

AIR EMISSION PERMIT NO. 06100001- 008

IS ISSUED TO

BLANDIN PAPER COMPANY

Rapids Energy Center/Minnesota Power
Itasca County

Blandin Paper
115 SW 1st Street
Grand Rapids, MN 55744

Rapids Energy Center
502 NW 3rd Street
Grand Rapids, MN 55744

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date	Issuance Date	Action Number
Total Facility Operating Permit	04/17/1995	June 14, 1999	001
Major Amendment	02/22/2000	July 31, 2000	002
Major Amendment	04/23/2001	March 13, 2002	003
Administrative Amendment	06/10/2003	June 10, 2003	004
Major Amendment	01/21/2004	June 14, 2004	005
Major Amendment	01/28/2004	February 7, 2005	006
Administrative Amendment	12/23/04	August 9, 2005	007
Major Amendment	12/5/05	See below	008

This permit authorizes the Permittee to operate and construct 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.

Permit Type: Federal; Pt 70/Incorporates Existing NSR Conditions

Issue Date: December 22, 2005

Expiration: June 14, 2004*

All 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 received 12/15/03.)

Richard J. Sandberg, Manager
Air Quality Permits Section
Industrial Division

for Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Facility Description

Table A: Limits and Other Requirements

Table B: Submittals

Table C: *Not used in this permit*

Appendices:

Appendix A *Not used in this permit*

Appendix B Insignificant Activities List

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:

Blandin Paper Company (Blandin) operates a groundwood pulp and papermill in Grand Rapids, Minnesota. Blandin was initially built and began operation under the name Itasca Paper Company in 1902. In 1933 the company became Blandin Paper Company and in 1997 the plant was purchased by the UPM Kymmene Group based in Finland and the plant name was changed to Blandin Paper Company a Member of the UPM Kymmene Group. Blandin produces groundwood pulp and combines it with purchased kraft pulp to produce paper of advertising supplement, catalog, and magazine quality. Raw materials used to produce the paper include wood, clay, starch, and pigments.

The main contributing air emission sources at the plant consisted of four boilers (2 natural gas-fired units and 2 wood/coal-fired units), a Pressurized Groundwood (PGW) mill, four paper machines, and four coater/dryers. Blandin has a potential-to-emit (PTE) of greater than 250 tons per year for all criteria pollutants except lead and thus is a major source under the federal Prevention of Significant Deterioration (PSD) program. The two wood/coal boilers are New Source Performance Standard (NSPS) units (Subpart D) and the facility is a major Hazardous Air Pollutant (HAP) source and is thus applicable to the National Emission Standards for Hazardous Air Pollutants (NESHAP) program and is thus subject to a Maximum Achievable Control Technology (MACT) standard when it comes into effect. For existing boilers, the effective date is September 13, 2007.

In terms of pollution control equipment, the paper machines, PGW, coater/dryers, and the natural gas-fired only boilers were all uncontrolled sources. The main power boilers (the wood/coal-fired units) are controlled by high efficiency electrostatic precipitators.

Action 002:

Minnesota Power proposed to construct and operate two new natural gas fired boilers (to be numbered Boiler 7 and Boiler 8) at the Blandin site to replace existing Boiler Nos. 3 and 4, which were retired in place by Blandin. This permit amendment was major in order to establish federally enforceable limitations on operations, to require retirement of two existing boilers and to reflect the conditions of the netting analysis. Minnesota Power conducted a netting analysis for Nitrogen Oxides (NO_x) and demonstrated that the modification was not major under PSD requirements.

Existing Boiler Nos. 5 and 6 are in service most of the time and supply the majority of mill steam demand. This will not change after the modification. No electrical power produced at the site will enter the larger electrical power supply 'grid', although Minnesota Power may choose to operate the steam turbine connected to existing Boiler Nos. 3 and 4 (which will become the steam turbine for Boilers 7 and 8) at higher output levels in order to offset electrical power from off-site sources.

