/2008	007
Major Amendment	7/18/2008	008

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Facility Description

Amendment Description

Table A: Limits and Other Requirements

Table B: Submittals

Appendices:

Appendix I: Insignificant Activities

Appendix II: Stack Parameters Used in Modeling

NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	651-296-6300
Outside Metro Area	1-800-657-3864
TTY	651-282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

The City of Virginia Department of Public Utilities is a citizen-owned utility providing steam and electricity to businesses and residents of the local Virginia area. The department has the potential to operate any combination of four boilers using coal and/or natural gas and/or wood as fuel. Boiler 7 (EU 001) can burn both coal, sub-bituminous or bituminous and natural gas; Boiler 9 (EU 003) can burn only coal and Boiler 10 (EU 004) is a natural gas fired boiler. Boiler 11 (EU 006) is a wood fired boiler to be used for district heating and electric generation. There is an additional boiler, Boiler 8, located at the facility but is physically disconnected from the Utility System. Pollution control equipment consists of wet scrubbers, bag houses, and/or electrostatic precipitators in combination with good combustion practices.

AMENDMENT DESCRIPTION

Permit Action 006

A condition of the reissuance permit, Permit No. 13700028-005, was that the Permittee was to submit pressure drop ranges for each baghouse in the form of a major amendment application. This permit incorporates those pressure drop ranges for the material handling baghouses.

This permit amendment also incorporates limits based on conditions during previous stack emission testing. Requirements are set for the operation of the electrostatic precipitators, and frequency of on-going testing is specified.

Lastly, some changes were made in the database for the facility description. Some of the stack parameters and location were changed, and some of the newly permitted equipment has been more completely described because vendors have now been chosen. Because some of the stack parameters changed, the Permittee re-performed the computer dispersion modeling done previously for the issuance of the previous permit. That dispersion modeling shows no violation of ambient standards.

Permit Action 007

This permit amendment allows for RATA test extension deadlines for several monitoring units. This administrative amendment does not change facility's permit requirements.

Permit Action 008

This permit action is a major amendment to revise the CO BACT limit on the wood fired boiler (EU 006). The limit will be increased from 0.3 to 0.58 lb/MMBtu and the operating hours for the boiler will be limited to 7,560 hours/year to avoid crossing the EAW/AERA threshold for CO.

Several reopenings were also incorporated to revise limits based on performance tests. The PTE of the facility was recalculated and several citations were updated according to current MPCA policy.

The U.S. District Court of Appeals for the DC Circuit vacated the National Emissions Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial and Institutional Boilers and Process Heaters (Subpart DDDDD) on July 30, 2007. Boilers or process heaters installed after that date are subject to the requirements of Section 112(g) of the Clean Air Act. The facility has submitted a 112(j) determination to the MPCA. This information will be used when a new standard is promulgated. Specific NESHAP DDDDD requirements have been removed from the permit.

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-1**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item: Total Facility

What to do	Why to do it
SOURCE-SPECIFIC REQUIREMENTS	hdr
Permit Appendices: This permit contains two appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendices.	Minn. R. 7007.0800, subp. 2
Permanently seal or remove SV 007 and SV 008. Equipment Removal and/or Dismantlement: due 90 days after Permit Issuance	Minn. R. 7007.0800, subp. 2
DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NSR	hdr
These requirements apply if a reasonable possibility (RP) as defined in 40 CFR Section 52.21(r)(6)(vi) exists that a proposed project, analyzed using the actual-to-projected-actual (ATPA) test (either by itself or as part of the hybrid test at Section 52.21(a)(2)(iv)(f)) and found to not be part of a major modification, may result in a significant emissions increase (SEI). If the ATPA test is not used for the project, or if there is no RP that the proposed project could result in a SEI, these requirements do not apply to that project. The Permittee is only subject to the Preconstruction Documentation requirement for a project where a RP occurs only within the meaning of Section 52.2(r)(6)(vi)(a). Even though a particular modification is not subject to New Source Review (NSR), or where there isn't a RP that a proposed project could result in a SEI, a permit amendment, recordkeeping, or notification may still be required by Minn. R. 7007.1150 - 7007.1500.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following: 1. Project description 2. Identification of any emission unit (EU) whose emissions of an NSR pollutant could be affected 3. Pre-change potential emissions of any affected existing EU, and the projected post-change potential emissions of any affected existing or new EU. 4. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded due to increases not associated with the modification and that the EU could have accommodated during the baseline period, an explanation of why the amounts were excluded, and any creditable contemporaneous increases and decreases that were considered in the determination. The Permittee shall maintain records of this documentation.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.1200, subp. 4; Minn. R. 7007.0800, subps. 4 & 5
The Permittee shall monitor the actual emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using the ATPA test, and the potential emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using potential emissions in the hybrid test. The Permittee shall calculate and maintain a record of the sum of the actual and potential (if the hybrid test was used in the analysis) emissions of the regulated pollutant, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit of any unit associated with the project.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

<p>The Permittee must submit a report to the Agency if the annual summed (actual, plus potential if used in hybrid test) emissions differ from the preconstruction projection and exceed the baseline actual emissions by a significant amount as listed at 40 CFR Section 52.21(b)(23). Such report shall be submitted to the Agency within 60 days after the end of the year in which the exceedances occur. The report shall contain:</p> <p>a. The name and ID number of the facility, and the name and telephone number of the facility contact person</p> <p>b. The annual emissions (actual, plus potential if any part of the project was analyzed using the hybrid test) for each pollutant for which the preconstruction projection and significant emissions increase are exceeded.</p> <p>c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection.</p>	<p>Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5</p>
OPERATIONAL REQUIREMENTS	hdr
The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.	<p>40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080</p>
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	<p>Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)</p>
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subps. 14 and 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, and/or B.	Minn. R. ch. 7017
<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test</p> <p>Performance Test Plan: due 30 days before each Performance Test</p> <p>Performance Test Pre-test Meeting: due 7 days before each Performance Test</p> <p>Performance Test Report: due 45 days after each Performance Test</p> <p>Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.</p>	<p>Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4; Minn. R. 7017.2035, subps. 1-2</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.	Minn. R. 7017.2025, subp. 3
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: The Permittee shall calibrate all required monitoring equipment at least once every 12 months (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, and/or B, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
MODELING REQUIREMENTS	hdr
Parameters Used in Modeling: The stack heights, emission rates, and other parameters used in the dispersion modeling are listed in the Appendix of this permit. The Permittee must submit to the Commissioner for approval any revisions of these parameters and must wait for a written approval before making such changes. The information submitted must include, at a minimum, the locations, heights and diameters of the stacks, locations and dimensions of nearby buildings, the velocity and temperatures of the gases emitted, and the emission rates. The plume dispersion characteristics due to the revisions of the information must be equivalent to or better than the dispersion characteristics modeled. The Permittee shall demonstrate this equivalency in the proposal. If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must remodel.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
For changes that do not involve an increase in an emission rate and that do not require a permit amendment, this proposal must be submitted as soon as practicable, but no less than 60 days before beginning actual construction of the stack or associated emission unit. For changes involving increases in emission rates and that require a minor permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before beginning actual construction of the stack or associated emission unit. For changes involving increases in emission rates and that require a permit amendment other than a minor amendment, the proposal must be submitted with the permit application.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
RECORDKEEPING	hdr
Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. These records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.	Minn. R. 7007.1200, subp. 4
REPORTING/SUBMITTALS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-4**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

<p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.</p>	Minn. R. 7019.1000, subp. 3
<p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.</p>	Minn. R. 7019.1000, subp. 2
<p>Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.</p>	Minn. R. 7019.1000, subp. 1
<p>Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. 	Minn. R. 7019.1000, subp. 1
<p>Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.</p>	Minn. R. 7007.1150 - 7007.1500
<p>For changes that do not require a permit amendment:</p> <ul style="list-style-type: none"> - The Permittee shall submit a Part 1 MACT application within 30 days of startup of any 112(j) affected source. The application shall meet the requirements of 40 CFR Section 63.53(a). - The Permittee shall submit a Part 2 MACT application within 90 days of startup of any 112(j) affected source. The application shall meet the requirements of 40 CFR Section 63.53(b). <p>112(j) affected source is defined in 40 CFR Section 63.51. As of permit issuance, 112(j) affected sources include industrial, commercial, and institutional boilers and process heaters; brick and structural clay products manufacturing; clay ceramics manufacturing.</p>	40 CFR Section 63.52(b)(1) and 63.52(e)(1)
<p>Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).</p>	Minn. R. 7007.1400, subp. 1(H)
<p>Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.</p>	Minn. R. 7019.3000 - 7019.3100
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	Minn. R. 7002.0005 - 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: GP 001 Boilers 7 and 9 SO2 limits**Associated Items:** EU 001 Boiler #7

EU 003 Boiler #9

MR 001 Boiler 7 CO2 (bias adjustment)

MR 002 Boiler 7 SO2

MR 003 Boiler 9 CO2 (bias adjustment)

MR 004 Boiler 9 SO2

SV 002 Boiler No. 7

SV 003 Boiler No. 9

What to do	Why to do it
Sulfur Dioxide: less than or equal to 2.5 lbs/million Btu heat input using 1-Hour Average when only one of the emission units in GP 001 is combusting coal. This limit also satisfies the limit of 4.0 lbs/MMBtu in Minn. R. 7011.0510, subp. 1.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080; Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 1.60 lbs/million Btu heat input using 1-Hour Average when both EU 001 and EU 003 are combusting coal. This SO2 limit applies individually to each emission unit. This limit also satisfies the limit of 4.0 lbs/MMBtu in Minn. R. 7011.0510, subp. 1.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080; Minn. R. 7011.0510, subp. 1
Coal Combustion Monitoring: The Permittee shall record the start and stop dates and times of all coal combustion periods in EU 001 and EU 003. The Permittee may use the data from the SO2 CEM for EU 001 (on SV 002) and the SO2 CEM for EU 003 (on SV 003) to meet this recordkeeping requirement providing the CEM data continuously specifies the time and date. However, when either or both of the CEMs malfunction, the Permittee shall keep a written log of coal combustion in EU 001 and/or EU 003 in place of CEM data, during the CEM malfunction.	Minn. R. 7007.0800, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-6

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: GP 002 Boilers 7, 9, and 10 and makeup air heater NOx cap**Associated Items:** EU 001 Boiler #7

EU 003 Boiler #9

EU 004 Boiler #10

EU 005 Makeup Air Heater

What to do	Why to do it
Nitrogen Oxides: less than 73.08 tons/month using 12-month Rolling Average basis.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000
Recordkeeping: by the 15th day of each month, the Permittee shall record the following information: 1) tons of coal burned in EU 001 during the previous month; 2) tons of coal burned in EU 003 during the previous month; 3) total mmcf (million cubic feet) of natural gas burned in EU 001 during the previous month; 4) total monthly NOx emissions for EU 004 and EU 005 as measured by NOx CEMS. The Permittee shall use these fuel usage records, NOx emissions data, and Equation 1 to determine monthly facility NOx emissions.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 5
By the 15th day of each month the Permittee shall calculate and record the monthly NOx emissions using Equation 1: $\text{NOx emissions} = \text{EF1c(A)} + \text{EF1ng(B)} + \text{EF3c(C)} + y$ EF1c = 0.007 (EU 001 emission factor for coal; tons NOx/ton coal combusted) EF1ng = 0.275 (EU 001 emission factor for natural gas; tons NOx/mmcf natural gas combusted) EF3c = 0.007 (EU 003 emission factor for coal; tons NOx/ton coal combusted) A = tons of coal burned in EU 001 during the month B = mmcf natural gas burned in EU 001 during the month C = tons of coal burned in EU 003 during the month y = monthly total EU 004 and EU 005 NOx emissions determined by NOx CEMS By the 15th day of each month the Permittee shall calculate and record the monthly 12-month rolling average NOx emission rate. The monthly 12-month rolling average shall be determined by summing the monthly NOx emission rates (determined using the above equation) for the previous 12 months, and dividing by 12.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4(B)
Revision of Equation 1 Emission Factors: All Equation 1 emission factors shall be revised based on the results of each performance test. The Permittee shall use the most-recent performance test-revised emission factor for calculating emissions, upon receipt of written notification from the MPCA that the performance testing results were valid. For the interim period prior to receipt of any written MPCA notification, the Permittee shall use the factors defined above for Equation 1 in this permit.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: GP 003 Material Handling Baghouses**Associated Items:** CE 010 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 014 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 007 Enclosed Wood Unloading

EU 009 Wood Conveyor System

EU 010 Wood Transfer/Metering Bin

What to do	Why to do it
Total Particulate Matter: greater than or equal to 99.0 percent control efficiency . This limit applies to each unit individually.	Minn. R. 7011.0070, subp. 1(A)
PM < 10 micron: greater than or equal to 93.0 percent control efficiency . This limit applies to each unit individually.	Minn. R. 7011.0070, subp. 1(A)
Opacity: less than or equal to 0 percent . This limit applies individually to each unit in the group.	Title I Condition: 40 CFR Section 52.21 BACT Limit
Visible Emissions: The Permittee shall check the fabric filter stacks for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filters, once each day of operation.	Title I Condition: 40 CFR Section 52.21 BACT Limit
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit. Pressure Drop Range for CE010: 2 to 6 inches water gauge CE013: 2 to 6 inches water gauge CE014: 2 to 6 inches water gauge	Title I Condition: 40 CFR Section 52.21 BACT Limit
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment when the emission unit is in operation.	Title I Condition: 40 CFR Section 52.21 BACT Limit
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 and 14
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
PERFORMANCE TESTING	hdr
Performance Test: due before end of each 60 months starting 10/03/2007. Testing shall be performed for PM10 from one of the material handling baghouses with the highest calculated input grain loading.	Title I Condition: 40 CFR Section 52.21 BACT Limit
Limits are set under EU's 007, 009, & 010.	

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-8**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: GP 004 SO₂, CO, NO_x, CO₂ and O₂ Monitors**Associated Items:** MR 001 Boiler 7 CO₂ (bias adjustment)MR 002 Boiler 7 SO₂MR 003 Boiler 9 CO₂ (bias adjustment)MR 004 Boiler 9 SO₂MR 005 Boiler 10 NO_xMR 010 Boiler 10 CO₂ (bias adjustment)MR 011 Boiler 11 (Wood Fired) NO_x

MR 013 Boiler 11 (Wood Fired) CO

MR 014 Boiler 11 (Wood Fired) O₂ (bias adjustment)

What to do	Why to do it
ADDITIONAL REQUIREMENTS ARE AT THE INDIVIDUAL MONITOR LEVEL	hdr
Emissions Monitoring: The owner or operator shall use a CEMS to measure emissions. Monitoring requirements are located at each individual monitor.	Minn. R. 7017.1006
Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. No data record is required for the diluent monitors. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Monitoring Data: All data points collected by a CEMS shall be used to calculate individual hourly emission averages unless another applicable requirement requires more frequent averaging. In order for an hour of data to be considered, it must contain the following minimum number of data points: A. four data points, equally spaced, if the emission unit operated during the entire hour; B. two data points, at least 15 minutes apart, during periods of monitor calibration or routine maintenance; C. one data point if the emission unit operated for 15 minutes or less during the hour.	Minn. R. 7017.1160, subp. 1 and 2
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR Part 60, Appendix F, section 3. The plan shall include the manufacturer's spare parts list for each CEMS and require that those parts be kept at the facility unless the Commissioner gives written approval to exclude specific spare parts from the list.	Minn. R. 7017.1170, subp. 2
Requirement: CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily according to the procedures listed in Minn. R. 7017.1170, subp. 3(A) and 40 CFR Section 60.13(d)(1) for each pollutant concentration, each diluent monitor, and for each monitor range. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. If no span value is specified in the applicable requirement or in a compliance document, the Permittee shall use a span value equivalent to 1.5 times the emission limit. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 3
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).	Minn. R. 7017.1180, subp. 2
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.1130

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-9**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: GP 005 Opacity Monitors**Associated Items:** MR 006 Boiler 7 Opacity

MR 008 Boiler 9 Opacity

MR 012 Boiler 11 (Wood Fired) Opacity

What to do	Why to do it
REQUIREMENTS FOR ALL OPACITY MONITORS	hdr
ADDITIONAL REQUIREMENTS AT THE INDIVIDUAL MONITOR LEVEL	hdr
Continuous Operation: COMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A COMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	40 CFR Section 60.13(e); Minn. R. 7017.1090, subp. 1;
QA Plan Required: Implement a written quality assurance plan which covers each COMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain the written procedures listed in Minn. R. 7017.1210, subp. 1.	Minn. R. 7017.1210, subp. 1
COMS QA/QC: The owner or operator of an affected facility is subject to the performance specifications listed in 40 CFR pt. 60, Appendix B and shall operate, calibrate, and maintain each COMS according to the QA/QC procedures in Minn. R. 7017.1210.	40 CFR Section 60.13(a); Minn. R. 7017.1210
COMS Daily Calibration Drift Check: The Permittee must automatically, intrinsic to the opacity monitor, check the zero and upscale (span) calibration drifts at least once daily. The acceptable range is as defined in 40 CFR pt. 60, Appendix B, PS-1. The span value shall be between 60% and 80%. For COMS without automatic zero adjustments, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments. For COMS with automatic zero adjustments, the optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition as specified in 40 CFR 60.13(d)(2).	40 CFR Section 60.13(d)(1-2); Minn. R. 7017.1210, subp. 2
Attenuator Calibration: The Permittee shall perform an attenuator calibration in accordance with Minn. R. 7017.1210, subp. 4.	Minn. R. 7017.1210, subp. 4
All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data for each successive 6-minute period.	40 CFR Section 60.13(e)(1); 40 CFR Section 60.13(h); Minn. R. 7017.1200, subp. 1, 2 & 3
Recordkeeping: The owner or operator must retain records of all COMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7017.1130
COMS Calibration Error Audit: due before end of each calendar half-year following COMS Certification Test or 06/30/05. Conduct three point calibration error audits at least 3 months apart but no greater than 8 months apart. Conduct audits in accordance with Minn. R. 7017.1210, subp. 3.	Minn. R. 7017.1210, subp. 3

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-10**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: EU 001 Boiler #7

Associated Items: CE 001 Centrifugal Collector - Medium Efficiency

CE 002 Electrostatic Precipitator - High Efficiency

GP 001 Boilers 7 and 9 SO₂ limits

GP 002 Boilers 7, 9, and 10 and makeup air heater NO_x cap

MR 001 Boiler 7 CO₂ (bias adjustment)

MR 002 Boiler 7 SO₂

MR 006 Boiler 7 Opacity

SV 002 Boiler No. 7

What to do	Why to do it
EMISSION AND FUEL TYPE LIMITS	hdr
See GP001 table for sulfur dioxide emission limits.	
Total Particulate Matter: less than or equal to 0.60 lbs/million Btu heat input	Minn. R. 7011.0510, subp. 1
Particulate Matter < 10 micron: less than or equal to 0.30 lbs/million Btu heat input	Title I Condition: 40 CFR 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20 percent or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent.	40 CFR Section 64.3; Minn. R. 7011.0510, subp. 2; Minn. R. 7017.0200
Fuels Allowed: natural gas, subbituminous coal, and bituminous coal.	Minn. R. 7007.0800, subp. 2
RECORDKEEPING	hdr
Fuel Usage Recordkeeping: by the 15th day of each month, the Permittee shall record the EU 001 fuel usage (for each permitted fuel) for the previous calendar month. The monthly values shall be used in the NO _x emissions calculation equation (Equation 1) in the total facility section of this permit.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 5
PERFORMANCE TESTING	hdr
Performance Test: due before end of each 60 months starting 12/09/2005 to measure Total Particulate Matter emissions while burning coal. The Total Particulate Matter emissions tests shall be conducted at an interval not to exceed 60 months between test dates.	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 12/09/2005 for PM ₁₀ emissions.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
Performance Test: due before end of each 24 months starting 01/01/2007 to measure NO _x emissions while burning coal, and while burning natural gas. The NO _x tests are for the purpose of determining the NO _x emission factor (EF ₁) for use in Equation 1 in the GP002 section of the permit. Initial test is due prior to 1/1/2007.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000;
Boiler Alternative Operating Conditions for Performance Testing: Alternative Operating Conditions during testing are defined as 90% to 100% of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing. In no case will the new operating rate limit be higher than allowed by an existing permit condition.	Minn. R. 7017.2025, subp. 2(A) and 3(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-11**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