Minnesota Power has proposed that the new boilers be equipped with low NO_x burners and flue gas re-circulation. The new natural gas fired boilers are subject to federal NSPS, subpart Db and are equipped with a continuous emissions monitoring system (CEMS) to monitor NO_x emissions. An emission limit more stringent than the NSPS limit for NO_x was proposed, to maintain limited emissions to below the significance level after netting. A Carbon Monoxide (CO) limit was proposed at a level equivalent to about half the AP-42 emission factor and performance (stack)

testing will be the primary periodic monitoring method for that pollutant. At the proposed limited level, netting was not necessary for CO.

Minnesota Power proposed an operating limit of 76 percent of total fuel combustion capacity for the new boilers in order to limit Particulate Matter smaller than 10 microns (PM₁₀) emissions to below the PSD significance threshold.

The draft permit established a 365-day rolling average and 365-day rolling sum based limits for NO_x emissions and fuel usage respectively. These averaging times reflect the status of the boilers as secondary units with unpredictable operating schedules. More frequent startup and shutdown occurrences are anticipated which, combined with low usage, creates a need to average emissions over a longer period. However, the permit did specify that the emission limits apply during periods of startup, shutdown and malfunction and it does require more frequent compliance demonstration during the first 365 days of operation.

When the proposed operating and emission limits are taken into account, only the NO_x Potential to Emit (PTE) exceeds the Prevention of Significant Deterioration (PSD) significance threshold and therefore only NO_x was considered in the netting analysis.

Action 003:

This amendment concerned a “backwards” federal PSD analysis for the PGW mill and #6 paper machine at the facility.

On April 6, 1988, Blandin received an air emissions permit amendment (Amendment No. 6 to Air Emissions Permit No. 636A-84-OT-1) which authorized modification of the facility, including the installation of a new PGW mill, and #6 paper machine and coater. The permit was issued as a non-major modification under PSD for Volatile Organic Compound (VOC) emissions.

PSD review was conducted for VOC emissions from these emission units. The result of the BACT analysis was the application of a Regenerative Thermal Oxidizer (RTO) to the PGW mill, and no control for the #6 paper machine or the #6 coater.

An unrelated item that was changed in the permit is updating the modeling requirements that were implemented in the original Title V permit. The Minnesota Pollution Control Agency (MPCA) policy on the subject had recently changed.

Action 004:

This permit action was for a 120 day extension to the deadline for submittal of the computer dispersion modeling results.

Action 005:

This permit action was an MPCA-initiated major amendment under Minn. R. 7007.1600, subp. 1(D). It changed the minimum allowable temperature for EU015 (afterburner) from 1600 degrees Fahrenheit to 1450 degrees Fahrenheit as a result of performance testing.

Action 006:

This permit action incorporated two applications. On January 29, 2004, Blandin Paper Company/Rapids Energy Center (Blandin) submitted a permit application for a major amendment to its Part 70 permit. That application asked for the removal of Title I Conditions set for Paper Machines 3 and 4. The request was made because those paper machines were decommissioned in December 2002. Additionally, the application asked that the Pressurized Greenwood Mill (PGW) be designated as a Clean Unit as is provided for under 40 CFR § 52.21(x).

On August 2, 2004, Blandin submitted an application for a major amendment to replace the burners in the gas-fired boilers 7 and 8. In addition, the company planned to install 10 mmBtu pilot burners in each boiler to reduce the time for boiler startup. The heat input of the boilers is still 280 mmBtu per hour each plus an additional 10 mmBtu per hour due to the pilot burners.

The MPCA has determined that the modifications proposed in the August 2, 2004, permit application qualify as an insignificant activity, not as a modification requiring a major amendment. Calculations showing the potential emission increase of the new burners, and calculations of future actual emissions minus past actual are attached to the technical support document. Because the modifications qualify as an insignificant modification, the company is allowed by Minnesota Rules to proceed without with the modification without issuance of a permit.

Other changes were made to the permit other than those applied for. They were:

1. Requirements for submittals that have already been submitted were deleted;
2. Stack emissions testing frequency requirements were changed based on the most recent stack test results;
3. The required operating temperature for the RTO was reduced to 1450 degrees Fahrenheit based on stack emission test results; and
4. Submittals required pertaining to stack emission testing (notifications, test reports, etc.) were specified at the total facility level, rather than each individual emission unit.