<p>Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:</p> <p>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:</p> <p>(1) If the results of the performance test are greater than 80% of any applicable emission limit for which compliance is demonstrated, then boiler operation will be limited to the tested operating rate.</p> <p>(2) If results are less than or equal to 80% of all applicable emission limits for which compliance is demonstrated, boiler operation will be limited to 110% of the tested operating rate.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, subp. 3(B)
<p>STET (Short Term Emergency and Testing) Operating hours limit:</p> <p>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Maintain documentation of all STET operation to demonstrate compliance with this limit. The boiler must meet emission limits during STET operation.</p>	Minn. R. 7007.0800, subp. 2
<p>STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing:</p> <p>If performance test results demonstrate compliance at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test.</p> <p>If performance test results demonstrate compliance at greater than 80% of any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test.</p> <p>In no case will STET operation be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, subp. 2
<p>The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn. R. 7017.2001-7017.2060.</p>	Minn. R. 7017.2020, subp. 4
CONTINUOUS MONITORING REQUIREMENTS	hdr
<p>Emission Monitoring: The Permittee shall use a COMS on SV 002 to measure opacity emissions from EU 001, upon commencing coal combustion.</p>	Minn. R. 7007.0800, subp. 2
<p>Emissions Monitoring: The Permittee shall use a SO2 CEMS on SV 002 to measure SO2 emissions from EU 001, upon commencing coal combustion.</p>	Minn. R. 7007.0800, subp. 2
SEE CONTROL EQUIPMENT OPERATING PARAMETERS AT THE INDIVIDUAL CE LEVEL	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-12**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: EU 003 Boiler #9**Associated Items:** CE 003 Electrostatic Precipitator - High Efficiency

GP 001 Boilers 7 and 9 SO2 limits

GP 002 Boilers 7, 9, and 10 and makeup air heater NOx cap

MR 003 Boiler 9 CO2 (bias adjustment)

MR 004 Boiler 9 SO2

MR 008 Boiler 9 Opacity

SV 003 Boiler No. 9

What to do	Why to do it
EMISSION AND FUEL LIMITS	hdr
Total Particulate Matter: less than or equal to 0.60 lbs/million Btu heat input	Minn. R. 7011.0510, subp. 1
Particulate Matter < 10 micron: less than or equal to 0.30 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20 percent or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent.	40 CFR Section 64.3; Minn. R. 7011.0510, subp. 2; Minn. R. 7017.0200
Fuels Allowed: subbituminous coal, bituminous coal, and oily cellulose-based sorbents (including oily rags).	Minn. R. 7007.0800, subp. 2
Fuel Usage Limit: The Permittee shall not combust more than 500 pounds per year of oily cellulose-based sorbents (oily rags) in EU 003.	Minn. R. 7007.0800, subp. 2
RECORDKEEPING	hdr
Fuel Usage Recordkeeping: by the 15th day of each month the Permittee shall record the type and quantity of fuels burned in EU 003 during the previous month. The monthly records shall be used in the NOx emission calculation equation (Equation 1) in the total facility section of this permit.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 5
PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 12/09/2005 for PM10 emissions.	Title I Condition: 40 CFR 52.21(k); Minn. R. 7007.3000
Performance Test: due before end of each 60 months starting 12/09/2005 to measure Total Particulate Matter emissions.	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 24 months starting 02/07/2006 to measure NOx emissions while burning coal. The NOx tests are for the purpose of determining the NOx emission factor (EF3) for use in Equation 1 in the GP002 section of the permit.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000;
Boiler Alternative Operating Conditions for Performance Testing: Alternative Operating Conditions during testing are defined as 90% to 100% of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing. In no case will the new operating rate limit be higher than allowed by an existing permit condition.	Minn. R. 7017.2025, subp. 2(A) and 3(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-13**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

<p>Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:</p> <p>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:</p> <p>(1) If the results of the performance test are greater than 80% of any applicable emission limit for which compliance is demonstrated, then boiler operation will be limited to the tested operating rate.</p> <p>(2) If results are less than or equal to 80% of all applicable emission limits for which compliance is demonstrated, boiler operation will be limited to 110% of the tested operating rate.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, subp. 3(B)
<p>STET (Short Term Emergency and Testing) Operating hours limit:</p> <p>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Maintain documentation of all STET operation to demonstrate compliance with this limit. The boiler must meet emission limits during STET operation.</p>	Minn. R. 7007.0800, subp. 2
<p>STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing:</p> <p>If performance test results demonstrate compliance at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test.</p> <p>If performance test results demonstrate compliance at greater than 80% of any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test.</p> <p>In no case will STET operation be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, subp. 2
<p>The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn. R. 7017.2001-7017.2060.</p>	Minn. R. 7017.2020, subp. 4
CONTINUOUS MONITORING REQUIREMENTS	hdr
Emission Monitoring: The Permittee shall use a COMS to measure opacity emissions from EU 003.	Minn. R. 7007.0800, subp. 2
Emissions Monitoring: The Permittee shall use a SO2 CEMS to measure SO2 emissions from EU 003.	Minn. R. 7007.0800, subp. 2
SEE CONTROL EQUIPMENT OPERATING PARAMETERS AT THE INDIVIDUAL CE LEVEL	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-14**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: EU 004 Boiler #10**Associated Items:** CE 004 Modified Furnace or Burner Design

CE 005 Flue Gas Recirculation

CE 006 Low Excess - Air Firing

GP 002 Boilers 7, 9, and 10 and makeup air heater NOx cap

MR 005 Boiler 10 NOx

MR 010 Boiler 10 CO2 (bias adjustment)

SV 004 Natural Gas Boiler 10

What to do	Why to do it
EMISSION AND FUEL TYPE LIMITS	hdr
Total Particulate Matter: less than or equal to 0.030 lbs/million Btu heat input	40 CFR Section 60.42Da(a)(1)
Opacity: less than or equal to 20 percent opacity using 6 Minute Average except for one 6-minute period per hour of not more than 27 percent opacity.	40 CFR Section 60.42Da(b); Minn. R. 7011.0560
Sulfur Dioxide: less than or equal to 0.20 lbs/million Btu heat input using 30-day Rolling Average	40 CFR Section 60.43Da(b)(2); Minn. R. 7011.0560
Nitrogen Oxides: less than or equal to 0.10 lbs/million Btu heat input using 30-day Rolling Average . This requirement satisfies the limit of 0.20 lbs/MMBtu in 40 CFR Section 60.44a(a)(1).	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000; 40 CFR Section 60.44Da(a)(1); Minn. R. 7011.0560
Fuels Allowed: Natural gas only.	Minn. R. 7007.0800, subp 2
CONTINUOUS EMISSIONS MONITORING	hdr
Emissions Monitoring: The Permittee shall use a NOx CEMS to measure NOx emissions from EU 004, and record the output of the system. This requirement ensures compliance with 40 CFR Section 60.49 Da(c).	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000; 40 CFR Section 60.49Da(c); Minn. R. 7011.0560
Emissions Monitoring: The owner or operator shall operate and maintain a CO2 or O2 analyzer at the location of the NOx CEMS, and record the output of the NOx CEMS.	40 CFR Section 60.49Da(d); Minn. R. 7011.0560
RECORDKEEPING	hdr
Recordkeeping: The owner or operator must retain records of all CEMS/COMS monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	40 CFR Section 60.7(f); Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-15**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: EU 006 Boiler #11 (Wood Fired)**Associated Items:** CE 007 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

CE 008 Selective Noncatalytic Reduction for NOX

CE 009 Electrostatic Precipitator - High Efficiency

MR 011 Boiler 11 (Wood Fired) NOx

MR 012 Boiler 11 (Wood Fired) Opacity

MR 013 Boiler 11 (Wood Fired) CO

MR 014 Boiler 11 (Wood Fired) O2 (bias adjustment)

SV 005 Boiler #11 (Wood Fired)

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.025 lbs/million Btu heat input . This limit also satisfies the limit of 0.10 lb/MMBtu specified in 40 CFR Section 60.43b(c)(1).	Title I Condition: 40 CFR Section 52.21(j) BACT Limit; 40 CFR Section 60.43b(c)(1); Minn. R. 7007.3000; Minn. R. 7011.0565
PM < 10 micron: less than or equal to 0.025 lbs/million Btu heat input .	Title I Condition: 40 CFR Section 52.21(j) BACT Limit; Minn. R. 7007.3000
PM < 2.5 micron: less than or equal to 0.025 lbs/million Btu heat input .	Title I Condition: 40 CFR Section 52.21(j) BACT Limit; Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 0.58 lbs/million Btu heat input using 8-hour Block Average . "Eight-hour block average" means the average of all hourly emission rates when the emissions unit is operating over three discrete eight-hour periods beginning at midnight.	Title I Condition: 40 CFR Section 52.21(j) BACT Limit; Minn. R. 7007.3000
Hydrochloric acid: less than or equal to 0.020 lbs/million Btu heat input	Minn. R. 7007.0800, subp. 2
Nitrogen Oxides: less than or equal to 0.15 lbs/million Btu heat input based on a 30-day rolling average.	Title I Condition: 40 CFR Section 52.21(j) BACT Limit; Minn. R. 7007.3000
Mercury: less than or equal to 0.000003 lbs/million Btu heat input	Minn. R. 7007.0800, subp. 2
Opacity: less than or equal to 20 percent based on a 6-minute average, except for one 6-minute period per hour of not more than 27 percent opacity. This limit applies at all times, except during periods of startup, shutdown or malfunction.	40 CFR Section 60.43b(f); Minn. R. 7011.0565
Steam Flow: less than or equal to 111,661 lbs/hour using 8-hour Block Average , unless a new limit is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA- approved performance test where compliance was demonstrated. The new limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change. Readings shall be taken every 15 minutes of operation and used to calculate the 8-Hour Block Average for the wood fired boiler.	Minn. R. 7017.2025, subp. 3
OPERATING LIMITS	hdr
Operating Hours: less than or equal to 7,560 hours/year using 12-month Rolling Sum	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS
A-16

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

<p>Fuel use limited to untreated wood, such as, but not limited to, logging waste, trees, brush, etc.</p> <p>Untreated wood is defined as any wood that has not been subject to any chemical treatment or coating. Examples are:</p> <ol style="list-style-type: none"> 1) untreated residuals from manufacturing processes such as furniture, cabinet, and pallet making and other wood product manufacture; 2) construction waste; 3) urban and park tree trimming and forest residuals; 4) wood from trees downed by storms; 5) trees removed for urban development; 6) trees grown specifically to be used as fuel; and 7) trees removed as part of a timber management plan. 	<p>Minn. R. 7007.0800, subp. 2</p>
<p>At all times, including periods of startup, shutdown, and malfunction, owners or operators shall, to the extent practical, maintain and operate EU 006 (the affected facility), including the associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.</p>	<p>40 CFR Section 60.11(d)</p>
<p>CONTINUOUS MONITORING REQUIREMENTS (Additional requirements at the individual MR level)</p>	<p>hdr</p>
<p>Install, maintain, and operate a continuous monitor to measure the opacity of stack emissions.</p>	<p>40 CFR Section 60.48b(a); Minn. R. 7011.0565</p>
<p>Install, operate and maintain a continuous monitor to measure stack nitrogen oxides emissions. Installation, operation and maintenance shall be in accordance with 40 CFR Section 60.15 and 40 CFR 60, Appendix B.</p> <p>For more specific requirements, see the GP 004 table in this permit.</p>	<p>Title I Condition: 40 CFR Section 52.21 BACT Limit; 40 CFR Section 64.3(d)(2)</p>
<p>Install hardware and software to collect and average CO emissions for EU 006. Equipment Installation: due 90 days after Permit Issuance</p>	<p>Minn. R. 7007.0800, subp. 2</p>
<p>RECORDKEEPING</p>	<p>hdr</p>
<p>Keep all records readily available and on site for a period of 5 years.</p> <p>Maintain relevant records of each startup, shutdown, or malfunction of operation equipment and the occurrence and duration of each malfunction of the required air pollution control and monitoring equipment.</p>	<p>40 CFR Section 60.7(b)</p>
<p>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 or devices; and all other information required by this part recorded in a permanent form suitable for inspection.</p>	<p>40 CFR Section 60.7(f)</p>
<p>Keep records of the type and amount of all fuels burned to demonstrate that all fuel types and mixtures of fuels burned would result in lower emissions of HCl and mercury than the applicable emission limit.</p> <p>If the permittee plans to burn a new type of fuel, the appropriate permit amendment must be received from the MPCA. The HCl emission rate must be recalculated using the equation in Appendix III, based on supplier data or independent fuel analysis.</p>	<p>Minn. R. 7007.0800, subp. 2</p>
<p>Monthly Recordkeeping - Operating Hours. By the 15th of the month, the Permittee shall calculate and record the following:</p> <ol style="list-style-type: none"> 1) The total operating hours for EU 006 for the previous calendar month. 2) The 12 month EU 006 rolling sum of operating hours for the previous 12 month period by summing the monthly operating hours data for the previous 12 months. 	<p>Minn. R. 7007.0800, subp. 2</p>
<p>PERFORMANCE TESTING (Additional requirements at the individual CE level)</p>	<p>hdr</p>
<p>Performance Test: due before end of each year starting 11/19/2009 for PM and PM10 emissions in EU 006.</p>	<p>Title I Condition: 40 CFR 52.21(j) BACT Limit; 40 CFR Section 60.43b(c)(1); Minn. R. 7007.3000; Minn. R. 7011.0565</p>
<p>Performance tests and procedures under 40 CFR Section 60.46b(d) must be followed.</p>	<p>40 CFR Section 60.46b(d-e); Minn. R. 7011.0565</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-17**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

<p>Boiler Alternative Operating Conditions for Performance Testing:</p> <p>Alternative Operating Conditions during testing are defined as 90% to 100% of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, subp. 2(A) and 3(B)
<p>Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:</p> <p>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:</p> <p>(1) If the results of the performance test are greater than 80% of any applicable emission limit for which compliance is demonstrated, then boiler operation will be limited to the tested operating rate.</p> <p>(2) If results are less than or equal to 80% of all applicable emission limits for which compliance is demonstrated, boiler operation will be limited to 110% of the tested operating rate.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, subp. 3(B)
<p>STET (Short Term Emergency and Testing) Operating hours limit:</p> <p>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Maintain documentation of all STET operation to demonstrate compliance with this limit. The boiler must meet emission limits during STET operation.</p>	Minn. R. 7007.0800, subp. 2
<p>STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing:</p> <p>If performance test results demonstrate compliance at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test.</p> <p>If performance test results demonstrate compliance at greater than 80% any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test.</p> <p>In no case will STET operation be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-18**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: EU 007 Enclosed Wood Unloading**Associated Items:** CE 010 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

GP 003 Material Handling Baghouses

SV 006 Enclosed Wood Unloading Area

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 0.0020 grains/dry standard cubic foot	Title I Condition: 40 CFR Section 52.21(j) BACT Limit
Total Particulate Matter: less than or equal to 0.0020 grains/dry standard cubic foot	Title I Condition: 40 CFR Section 52.21(j) BACT Limit
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715
For compliance demonstration, see GP003 requirements table.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-19**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: EU 009 Wood Conveyor System**Associated Items:** GP 003 Material Handling Baghouses

SV 009 Wood Conveyor

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 0.0020 grains/dry standard cubic foot	Title I Condition: 40 CFR Section 52.21(j) BACT Limit
Total Particulate Matter: less than or equal to 0.0020 grains/dry standard cubic foot	Title I Condition: 40 CFR Section 52.21(j) BACT Limit
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715
For compliance demonstration, see GP003 requirements table.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-20**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: EU 010 Wood Transfer/Metering Bin**Associated Items:** GP 003 Material Handling Baghouses

SV 010 Wood Transfer Metering Bin

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 0.0020 grains/dry standard cubic foot	Title I Condition: 40 CFR Section 52.21(j) BACT Limit
Total Particulate Matter: less than or equal to 0.0020 grains/dry standard cubic foot	Title I Condition: 40 CFR Section 52.21(j) BACT Limit
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715
For compliance demonstration, see GP003 requirements table.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-21**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: CE 001 Centrifugal Collector - Medium Efficiency**Associated Items:** EU 001 Boiler #7

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
The Permittee shall operate and maintain CE 001 any time that any process equipment controlled by CE 001 is in operation (EU 001). The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
The Permittee shall operate and maintain the collector in accordance with the O & M Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
RECORDKEEPING AND MONITORING REQUIREMENTS	hdr
Periodic Inspections: At least semiannually, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 & 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-22**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: CE 002 Electrostatic Precipitator - High Efficiency**Associated Items: EU 001 Boiler #7**

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 95 percent control efficiency	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for PM < 10 micron: greater than or equal to 95 percent control efficiency	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
Total Power Input: greater than or equal to 19.0 kilowatts using 3-hour Rolling Average, unless a new minimum total power input is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum power input is required to be set, it will be based on the average power input recorded during the most recent MPCA approved performance test where compliance for Total Particulate Matter and/or Particulate Matter less than 10 microns emissions was demonstrated. If the three-hour rolling average total secondary power input drops below the minimum limit, this shall be reported as a deviation.	40 CFR Section 64.3(d)(3); Minn. R. 7017.2025, subp. 3; Minn. R. 7007.0800, subp. 14
The Permittee shall operate and maintain the electrostatic precipitator (ESP) any time that any process equipment controlled by the ESP is in operation (EU 001), except when burning only natural gas. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
MONITORING AND RECORDKEEPING	hdr
Install hardware and software to collect and average total power input for CE 002. Equipment Installation: due 90 days after Permit Issuance	Minn. R. 7007.0800, subp. 2
Annual Inspections: At least once per calendar year, or more frequently if required by the manufacturer, the Permittee shall inspect the control equipment components not covered by the quarterly inspections. This includes, but is not limited to, components that are not subject to wear or plugging including structural components, housings, and hoods. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 4, 5 and 14
Annual Calibration: The Permittee shall calibrate the total power input monitor at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - any recorded operating parameter is outside the required operating range/level (e.g., total secondary voltage); or - the ESP or any of its components are found during the inspections to need repair. Corrective actions shall return operation to within the permitted range/level and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the ESP. The Permittee shall keep a record of the type and date of any corrective action taken for the ESP.	Minn. R. 7007.0800, subp. 4, 5 and 14
Operation and Maintenance of ESP: The Permittee shall operate and maintain the ESP in accordance with the O & M Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and review by MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-23**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: CE 003 Electrostatic Precipitator - High Efficiency**Associated Items: EU 003 Boiler #9**

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 95 percent control efficiency	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for PM < 10 micron: greater than or equal to 95 percent control efficiency	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
Total Power Input: greater than or equal to 19.0 kilowatts using 3-hour Rolling Average, unless a new minimum total power input is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum power input is required to be set, it will be based on the average power input recorded during the most recent MPCA approved performance test where compliance for Total Particulate Matter and/or Particulate Matter less than 10 microns emissions was demonstrated. If the three-hour rolling average total secondary power input drops below the minimum limit, this shall be reported as a deviation.	40 CFR Section 64.3(d)(3); Minn. R. 7017.2025, subp. 3; Minn. R. 7007.0800, subp. 14
The Permittee shall operate and maintain the electrostatic precipitator (ESP) any time that any process equipment controlled by the ESP is in operation (EU 003), except when burning only natural gas. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
MONITORING AND RECORDKEEPING	hdr
Install hardware and software to collect and average total power input for CE 003. Equipment Installation: due 90 days after Permit Issuance	Minn. R. 7007.0800, subp. 2
Annual Inspections: At least once per calendar year, or more frequently if required by the manufacturer, the Permittee shall inspect the control equipment components not covered by the quarterly inspections. This includes, but is not limited to, components that are not subject to wear or plugging including structural components, housings, and hoods. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 4, 5 and 14
Annual Calibration: The Permittee shall calibrate the total power input monitor at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - any recorded operating parameter is outside the required operating range/level (e.g., total secondary voltage); or - the ESP or any of its components are found during the inspections to need repair. Corrective actions shall return operation to within the permitted range/level and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the ESP. The Permittee shall keep a record of the type and date of any corrective action taken for the ESP.	Minn. R. 7007.0800, subp. 4, 5 and 14
Operation and Maintenance of ESP: The Permittee shall operate and maintain the ESP in accordance with the O & M Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and review by MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-24**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: CE 007 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones**Associated Items:** EU 006 Boiler #11 (Wood Fired)