Action 007:

This permit amendment was originally started by a major amendment permit application from Minnesota Power, on December 23, 2004 requesting Clean Unit Designation (CUD) for Boilers 7 and 8. Subsequent to the application, the Clean Unit provisions of the New Source Review Reform rules were vacated. Therefore, the permit application was returned to the Permittee, and no changes were made to designate any emission units as Clean Units. In addition, the permit requirements regarding Clean Unit Designation which were previously added to EU 015 (Pressurized Greenwood Mill) in PER 006 were removed with this permit amendment.

This permit action did not authorize any physical changes. Requirements were removed or changed for items that have been completed. Other required template updates were also incorporated in this amendment.

Action 008:

This permit action incorporates a major amendment application submitted on August 5, 2005. The amendment is to change monitoring requirements associated with NO_x limits on the natural gas-fired boilers 7 and 8. The changes are needed because Minnesota Power has decided to install smaller burners, 1 mmBtu/hr center-fired burners rather than the 10 mmBtu/hr pilot burners, on boilers 7 and 8. Due to the small size of the burners, they can not meet the 0.04 lb/mmBtu NO_x limit when only the center-fired burners are operating. Therefore, this amendment makes a change so that this limit does not apply when only the center-fired burners are operating. However, the NSPS limit of 0.2 lb/mmBtu continues to apply at all times. In addition, the overall fuel use limit remains unchanged. The testing frequency for EU 017 (Boiler 8) was changed to match what had been approved in a Notice of Compliance letter issued following a performance test; the change should have been made earlier, but had been overlooked with previous permit amendments.

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 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
A. OPERATIONAL REQUIREMENTS	hdr
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
Comply with Fugitive Emission Control Plan (submitted August 12, 1999, and as amended): The Permittee shall follow the actions and record keeping specified in the control plan. The plan may be amended by the Permittee with the Agency's approval. If the Agency determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Agency.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2
Comply with the O&M Plan (submitted October 12, 1999, and as amended): Follow the actions and record keeping specified in the O&M plan. The plan may be amended with the Agency's written approval.	Minn. R. 7007.0800, subp. 14; Minn. R. 7007.0800, subp. 16(J)
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 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
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
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
The Permittee shall comply, and upon written request demonstrate compliance, 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.	40 CFR pt. 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
B. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test 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>	Minn. Rs. 7017.2030, subp. 1-4, 7017.2018 and Minn. R. 7017.2035, subp. 1-2
C. MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, 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)
D. RECORDKEEPING REQUIREMENTS	hdr
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)
Record keeping: Retain all records at the stationary source 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)
E. REPORTING REQUIREMENTS	hdr
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. 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.	Minn. R. 7019.1000, subp. 3
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. 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.	Minn. R. 7019.1000, subp. 2
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.	Minn. R. 7019.1000, subp. 1
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: 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
F. MISCELLANEOUS	hdr
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.	Minn. R. 7007.1150 through Minn. R. 7007.1500
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).	Minn. R. 7007.1400, subp. 1(H)
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

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

<p>Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.</p>	<p>Minn. R. 7007.0800, subp. 9(A)</p>
<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>	<p>Minn. R. 7019.3000 through Minn. R. 7019.3010</p>
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	<p>Minn. R. 7002.0005 through Minn. R. 7002.0095</p>
<p>The Permittee may be required to submit a Risk Management Plan (RMP) under the federal rule, 40 CFR pt. 68. Each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process, shall design and implement an accidental release prevention program. The RMPs must be submitted to a centralized location as specified by US EPA. RMP submittal information may be obtained at http://www.epa.gov/swercepp or by calling 1-800-424-9346. These requirements must be complied with no later than the latest of the following dates: (1) June 21, 1999; (2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or (3) The date on which a regulated substance is first present above a threshold quantity in a process.</p>	<p>40 CFR pt. 68</p>
<p>G. MACT STANDARDS</p>	<p>hdr</p>
<p>Comply with Subp. DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters as applicable, by September 13, 2007 for the existing boilers.</p>	<p>40 CFR DDDDD</p>
<p>Comply with Subp. JJJJ, National Emission Standards for Hazardous Air Pollutants for Paper and Other Web Coating, as applicable, by December 4, 2005.</p>	<p>40 CFR JJJJ</p>
<p>H. DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NEW SOURCE REVIEW</p>	<p>hdr</p>
<p>These requirements apply where there is a reasonable possibility that a proposed project, analyzed using the actual-to-projected-actual (ATPA) test and found to not be part of a major modification, may result in a significant emissions increase. If the ATPA test is not used for a particular project, or if there is not a reasonable possibility that the proposed project could result in a significant emissions increase, then these requirements do not apply to that project.</p> <p>Even though a particular modification is not subject to New Source Review, a permit amendment, recordkeeping, or notification may still be required under Minn. R. 7007.1150 - 7007.1500.</p>	<p>Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000</p>
<p>Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following information:</p> <ol style="list-style-type: none"> 1. A description of the project 2. Identification of the emission unit(s) whose emissions of an NSR pollutant could be affected 3. 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 potential emissions, the projected actual emissions, the amount of emissions excluded due to increases not associated with the modification and that the unit(s) 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. <p>The Permittee shall maintain records of this documentation.</p>	<p>Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>
<p>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. The Permittee shall calculate and maintain a record of the sum of the actual and potential (if 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.</p>	<p>Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