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
The Permittee shall operate and maintain CE 007 any time that any process equipment controlled by CE 007 is in operation (EU 006). The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
The Permittee shall operate and maintain the collector in accordance with the O & M Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
RECORDKEEPING AND MONITORING REQUIREMENTS	hdr
Periodic Inspections: At least semiannually, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 & 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-25

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: CE 008 Selective Noncatalytic Reduction for NOX**Associated Items:** EU 006 Boiler #11 (Wood Fired)

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
The Permittee shall operate and maintain CE 008 any time that any process equipment controlled by CE 008 is in operation (EU 006). The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
The Permittee shall operate and maintain the SNCR in accordance with the O & M Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
Ammonia Slip: Limited to less than or equal to 25 ppm. If the ammonia slip exceeds this level, the SNCR system shall be adjusted to reduce the ammonia slip to less than 25 ppm, or shut down until repairs are made and normal operating conditions are achieved. Compliance shall be determined by monitoring the injection temperature and reagent feed rate. The minimum temperature window and maximum feed rate shall be determined by the performance testing required below.	Minn. R. 7007.0800, subp. 2
Injection Temperature: greater than or equal to 80 degrees Fahrenheit using 3-hour Block Average, unless a new limit is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA- approved performance test where compliance was demonstrated. The new limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change.	Minn. R. 7017.2025, subp. 3
Maximum Urea Feed Rate: less than or equal to 3.1 gallons/hr using 3-hour Block Average, unless a new limit is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change.	Minn. R. 7017.2025, subp. 3
The SNCR system will be adjusted or may be shut down when the ammonia slip exceeds the limit set above, until such time as the system is returned to normal operation.	Minn. R. 7007.0800, subp. 2
Performance Test: due before end of each 24 months starting 11/19/2009 for Ammonia Slip in EU 006 Wood Fired Boiler. A PM10 performance test must also be conducted simultaneously with the Ammonia Slip Test.	Minn. R. 7007.0800, subp. 2
RECORDKEEPING AND MONITORING REQUIREMENTS	hdr
Install hardware and software to track steam flow and urea injection for EU 006/CE 008. Install an alarm system on EU 006/CE 008 to alert operators when the urea injection rate is approaching the limit so operators can respond by manually reducing the flow rate. Equipment Installation: due 90 days after Permit Issuance	Minn. R. 7007.0800, subp. 2
Recordkeeping of Urea Feed Rate: The Permittee shall record the time and date of each feed rate reading and whether or not the recorded feed rate was within the range specified in this permit.	Title I Condition: 40 CFR 52.21(j) BACT Limit; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 & 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording the Urea Feed Rate as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored SNCR is in operation.	Minn. R. 7007.0800, subp. 4
Periodic Inspections: At least semiannually, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 & 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-26**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:

- The recorded feed rate is outside the required operating range; or
- The SNCR or any of its components are found during the inspections to need repair.

Corrective actions shall return the Urea feed rate to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O&M Plan for the SNCR. The Permittee shall keep a record of the type and date of any corrective action taken.

Minn. R. 7007.0800, subps. 4, 5 & 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-27**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: CE 009 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 006 Boiler #11 (Wood Fired)

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for PM < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
Total Power Input: greater than or equal to 46.1 kilowatts using 3-hour Rolling Average , unless a new minimum total power input is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum power input is required to be set, it will be based on the average power input recorded during the most recent MPCA approved performance test where compliance for Total Particulate Matter and/or Particulate Matter less than 10 microns emissions was demonstrated. If the three-hour rolling average total secondary power input drops below the minimum limit, this shall be reported as a deviation.	Minn. R. 7017.2025, subp. 3; Minn. R. 7007.0800, subp. 14
The Permittee shall operate and maintain the electrostatic precipitator (ESP) any time that any process equipment controlled by the ESP is in operation (EU 006). The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000
MONITORING AND RECORDKEEPING	hdr
Annual Inspections: At least once per calendar year, or more frequently if required by the manufacturer, the Permittee shall inspect the control equipment components not covered by the quarterly inspections. This includes, but is not limited to, components that are not subject to wear or plugging including structural components, housings, and hoods. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 4, 5 and 14
Annual Calibration: The Permittee shall calibrate the total power input monitor at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - any recorded operating parameter is outside the required operating range/level (e.g., total secondary voltage); or - the ESP or any of its components are found during the inspections to need repair. Corrective actions shall return operation to within the permitted range/level and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the ESP. The Permittee shall keep a record of the type and date of any corrective action taken for the ESP.	Minn. R. 7007.0800, subp. 4, 5 and 14
Operation and Maintenance of ESP: The Permittee shall operate and maintain the ESP in accordance with the O & M Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and review by MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Virginia Dept of Public Utilities
Permit Number: 13700028 - 008

Subject Item: FS 005 Wood Ash Loadout

What to do	Why to do it
Ash shall be wetted prior to loadout.	Title I Condition: 40 CFR Section 52.21(k) Ambient Impacts Analysis

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Virginia Dept of Public Utilities
Permit Number: 13700028 - 008

Subject Item: FS 006 Coal Fly Ash Loadout

What to do	Why to do it
Ash shall be wetted prior to loadout.	Title I Condition: 40 CFR Section 52.21(k) Ambient Impacts Analysis

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Virginia Dept of Public Utilities
Permit Number: 13700028 - 008

Subject Item: FS 009 Truck Traffic

What to do	Why to do it
Under dry pavement conditions, if the temperature is less than 32 degrees F, sweeping of all traffic areas is required after every 32 trucks.	Title I Condition: 40 CFR Section 52.21(k), Ambient Impacts Analysis
Under dry pavement conditions, if the temperature is greater than 32 degrees F, sweeping and flushing are required after every 32 trucks.	continued from above
Sweeping and/or flushing is not required if the pavement is wet, or snow or ice covered.	continued from above

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-31**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: MR 001 Boiler 7 CO2 (bias adjustment)**Associated Items:** CM 001 Boiler 7: 2.5 lbs SO2/mmBtu, EU001, 1-hr ave.

CM 003 Boiler 7 & 9: 1.6 lbs SO2/mmBtu, EU001 & EU003, 1-hr ave.

EU 001 Boiler #7

GP 001 Boilers 7 and 9 SO2 limits

GP 004 SO2, CO, NOx, CO2 and O2 Monitors

What to do	Why to do it
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test for MR001. A RATA is not required in any calendar year if a RATA conducted in the previous year demonstrated a relative accuracy value of less than 15 percent or if the associated emissions unit operated less than 48 hours during the calendar year. If the exception is used, the next RATA shall be conducted during the first half of the following calendar year. RATAs shall be conducted at least 3 months apart according to 40 CFR pt. 60, Appendix F, section 5.1.1.C	Minn. R. 7017.1170, subp. 5
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test, except that a CGA is not required during any calendar half year in which a RATA was performed. The CGAs shall be conducted at least three months apart but no more than eight months apart. A CGA shall be conducted according to the procedures in 40 CFR pt. 60, Appendix F, section 5.1.2. If the monitored emission unit was operated for less than 24 hours during the calendar half year, a CGA is not required for that calendar half year.	Minn. R. 7017.1170, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-32**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: MR 002 Boiler 7 SO2**Associated Items:** CM 001 Boiler 7: 2.5 lbs SO2/mmBtu, EU001, 1-hr ave.

CM 003 Boiler 7 & 9: 1.6 lbs SO2/mmBtu, EU001 & EU003, 1-hr ave.

EU 001 Boiler #7

GP 001 Boilers 7 and 9 SO2 limits

GP 004 SO2, CO, NOx, CO2 and O2 Monitors

What to do	Why to do it
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test for MR002. A RATA is not required in any calendar year if a RATA conducted in the previous year demonstrated a relative accuracy value of less than 15 percent or if the associated emissions unit operated less than 48 hours during the calendar year. If the exception is used, the next RATA shall be conducted during the first half of the following calendar year. RATAs shall be conducted at least 3 months apart according to 40 CFR pt. 60, Appendix F, section 5.1.1.C	Minn. R. 7017.1170, subp. 5
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test, except that a CGA is not required during any calendar half year in which a RATA was performed. The CGAs shall be conducted at least three months apart but no more than eight months apart. A CGA shall be conducted according to the procedures in 40 CFR pt. 60, Appendix F, section 5.1.2. If the monitored emission unit was operated for less than 24 hours during the calendar half year, a CGA is not required for that calendar half year.	Minn. R. 7017.1170, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-33**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: MR 003 Boiler 9 CO2 (bias adjustment)**Associated Items:** CM 002 Boiler 9: 2.5 lbs SO2/mmBtu, EU003, 1-hr ave.

CM 003 Boiler 7 & 9: 1.6 lbs SO2/mmBtu, EU001 & EU003, 1-hr ave.