<p>The Permittee must submit a report to the Agency if the annual summed (actual plus potential, if applicable) 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> <ul style="list-style-type: none">a. The name and ID number of the facility, and the name and telephone number of the facility contact personb. The annual emissions (actual plus potential, if any part of the project was analyzed using potential emissions) for each pollutant for which the preconstruction projection and significant emissions increase are exceeded.c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection.	<p>Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5</p>
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TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Subject Item: GP 001 Paper Machines/Pressurized Groundwood Mills

- Associated Items:** EU 009 Paper Machine #5
 EU 010 Paper Machine #6
 EU 015 Pressurized Groundwood Mill
 SV 010
 SV 011
 SV 012
 SV 013 PM6 No. 1 Dryer Ex (44-0713)
 SV 014 PM6 No. 2 Dryer Ex (44-0714)
 SV 015 PM6 No. 3 Dryer Ex (44-0715)
 SV 035 PGW Main Stack (29-0707)
 SV 038 PGW Disc Thickener (29-0700)
 SV 039 PGW Bleach Press Ex (29-0703)
 SV 040 PGW General Chest Ex (29-0708)
 SV 041 PGW Grinder Air Lock
 SV 042 PM6 No. 1 Former Ex (44-0734)
 SV 043 PM6 No. 2 Former Ex (44-0736)
 SV 044 PM6 No. 3 Former Ex (44-0735)
 SV 045 PM6 No. 4 Former Ex (44-2430)
 SV 046 PM6 Press Ex Fan (44-0745)
 SV 047 PM6 Vacuum Pump Ex (44-0218)
 SV 048 PM6 Vacuum Roll Ex (44-0744)

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. 7011.0735.	Minn. R. 7011.0710, subp. 1.A.
Opacity: less than or equal to 20 percent opacity (this opacity limit applies to equipment installed after 1969 and thus applies to EU 009 and EU 010).	Minn. R. 7011.0715, subp. 1.B.
Periodic Monitoring: the Permittee shall maintain proper maintenance of the paper machines (EU 009 through EU 010) and the pressurized groundwood mills (EU 015) so as to prevent excessive amounts of particulate matter from being emitted from the stack/vents listed above under Associated Items.	Minn. R. 7007.0800, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Subject Item: GP 002 Coaters/Dryers

Associated Items: EU 011 Coater/Dryer #3

EU 012 Coater/Dryer #4

EU 013 Coater/Dryer #5

EU 014 Coater/Dryer #6

SV 016

SV 017

SV 018

SV 019

SV 020

SV 021

SV 022

SV 023

SV 024

SV 025

SV 026

SV 027

SV 028

SV 029

SV 030

SV 031

SV 032

SV 033

SV 034

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. 7011.0735.	Minn. R. 7011.0710, subp. 1.A.
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity (this opacity limit applies to equipment installed prior to 1969 and thus applies to EU 011 and EU 012).	Minn. R. 7011.0710, subp. 1.B.
Opacity: less than or equal to 20 percent opacity (this opacity limit applies to equipment installed after 1969 and thus applies to EU 013 and EU 014).	Minn. R. 7011.0715, subp. 1.B.
Periodic Monitoring: the Permittee shall maintain proper maintenance of the coater/dryers (EU 011 through EU 014) so as to prevent excessive amounts of particulate matter from being emitted from the stack/vents listed above under Associated Items.	Minn. R. 7007.0800, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Subject Item: GP 003 Solid Fuel Power Boilers