EU 003 Boiler #9

GP 001 Boilers 7 and 9 SO2 limits

GP 004 SO2, CO, NOx, CO2 and O2 Monitors

What to do	Why to do it
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test for MR003. A RATA is not required in any calendar year if a RATA conducted in the previous year demonstrated a relative accuracy value of less than 15 percent or if the associated emissions unit operated less than 48 hours during the calendar year. If the exception is used, the next RATA shall be conducted during the first half of the following calendar year. RATAs shall be conducted at least 3 months apart according to 40 CFR pt. 60, Appendix F, section 5.1.1.C	Minn. R. 7017.1170, subp. 5
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test, except that a CGA is not required during any calendar half year in which a RATA was performed. The CGAs shall be conducted at least three months apart but no more than eight months apart. A CGA shall be conducted according to the procedures in 40 CFR pt. 60, Appendix F, section 5.1.2. If the monitored emission unit was operated for less than 24 hours during the calendar half year, a CGA is not required for that calendar half year.	Minn. R. 7017.1170, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-34**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: MR 004 Boiler 9 SO2**Associated Items:** CM 002 Boiler 9: 2.5 lbs SO2/mmBtu, EU003, 1-hr ave.

CM 003 Boiler 7 & 9: 1.6 lbs SO2/mmBtu, EU001 & EU003, 1-hr ave.

EU 003 Boiler #9

GP 001 Boilers 7 and 9 SO2 limits

GP 004 SO2, CO, NOx, CO2 and O2 Monitors

What to do	Why to do it
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test for MR004. A RATA is not required in any calendar year if a RATA conducted in the previous year demonstrated a relative accuracy value of less than 15 percent or if the associated emissions unit operated less than 48 hours during the calendar year. If the exception is used, the next RATA shall be conducted during the first half of the following calendar year. RATAs shall be conducted at least 3 months apart according to 40 CFR pt. 60, Appendix F, section 5.1.1.C	Minn. R. 7017.1170, subp. 5
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test, except that a CGA is not required during any calendar half year in which a RATA was performed. The CGAs shall be conducted at least three months apart but no more than eight months apart. A CGA shall be conducted according to the procedures in 40 CFR pt. 60, Appendix F, section 5.1.2. If the monitored emission unit was operated for less than 24 hours during the calendar half year, a CGA is not required for that calendar half year.	Minn. R. 7017.1170, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-35

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: MR 005 Boiler 10 NOx**Associated Items:** CM 004 Boiler 10: 0.105 lbs NOx/mmBtu, EU004, 30 DRA

EU 004 Boiler #10

GP 004 SO2, CO, NOx, CO2 and O2 Monitors

What to do	Why to do it
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test for MR005. A RATA is not required in any calendar year if a RATA conducted in the previous year demonstrated a relative accuracy value of less than 15 percent or if the associated emissions unit operated less than 48 hours during the calendar year. If the exception is used, the next RATA shall be conducted during the first half of the following calendar year. RATAs shall be conducted at least 3 months apart according to 40 CFR pt. 60, Appendix F, section 5.1.1.C	Minn. R. 7017.1170, subp. 5
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test, except that a CGA is not required during any calendar half year in which a RATA was performed. The CGAs shall be conducted at least three months apart but no more than eight months apart. A CGA shall be conducted according to the procedures in 40 CFR pt. 60, Appendix F, section 5.1.2. If the monitored emission unit was operated for less than 24 hours during the calendar half year, a CGA is not required for that calendar half year.	Minn. R. 7017.1170, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-36**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: MR 010 Boiler 10 CO2 (bias adjustment)**Associated Items:** CM 004 Boiler 10: 0.105 lbs NOx/mmBtu, EU004, 30 DRA

EU 004 Boiler #10

GP 004 SO2, CO, NOx, CO2 and O2 Monitors

What to do	Why to do it
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test for MR010. A RATA is not required in any calendar year if a RATA conducted in the previous year demonstrated a relative accuracy value of less than 15 percent or if the associated emissions unit operated less than 48 hours during the calendar year. If the exception is used, the next RATA shall be conducted during the first half of the following calendar year. RATAs shall be conducted at least 3 months apart according to 40 CFR pt. 60, Appendix F, section 5.1.1.C	Minn. R. 7017.1170, subp. 5
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test, except that a CGA is not required during any calendar half year in which a RATA was performed. The CGAs shall be conducted at least three months apart but no more than eight months apart. A CGA shall be conducted according to the procedures in 40 CFR pt. 60, Appendix F, section 5.1.2. If the monitored emission unit was operated for less than 24 hours during the calendar half year, a CGA is not required for that calendar half year.	Minn. R. 7017.1170, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-37**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: MR 011 Boiler 11 (Wood Fired) NOx**Associated Items:** EU 006 Boiler #11 (Wood Fired)GP 004 SO₂, CO, NO_x, CO₂ and O₂ Monitors

What to do	Why to do it
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test for MR011. A RATA is not required in any calendar year if a RATA conducted in the previous year demonstrated a relative accuracy value of less than 15 percent or if the associated emissions unit operated less than 48 hours during the calendar year. If the exception is used, the next RATA shall be conducted during the first half of the following calendar year. RATAs shall be conducted at least 3 months apart according to 40 CFR pt. 60, Appendix F, section 5.1.1.C	Minn. R. 7017.1170, subp. 5
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test, except that a CGA is not required during any calendar half year in which a RATA was performed. The CGAs shall be conducted at least three months apart but no more than eight months apart. A CGA shall be conducted according to the procedures in 40 CFR pt. 60, Appendix F, section 5.1.2. If the monitored emission unit was operated for less than 24 hours during the calendar half year, a CGA is not required for that calendar half year.	Minn. R. 7017.1170, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-38**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: MR 013 Boiler 11 (Wood Fired) CO**Associated Items:** EU 006 Boiler #11 (Wood Fired)GP 004 SO₂, CO, NO_x, CO₂ and O₂ Monitors

What to do	Why to do it
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test for MR013. A RATA is not required in any calendar year if a RATA conducted in the previous year demonstrated a relative accuracy value of less than 15 percent or if the associated emissions unit operated less than 48 hours during the calendar year. If the exception is used, the next RATA shall be conducted during the first half of the following calendar year. RATAs shall be conducted at least 3 months apart according to 40 CFR pt. 60, Appendix F, section 5.1.1.C	Minn. R. 7017.1170, subp. 5
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test, except that a CGA is not required during any calendar half year in which a RATA was performed. The CGAs shall be conducted at least three months apart but no more than eight months apart. A CGA shall be conducted according to the procedures in 40 CFR pt. 60, Appendix F, section 5.1.2. If the monitored emission unit was operated for less than 24 hours during the calendar half year, a CGA is not required for that calendar half year.	Minn. R. 7017.1170, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-39**

07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Subject Item: MR 014 Boiler 11 (Wood Fired) O2 (bias adjustment)**Associated Items:** EU 006 Boiler #11 (Wood Fired)

GP 004 SO2, CO, NOx, CO2 and O2 Monitors

What to do	Why to do it
CEMs Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test for MR014. A RATA is not required in any calendar year if a RATA conducted in the previous year demonstrated a relative accuracy value of less than 15 percent or if the associated emissions unit operated less than 48 hours during the calendar year. If the exception is used, the next RATA shall be conducted during the first half of the following calendar year. RATAs shall be conducted at least 3 months apart according to 40 CFR pt. 60, Appendix F, section 5.1.1.C	Minn. R. 7017.1170, subp. 5
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test, except that a CGA is not required during any calendar half year in which a RATA was performed. The CGAs shall be conducted at least three months apart but no more than eight months apart. A CGA shall be conducted according to the procedures in 40 CFR pt. 60, Appendix F, section 5.1.2. If the monitored emission unit was operated for less than 24 hours during the calendar half year, a CGA is not required for that calendar half year.	Minn. R. 7017.1170, subp. 4

TABLE B: SUBMITTALS

B-1 07/09/10

Facility Name: Virginia Dept of Public Utilities
Permit Number: 13700028 - 008

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**B-2** 07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit.	Total Facility
Notification	due 7 days after Equipment Installation of the CO emissions tracking hardware/software has been completed for EU 006.	EU006
Notification	due 7 days after Equipment Installation of the steam rate and urea injection tracking software/hardware and the urea injection rate alarm system has been completed for EU 006/CE 008.	CE008
Notification	due 7 days after Equipment Installation of total power monitoring hardware/software has been completed for CE 002.	CE002
Notification	due 7 days after Equipment Installation of total power monitoring hardware/software has been completed for CE 003.	CE003
Notification	due 7 days after Equipment Removal and/or Dismantlement of SV 007 and SV 008.	Total Facility

TABLE B: RECURRENT SUBMITTALS**B-3** 07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

What to send	When to send	Portion of Facility Affected
COMS Calibration Error Audit Results Summary	due 30 days after end of each calendar quarter following Permit Issuance in which the COMS calibration error audit was completed for MR006, Boiler 7 Opacity.	MR006
COMS Calibration Error Audit Results Summary	due 30 days after end of each calendar quarter following Permit Issuance in which the COMS calibration error audit was completed for MR008, Boiler 9 Opacity.	MR008
COMS Calibration Error Audit Results Summary	due 30 days after end of each calendar quarter following Permit Issuance in which the COMS calibration error audit was completed for MR012, Wood Boiler Opacity.	MR012
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 06/30/2005 (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	Total Facility
Relative Accuracy Test Audit (RATA) Results Summary	due 45 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) in which the CEMS RATA was conducted for MR001, Boiler 7 CO ₂ .	MR001
Relative Accuracy Test Audit (RATA) Results Summary	due 45 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) in which the CEMS RATA was conducted for MR002, Boiler 7 SO ₂ .	MR002
Relative Accuracy Test Audit (RATA) Results Summary	due 45 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) in which the CEMS RATA was conducted for MR003, Boiler 9 CO ₂ .	MR003
Relative Accuracy Test Audit (RATA) Results Summary	due 45 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) in which the CEMS RATA was conducted for MR004, Boiler 9 SO ₂ .	MR004
Relative Accuracy Test Audit (RATA) Results Summary	due 45 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) in which the CEMS RATA was conducted for MR005, Boiler 10 NO _x .	MR005
Relative Accuracy Test Audit (RATA) Results Summary	due 45 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) in which the CEMS RATA was conducted for MR010, Boiler 10 CO ₂ .	MR010
Relative Accuracy Test Audit (RATA) Results Summary	due 45 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) in which the CEMS RATA was conducted for MR011, Wood Fired Boiler NO _x .	MR011
Relative Accuracy Test Audit (RATA) Results Summary	due 45 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) in which the CEMS RATA was conducted for MR013, Wood Fired Boiler CO.	MR013
Relative Accuracy Test Audit (RATA) Results Summary	due 45 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) in which the CEMS RATA was conducted for MR014, Wood Fired Boiler O ₂ .	MR014
Cylinder Gas Audit (CGA) Results Summary	due 30 days after end of each calendar half-year following Permit Issuance.	MR001, MR002, MR003, MR004, MR005, MR010, MR011, MR013, MR014

TABLE B: RECURRENT SUBMITTALS**B-4** 07/09/10

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028 - 008

Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). The Permittee shall submit this on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX I

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028-008

Insignificant Activities Required to be Listed:

Emission Unit	Basis in 7007.1300	Applicable Regulations
Surface Grinder	Subp. 3(D)(2)	Minn. R. 7011.0710-0715
Table saw	Subp. 3(D)(2)	Minn. R. 7011.0710-0715
Welding	Subp. 3(H)(3)	Minn. R. 7011.0710-0715
Acid Bath for Drum Cleaning	Subp. 3(I)	Minn. R. 7011.0710-0715
Parts Washers	Subp. 3(I)	Minn. R. 7011.0710-0715
Ash Silo Breather Vents	Subp. 4	Minn. R. 7011.0710-0715
Enclosed Wood Unloading	Subp. 4	Minn. R. 7011.0710-0715
Wood Conveyor	Subp. 3(I)	Minn. R. 7011.0710-0715
Metering Bin	Subp. 3(I)	Minn. R. 7011.0710-0715
Coal Fly Ash Silo	Subp. 3(I)	Minn. R. 7011.0710-0715
Coal Bottom Ash Silo water wash	Subp. 3(I)	Minn. R. 7011.0710-0715
Bunker 9	Subp. 3(I)	Minn. R. 7011.0710-0715
Coal Unloading	Subp. 3(I)	
Coal Crushing	Subp. 3(I)	
Coal Conveying	Subp. 3(I)	
Coal Fly Ash Loadout	Subp. 3(I)	
Coal Bottom Ash Loadout	Subp. 3(I)	
Truck Traffic	Subp. 4	

APPENDIX II

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028-008

Stack Parameters Used in Modeling

SV	Height (ft.)	Diameter (ft.)	Flow Rate (acfm)	Temperature (F)
SV002, Boiler 7	150	7	97,863	335
SV003 Boiler 9	150	5	106,860	390
SV004 Boiler 10	150	6	88,062	314
SV005 Wood Boiler	150	6.5	99,066	315
SV006 Wood Receiving	40	2.5	35,000	68
SV009 Wood Conveying	40	0.708	3500	68
SV010 Wood Metering	85	0.5	1800	68
SV014 Coal Ash Silo	8	0.67	1795	68
SV015 Coal Bottom Ash Silo Water Wash	85.7	1	2363	170
SV016 Coal Bottom Ash Bin Vent	59.1	2	20	68
SV017 Boiler 9 Bunker	96.9	1	1000	68

APPENDIX III

Facility Name: Virginia Dept of Public Utilities

Permit Number: 13700028-008

$$HCl = \sum_{i=1}^n (C_{i90})(Q_i)(1.028)]$$

HCl = HCl emission rate from the boiler or process heater in units of pounds per million Btu.

C_{i90} = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to the equation below.

Q_i = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of "1" for Q_i .

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of HCl to chlorine.

$$P_{90} = \text{mean} + (SD \times t)$$

mean = Arithmetic average of the fuel pollutant concentration in the fuel samples, in units of pounds per million Btu.

SD = Standard deviation of the pollutant concentration in the fuel samples, in units of pounds per million Btu.

t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 13700028-008

This Technical Support Document (TSD) is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the permit.

1. General Information

1.1 Applicant and Stationary Source Location:

Table 1. Applicant and Source Address

Applicant/Address	Stationary Source/Address (SIC Code: 4911)
Director of Operations PO Box 1048 Virginia, MN 55792-1048	City of Virginia Department of Public Utilities 618 South Second Street Virginia, MN 55792 St. Louis County
Contact: Douglas Ganoe Phone: 218-748-2102	

1.2 Facility Description

The City of Virginia Department of Public Utilities is a citizen-owned utility providing steam and electricity to businesses and residents of the local Virginia area. The department has the potential to operate any combination of four boilers using coal and/or natural gas and/or wood as fuel.

Boiler 7 (EU 001) can burn both coal, sub-bituminous or bituminous and natural gas; Boiler 9 (EU 003) can burn only coal, and Boiler 10 (EU 004) is a natural gas fired boiler. Boiler 11 (EU 006) is a wood fired boiler to be used for district heating and electric generation. There is an additional boiler, Boiler 8, located at the facility but is physically disconnected from the Utility System. Pollution control equipment consists of wet scrubbers, bag houses, and/or electrostatic precipitators in combination with good combustion practices.

1.3 Description of the Activities Allowed by this Permit Action

This permit action is a major amendment to revise the CO BACT limit on the wood fired boiler (EU 006). The limit will be increased from 0.3 to 0.58 lb/MMBtu and the operating hours for the boiler will be limited to 7,560 hours/year to avoid crossing the EAW/AERA threshold for CO.

Several reopenings were also incorporated to revise limits based on performance tests. The PTE of the facility was recalculated and several citations were updated according to current MPCA policy.

The U.S. District Court of Appeals for the DC Circuit vacated the National Emissions Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial and Institutional Boilers and Process Heaters (Subpart DDDDD) on July 30, 2007. Boilers or process heaters installed after that date are subject to the requirements of Section 112(g) of the Clean Air Act. The facility has submitted a 112(j) determination to the MPCA. This information will be used when a new standard is promulgated. Specific NESHAP DDDDD requirements have been removed from the permit.

1.4. Facility Emissions:

Table 2. Title I Emissions Increase Summary

Pollutant	Emissions Increase from the Modification (tpy)**	Limited Emissions Increase from the Modification (tpy)****	Source-wide Contemporaneous Increases and Decreases* (tpy)	Net Emissions Increase (tpy)	PSD Significant Thresholds for major sources (tpy)	NSR Review Required? (Yes/No)
PM					25	
PM ₁₀					15	
PM _{2.5}					10	
NO _x					40	
SO ₂					40	
CO	282.07	243.43	0.00	243.43	100	Yes
Ozone (VOC)					40	
Lead					0.6	

* Other emission changes during the contemporaneous period as defined by 40 CFR § 52.21, 40 CFR § 52.24 or 40 CFR pt. 51.

Table 3. Total Facility Potential to Emit Summary (tpy)

	PM	PM₁₀	PM_{2.5}	SO₂	NO_x	CO	VOC	Single HAP	All HAPs
Total Facility Limited Potential Emissions	1,152.1	591.9	101.0	2,997.3	1,007.4	1,149.6	26.7	148.6	176.5
Total Facility 2008 Actual Emissions	29.78	50.64	Not Reported	805.37	444.83	297.13	7.33	HAPs not reported in emission inventory	

Table 4. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD	PM, PM ₁₀ , SO ₂ , NO _x , CO		VOC, Pb
Part 70 Permit Program	PM ₁₀ , SO ₂ , NO _x , CO, HAPs		
Part 63 NESHAP	X		

2. Regulatory and/or Statutory Basis

New Source Review

The facility remains an existing major source under New Source Review regulations. The CO BACT Limit increase is authorized by this permit.

Part 70 Permit Program

The facility is a major source under the Part 70 permit program.

New Source Performance Standards (NSPS)

The gas fired boiler (EU004) is subject to 40 CFR pt. 60 subp. Da and the wood fired boiler (EU 006) is subject to 40 CFR pt. 60, subp. Db “Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units”.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is an existing major source of hazardous air pollutants. This permit does not change its status.

The facility (specifically EU’s 001, 003, 004, & 006) would have been subject to the Industrial, Commercial and Institutional Boilers and Process Heaters NESHAP (Subpart DDDDD), but because it was vacated they were required to submit a 112(j) determination (received 9/26/2007). This information will be used when a new standard is promulgated.

Compliance Assurance Monitoring (CAM)

CAM does not apply to the modification allowed in this permit amendment.

Environmental Review & AERA

The facility has accepted an operation limit such that it is not subject to conducting an environmental assessment worksheet (EAW). This limit is a 7,560 hr/yr operating hours limit to restrict CO emissions below 250 tpy. The 250 tpy is the CO emission threshold for conducting an EAW.

Endangered Species Act Analysis

The facility was required to do an ESA analysis because this permit action was a PSD amendment.

Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0515 Standards of Performance for New Indirect Heating Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment
- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines

Table 5. Regulatory Overview of Units Affected by the Modification/Permit Amendment

Level*	Applicable Regulations	Comments:
EU 006	40 CFR § 52.21	BACT Limit Revision

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3. PSD Requirements – CO

3.1 Best Available Control Technology – EU 006 (Boiler #11(Wood Fired))

Best Available Control Technology (BACT) analysis is required for all CO sources in the project. BACT is defined in 40 CFR 52.21(j), as follows:

“an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each air pollutant subject to regulation under the Clean Air Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant...”

BACT was determined using EPA’s top-down approach. Following the top-down approach, progressively less stringent control technologies are analyzed until a level of control considered BACT is reached on the basis of environmental, energy, and economic impacts. The steps involved include:

1. Identify applicable options.
2. Eliminate technically infeasible options.
3. Rank remaining alternatives by control effectiveness.
4. Evaluate most effective controls.
5. Select BACT.

3.1.1 Control Alternatives for Carbon Monoxide Emissions

The following CO control alternatives were considered for Emission Unit 6:

- Catalytic Oxidation
- Thermal Oxidation
- Good Combustion Practices

The feasibility of each is discussed in the following (provided by VPU):

Catalytic Oxidation

The particulate control, at VPU, is ducted directly to the stack. VPU has provided that there is no room to include an oxidizer downstream of the particulate control. In addition, the Electrostatic Precipitator (ESP) does not remove Hydrogen Chloride (HCl), and there is concern that the HCl would foul a catalytic oxidizer. A scrubber would have to be installed to remove the HCl. VPU was unsuccessful in obtaining costs from vendors for a catalytic oxidation system. Hence, VPU asserts that catalytic oxidation is technically infeasible for this system.