- Associated Items:** CE 001 Electrostatic Precipitator - High Efficiency
 CE 002 Electrostatic Precipitator - High Efficiency
 CE 003 Centrifugal Collector - High Efficiency
 CE 004 Centrifugal Collector - High Efficiency
 EU 003 Boiler #5
 EU 004 Boiler #6
 MR 004 Boiler 5
 MR 005 Boiler 5
 MR 006 Boiler 5
 MR 007 Boiler 6
 MR 008 Boiler 6
 MR 009 Boiler 6
 SV 003

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.1 lbs/million Btu heat input (this limit applies individually to each emission unit listed above under Associated Items).	40 CFR Section 60.42(a)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity (this limit applies individually to each emission unit listed above under Associated Items).	40 CFR Section 60.42(a)(2)
Sulfur Dioxide: less than or equal to 1.2 lbs/million Btu heat input using 3-hour Rolling Average (this limit applies individually to each emission unit listed above under Associated Items).	40 CFR Section 60.43(a)(2)
Nitrogen Oxides: less than or equal to 0.7 lbs/million Btu heat input using 3-hour Rolling Average (this limit applies individually to each emission unit listed above under Associated Items).	40 CFR Section 60.44(a)(3)
Carbon Monoxide: less than or equal to 1300 parts per million on a dry, 8-hour discrete average basis (this limit applies individually to each emission unit listed above under Associated Items).	Minn. Stat. Section 116.07, subp. 4a and Minn. R. 7007.0800, subp. 2
B. OPERATIONAL REQUIREMENTS	hdr
Fuels Allowed: the Permittee shall only combust wood waste (includes creosote treated railroad ties, waste paper, and paper roll fiber cores), western subbituminous coal, and on-site generated waste (includes petroleum derived waste oil/sorbents and ignitable-only solvents) in EU 003.	Minn. R. 7007.0800, subp. 2
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due before year starting 12/15/2005 to measure carbon monoxide emissions from EU 003 and EU 004 operating simultaneously and venting through SV 003. The tests shall be conducted at an interval not to exceed twelve months between test dates.	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 36 months starting 12/15/2005 to measure particulate emissions from EU 003 and EU 004 operating simultaneously and venting through SV 003. The tests shall be conducted at an interval not to exceed 36 months between test dates.	Minn. R. 7017.2020, subp. 1
D. CONTINUOUS EMISSIONS MONITORING	hdr
Emissions Monitoring: The owner or operator shall use a COMS to measure opacity emissions from SV003.	Minn. R. 7017.1000, subp. 1; 40 CFR Section 60.45(a)
COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all COMS shall be in continuous operation.	Minn. R. 7007.0800, subp. 2; 40 CFR Section 60.13(e)
COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily. The COMS must be adjusted whenever the calibration drift (CD) exceeds twice the specification of PS-1 of 40 CFR 60, Appendix B.	Minn. R. 7017.1000; 40 CFR Section 60.13(d)(2)

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

COMS Calibration Error Audit: due before end of each half-year following COMS Certification Test Conduct three point calibration error audits at least 3 months apart but no greater than 8 months apart.	Minn. R. 7017.1210, subp. 3
COMS Calibration Error Audit Results Summary: due 30 days after end of each calendar half-year following COMS Calibration Error Audit.	Minn. R. 7017.1220
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to 6 minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the 6 minute averaging period.	Minn. R. 7007.0800, subp. 2; 40 CFR Section 60.13(e)(1); 40 CFR Section 60.13(h)
Recordkeeping: The owner or operator must retain records of all COMS and 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. 7017.1130
Emissions Monitoring: The owner or operator shall use NOx and SO2 CEMS to measure NOx and SO2 emissions from EU003 and EU 004.	Minn. R. 7017.1000, subp. 1
Cylinder Gas Audit: due before end of each calendar half-year starting 06/14/1999 . Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 4
Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar half-year following Cylinder Gas Audit (CGA)	Minn. R. 7017.1180, subp. 1
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year starting 06/14/1999 for the monitors on EU 003 and EU 004. If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS RATA.	Minn. R. 7017.1180, subp. 2
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each quarter year in which the CEMS RATA was conducted.	Minn. R. 7017.1180, subp. 3
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. 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

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Subject Item: GP 004 Natural Gas Boilers 7 and 8**Associated Items:** EU 016 Boiler #7

EU 017 Boiler #8

What to do	Why to do it
Fuel Usage: less than or equal to 3695.3 million cubic feet/year using 365-day Rolling Sum (combined fuel usage limit for Boilers 7 and 8)	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000. To avoid classification as a major modification under NSR
Recordkeeping: The Permittee shall maintain daily records of the amount of natural gas combusted in each boiler. By the 15th of each month, calculate the previous 12 months natural gas usage and compare to the limit. Record the results.	Title I Condition: Recordkeeping for limit taken to avoid classification as a major modification under 40 CFR 52.21

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Subject Item: EU 015 Pressurized Groundwood Mill

- Associated Items:** CE 012 Direct Flame Afterburner w/Heat Exchanger
 GP 001 Paper Machines/Pressurized Groundwood Mills
 SV 035 PGW Main Stack (29-0707)
 SV 038 PGW Disc Thickener (29-0700)
 SV 039 PGW Bleach Press Ex (29-0703)
 SV 040 PGW General Chest Ex (29-0708)
 SV 041 PGW Grinder Air Lock

What to do	Why to do it
LIMITS	hdr
<p>Required Control Equipment: The Permittee shall operate and maintain a Regenerative Thermal Oxidizer (RTO) to control emissions from the General Chest (SV 040) and Grinder Air Lock vents (SV 041) anytime the PGW grinders are grinding wood, and/or screening and cleaning operations are occurring.</p> <p>Report all excess emissions during a malfunction condition, and take actions to reduce emissions, according to Minn. R. 7019.1000.</p>	<p>Title I Condition: 40 CFR Section 52.21 operational and reporting requirement in support of BACT limit; Minn. R. 7007.3000; Minn. R. 7019.1000</p>
<p>Volatile Organic Compounds: greater than or equal to 90 percent destruction efficiency or less than or equal to 0.081 lb VOC (as C)/ton of bone-dry pulp from the General Chest (SV 040) and Grinder Air Lock vents (SV 041). The Permittee shall operate and maintain the RTO such that it continuously achieves these limits.</p>	<p>Title I Condition: 40 CFR Section 52.21 BACT limit; Minn. R. 7007.3000</p>
MONITORING REQUIREMENTS	hdr
<p>Temperature: greater than or equal to 1450 degrees F using 3-hour Rolling Average in the combustion chamber unless a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent MPCA approved performance test where compliance was demonstrated. If the 3-hour rolling average temperature drops below the minimum temperature limit, the VOC emitted during that time shall be considered uncontrolled until the average minimum temperature is once again achieved. This shall be reported as a deviation.</p>	<p>Title I Condition: 40 CFR Section 52.21 monitoring requirement in support of BACT limit; Minn. R. 7007.3000</p>
<p>Corrective Action: If the 3-hour rolling average combustion chamber temperature falls below the minimum required value, take corrective action, as outlined in the facility Operation and Maintenance Plan, to restore the temperature to the minimum required value. Make a record of all temperature deviations and corrective actions taken.</p>	<p>Title I Condition: 40 CFR Section 52.21 monitoring requirement in support of BACT limit; Minn. R. 7007.3000</p>
<p>Monitoring Equipment: The Permittee shall install and maintain monitoring equipment necessary for measuring the temperature as required by this permit. The monitoring equipment must be installed, in use, and properly maintained whenever the RTO is required to be operated.</p>	<p>Minn. R. 7007.0800, subp. 4</p>
<p>The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the RTO combustion chamber temperature. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius. The recording device shall also calculate the 3-hour rolling average combustion chamber temperature.</p>	<p>Minn. R. 7007.0800, subp. 4</p>
<p>The Permittee shall maintain a continuous hard copy readout or computer file of the temperature readings and calculated 3-hour rolling average temperatures for the RTO combustion chamber.</p>	<p>Minn. R. 7007.0800, subp. 5</p>
<p>Daily Monitoring: The Permittee shall physically check the temperature recording device, and make a record, at least once each operating day to verify that it is working and recording properly.</p>	<p>Minn. R. 7007.0800, subp. 4</p>
<p>Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components specified in the Operation and Maintenance Plan for the facility. The Permittee shall maintain a written record of the inspections and any corrective actions taken resulting from the inspections.</p>	<p>Minn. R. 7007.0800, subps. 2, 5, 14</p>
<p>Annual Calibration: The Permittee shall calibrate the temperature monitor at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.</p>	<p>Minn. R. 7007.0800, subps. 2, 5, 14</p>
PERFORMANCE TESTING	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