Thermal Oxidation

VPU was also unsuccessful in obtaining cost information from vendors for a thermal oxidation system. However, EPA has developed an air pollution control technology fact sheet for thermal incineration. There is cost information contained in the EPA fact sheet that was used for this analysis. The cost analysis for a thermal oxidation system is attached. The total cost effectiveness came to \$40,500 per ton of CO removed.

The request is to increase CO emissions from 0.3 lb/MMBtu to 0.58 lb/MMBtu. This equates to a potential increase in CO of 243.4 tons of CO. Assuming a thermal oxidizer will achieve 95% reduction in CO from the boiler, the potential increase in emissions is 12.17 tons per year (not including CO from oxidizer).

The burner size required for the air flow of the boiler would be 90.44 MMBtu/hour. The emissions from the oxidizer were calculated using AP-42 emission factors for natural gas boilers. The calculated emissions are presented in Table 6.

Table 6.
Potential Emissions of Criteria Pollutants 90 MMBtu/hour Thermal Oxidizer

Pollutant	Tons Per Year
Nitrogen Oxide	19.22
Sulfur Dioxide	0.23
Volatile Organic Compounds	2.14
Particulate Matter	2.95
Carbon Monoxide	32.62

Adding in the CO emissions, from the oxidizer, the overall increase in CO would be 43.63 tons per year. VPU asserts that thermal oxidation is economically infeasible

Good Combustion Practices

CO emissions primarily result from incomplete combustion. The oxidation of CO to CO₂ is dependent upon temperature and residence time of the combustion process. The use of good combustion practice (GCP) such as high combustion temperatures, adequate combustion air, and proper air/fuel mixing can minimize CO emissions. Proper design and operation of a boiler effectively acts like a thermal oxidizer for control of CO emissions. Therefore, GCP is considered a feasible control technology for CO emissions.

3.1.2 RACT/BACT/LAER Clearinghouse Data

The current RBLC database information for CO limits applied to industrial and utility wood-waste boilers was compiled. Table 7 includes Industrial boilers from the source categories 12.120 & 12.190.

Table 7. Summary of RBLC Data for CO from Wood Fired Boilers

RBLC ID	Company	Boiler Size MMBtu/hr	Fuel Type	Limit	Units	Technology	Date
MI-0386	Northern MI University	185	wood & coal	0.17	Lb/MMBtu	None (efficient combustion of fire)	5-12-2008
IA-0095	Tate & Lyle	200	corn fiber	0.17	Lb/MMBtu (30 day rolling average)	good combustion practices	9-19-2009
LA-0218	Florien Plywood Plant	225	wood	0.6	Lb/MMBtu (hourly average)	high pressure overfire air and good combustion practices	4-22-2008
OH-0269	Biomass Energy	175	wood	0.1	Lb/MMBtu	catalytic oxidation (20% reduction)	1-05-2004
VA-0268	Thermal Ventures	120	wood	0.44	Lb/MMBtu	good combustion practices	2-15-2002
NC-0092	International Paper Co.	600	Mix ¹	0.5	Lb/MMBtu	good combustion practices	5-1--2001

¹ Fuel mix includes bark, wood fiber sludge and fossil fuel

3.1.3 Proposal for CO BACT

The Florien Plywood Plant, Biomass Energy, and Thermal Ventures are the facilities using a similar fuel type to Virginia Public Utilities. The Florien Plywood Plant has a boiler that is the closest in size to VPU's boiler (230 mmbtu/hr) and this is also the most recent of the three facilities. A limit of 0.58 lbs/MMBTU was chosen to be similar to this limit. The limit was also changed from a 4-hour block average to an 8-hour block average to be in line with the CO NAAQS Standard.

3.2 Ambient Air Quality Analysis

Air dispersion modeling was performed for Virginia Public Utilities in Virginia, Minnesota in 2005. The purpose of the air dispersion modeling analysis was to demonstrate that the emissions from the facility do not cause or contribute to a violation of the Minnesota and National Ambient Air Quality Standards (MAAQs and NAAQS). Modeling was conducted to determine whether emissions from the project alone would result in predicted maximum downwind ambient concentrations of carbon monoxide above the PSD significant ambient impact levels. Predicted maximum concentrations are less than the corresponding significant ambient impact levels. No further analyses are required.

Table 8 summarizes the model-predicted ambient CO concentrations for the 1-hour averaging period for a 100 percent load scenario. This modeling was done during the last reissuance. The CO emission factor is roughly doubling the current permit limit, which would cause an approximate doubling of the high concentrations. The highest concentration in this scenario would be approximately 640 micrograms per cubic meter, which is approximately 32% of the significant impact threshold of 2,000 micrograms per cubic meter. Full impact modeling for CO is therefore not required for NAAQS compliance based upon the 1-hour averaging period.

Table 8. ISC-PRIME Results for 100% Load Carbon Monoxide Impacts - 1-Hour Averaging Period

Year	Highest-High Concentration (ug/m3)	Period*	Receptor X	Receptor Y	Impact Radius (km)**
1972	319.77859	05/31/21	535500	5263600	-
1973	313.53317	07/03/24	535500	5263600	-
1974	307.75378	06/19/22	535500	5263700	-
1975	314.81525	09/04/01	535400	5263700	-
1976	311.15924	07/17/23	535600	5263500	-

*period notation refers to the time period during which the high value occurred (day/mo/hr)

**Impact radius measured from 534552, 5263264, the wood boiler stack location.

Table 9 summarizes the model-predicted CO concentrations for the 8-hour averaging period for a 100 percent load scenario. This modeling was done during the last reissuance. The CO emission factor is roughly doubling the current permit limit, which would cause an approximate doubling of the high concentrations. The highest concentration in this scenario would be approximately 250 micrograms per cubic meter, which is approximately 50% of the significant impact threshold of 500 micrograms per cubic meter. Full impact modeling for CO is therefore not required for NAAQS compliance based upon the 8-hour averaging period.

Table 9. ISC-PRIME Results for 100% Load Carbon Monoxide Impacts -

8-Hour Averaging Period

Year	Highest-High Concentration (ug/m3)	Period*	Receptor X	Receptor Y	Impact Radius (km)**
1972	105.75436	09/20/24	535300	5263800	-
1973	93.43497	09/27/24	535200	5264000	-
1974	124.84381	01/04/08	535400	5263800	-
1975	87.18205	08/25/24	535400	5263800	-
1976	86.40488	04/15/08	535600	5263600	-

**period notation refers to the time period during which the high value occurred (day/mo/hr)*

***Impact radius measured from 534552, 5263264, the wood boiler stack location.*

4. Technical Information

BACT Revision: The facility was experiencing compliance issues with the previous CO limit of 0.3 lbs/MMBtu. Based on the data in the BRL Clearinghouse, recent CEMs data, and input from MPCA enforcement staff a new limit of 0.58 lbs/MMBTU was established. The limit was also changed from a 4-hour block average to an 8-hour block average to be in line with the CO NAAQS Standard.

NESHAP DDDDD: The Boiler MACT requirements were removed from the permit because of the vacatur of the standard. The Mercury and Hydrochloric Acid limits at the EU 006 level were previously cited as being part of the NESHAP; however, these limits were also part of the original modeling analysis. Therefore these limits were kept and the citation was changed to a MN rule.

Control Equipment: Permit requirements related to the control equipment were moved to the individual CE level. Requirements were added to ensure the operation of the control equipment when the associated emission units are in operation. Control equipment venting directly to another piece of control equipment generally has fewer requirements.

4.1 Calculations of Potential to Emit

Attachment 1 to this TSD contains detailed calculations for this modification.

4.2 Periodic Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considers the following:

- The likelihood of violating the applicable requirements;
- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

Table 10 below summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 10. Periodic Monitoring

Level*	Requirement (rule basis)	Additional Monitoring	Discussion
EU 006	0.58 lbs CO/MMBTU heat input 7,560 hrs/yr operating limit (40 CFR §52.21(j) BACT Limit)	CEMS, performance testing, recordkeeping	BACT limit revision. The operating hours limit keeps the CO increase under 250 tpy avoiding the need for a mandatory EAW/AERA.
EU 006, CE 002, CE 003, CE 008	Install hardware/software to comply with relevant monitoring requirements within 90 of permit issuance. (Minn. R. 7007.0800, subp. 2)	These requirements were added to allow VPU to update their monitoring equipment to so that it can comply with the new/updated emissions limits and monitoring requirements from this permit action.	

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

4.3 Insignificant Activities

Virginia Public Utilities has several operations which are classified as insignificant activities. These are listed in Appendix I to the permit.

4.4 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements.

4.5 Comments Received

Public Notice Period: 5/25/2010 – 6/24/2010

EPA 45-day Review Period: 5/25/2010 – 7/9/2010

Comments were received from public during the public notice period. The comments received did not include adverse comments on any applicable requirements of the permit. Typographical changes to the permit were made as a result of the comments on pages A-7 and A-14. The comments were received from Virginia Public Utilities.

5. Permit Fee Assessment

Attachment 3 to this TSD contains the MPCA's assessment of Application and Additional Points used to determine the permit application fee for this permit action as required by Minn. R. 7002.0019. The permit action includes one permit application, received before the effective date of the rule (July 1, 2009). The permit includes the incorporation of one BACT Analysis that was triggered by the modification authorized by the amendment application.

6. Conclusion

Based on the information provided by Virginia Department of Public Utilities, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 13700028-008, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Chris Buntjer (permit writer/engineer)
 Bob Beresford (enforcement)
 Andy Place (stack testing)
 Bruce Braaten (peer reviewer)

AQ File No. 622; DQ 2175, 1193, 1639, 1875, & 2389

Attachments: 1. Calculation Spreadsheets & Facility Description
 2. CD-01 Forms
 3. Fee Assessment