<p>Performance Test: due before end of each 60 months starting 10/08/2003 of the RTO. The performance test must use current EPA reference test methods and need not include methane emissions as part of VOC emissions. For required submittals pertaining to performance tests, see the Total Facility requirements table.</p>	<p>Title I Condition: 40 CFR Section 52.21 testing requirement in support of BACT limit; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1</p>
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TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Subject Item: EU 016 Boiler #7

Associated Items: CE 006 Modified Furnace or Burner Design

CE 008 Flue Gas Recirculation

GP 004 Natural Gas Boilers 7 and 8

MR 010 Boiler 7

MR 011 Boiler 7

SV 036

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Nitrogen Oxides: less than or equal to 0.040 lbs/million Btu heat input using 365-day Rolling Average . A new 365-day rolling average shall be calculated each steam generating unit operating day as the average of all the hourly nitrogen oxides emission data for the preceding 365 calendar days. This standard does not apply during times when only the center-fired burner is operating, but does apply at all other times including periods of startup, shutdown and malfunction of the main burner. Hours when only the center-fired burner is operating may be excluded in the calculation of the 365-day rolling average.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000. To avoid classification as a major modification under NSR.
Nitrogen Oxides: less than or equal to 0.20 lbs/million Btu heat input using 30-day Rolling Average . A new 30-day rolling average shall be calculated each steam generating unit operating day as the average of all the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days. This standard applies at all times including periods of startup, shutdown and malfunction and during periods when only the center-fired burner is operating.	Title I Condition: 40 CFR Section 60.44b(l); Minn. R. 7011.0565
Carbon Monoxide: less than or equal to 11.2 lbs/hour . This standard applies at all times including periods of startup, shutdown and malfunction.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000. To avoid classification as a major modification under NSR.
B. REPORTING & RECORDKEEPING REQUIREMENTS	hdr
Recordkeeping: The permittee shall record and maintain records of the amounts of each fuel combusted during each operating day. In addition, the permittee shall maintain records of the operational data listed in 40 CFR 60.49b(g).	40 CFR Section 60.49b(d)&(g); Minn. R. 7011.0565
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 02/19/2002 of EU016 to measure carbon monoxide emissions. The carbon monoxide test shall be conducted at the lowest achievable low load condition that is representative of normal operation.	Title I Condition: Minn. R. 7017.2020, subp. 1
D. CONTINUOUS EMISSION MONITORING REQUIREMENTS	hdr
CEMS Installation: Install, calibrate, maintain and operate a continuous monitoring system for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system.	Title I Condition: 40 CFR Section 60.48b(b); Minn. R. 7011.0565;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. Data is recorded during calibration checks, and zero and span adjustments. 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. The 1-hour average emission rates shall be expressed in lb/mmBtu and the span value for the CEMS shall be 210 ppm.	40 CFR Section 60.48b(c)-(e); Minn. R. 7011.0565; 40 CFR Section 60.13(e); Minn. R. 7017.1090, subp. 1
When nitrogen oxides emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained using standby procedures to provide emissions data for a minimum of 75% of operating hours in each steam generating unit operating day, in at least 22 of 30 successive steam generating unit operating days.	40 CFR Section 60.48b(f); Minn. R. 7011.0565
CEMS 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 40CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2; 40 CFR Part 60, Appendix F, Section 3
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test. Follow the procedures in 40 CFR pt. 60, Appendix F.	40 CFR part 60, Appendix F, Section 5.1.1; Minn. R. 7017.1170, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Relative Accuracy Test Audit (RATA) Notification: due 30 days before each CEMS RATA.	Minn. R. 7017.1180, subp. 2
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which the CEMS RATA was conducted.	Minn. R. 7017.1180, subp. 3; 40 CFR Part 60, Appendix F, Section 1
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F shall be used to determine out-of-control periods for CEMS.	40 CFR Part 60, Appendix F, Section 4.1; 40 CFR Section 60.13(d)(1); Minn. R. 7017.1170, subp. 3
CEMS Cylinder Gas Audit (CGA): due before end of each calendar quarter following CEM Certification Test but in no more than three calendar quarters per calendar year. The RATA shall be conducted during the calendar quarter in which a CGA is not performed.	40 CFR Part 60, Appendix F, Section 5.1.2; Minn. R. 7017.1170, subp. 4
Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter following Cylinder Gas Audit (CGA).	Minn. R. 7017.1180, subp. 1; 40 CFR Part 60, Subp. Db; Minn. R. 7011.0565; 40 CFR Part 60, Appendix F, Section 1; Minn. R. 7017.1180, subp. 1
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. 7017.1130; 40 CFR Section 60.7(f)
Records of Startup, Shutdown, or Malfunction: Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	40 CFR Section 60.7(b)

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Subject Item: EU 017 Boiler #8

Associated Items: CE 007 Modified Furnace or Burner Design

CE 009 Flue Gas Recirculation

GP 004 Natural Gas Boilers 7 and 8

MR 012 Boiler 8

MR 013 Boiler 8

SV 037

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Nitrogen Oxides: less than or equal to 0.040 lbs/million Btu heat input using 365-day Rolling Average . A new 365-day rolling average shall be calculated each steam generating unit operating day as the average of all the hourly nitrogen oxides emission data for the preceding 365 calendar days. This standard does not apply during times when only the center-fired burner is operating, but does apply at all other times including periods of startup, shutdown and malfunction of the main burner. Hours when only the center-fired burner is operating may be excluded in the calculation of the 365-day rolling average.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000. To avoid classification as a major modification under NSR.
Nitrogen Oxides: less than or equal to 0.20 lbs/million Btu heat input using 30-day Rolling Average . A new 30-day rolling average shall be calculated each steam generating unit operating day as the average of all the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days. This standard applies at all times including periods of startup, shutdown and malfunction and during periods when only the center-fired burner is operating.	Title I Condition: 40 CFR Section 60.44b(l); Minn. R. 7011.0565.
Carbon Monoxide: less than or equal to 11.2 lbs/hour . This standard applies at all times including periods of startup, shutdown and malfunction.	Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000. To avoid classification as a major modification under NSR.
B. REPORTING & RECORDKEEPING REQUIREMENTS	hdr
Recordkeeping: The permittee shall record and maintain records of the amounts of each fuel combusted during each operating day. In addition, the permittee shall maintain records of the operational data listed in 40 CFR 60.49b(g).	40 CFR Section 60.49b(d)&(g); Minn. R. 7011.0565.
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 02/19/2002 of EU017 to measure carbon monoxide emissions. The carbon monoxide test shall be conducted at the lowest achievable low load condition that is representative of normal operation.	Title I Condition: Minn. R. 7017.2020, subp. 1
D. CONTINUOUS EMISSION MONITORING REQUIREMENTS	hdr
CEMS Installation: Install, calibrate, maintain and operate a continuous monitoring system for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system.	Title I Condition: 40 CFR Section 60.48b(b)); Minn. R. 7011.0565; 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. Data is recorded during calibration checks, and zero and span adjustments. 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. The 1-hour average emission rates shall be expressed in lb/mmBtu and the span value for the CEMS shall be 210 ppm.	40 CFR Section 60.48b(c)-(e); Minn. R. 7011.0565; 40 CFR Section 60.13(e); Minn. R. 7017.1090, subp. 1
When nitrogen oxides emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained using standby procedures to provide emissions data for a minimum of 75% of operating hours in each steam generating unit operating day, in at least 22 of 30 successive steam generating unit operating days.	40 CFR Section 60.48b(f)); Minn. R. 7011.0565
CEMS 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 40CFR 60, App. F, section 3.	Minn. R. 7017.1170, subp. 2; 40 CFR Part 60, Appendix F, Section 3
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test. Follow the procedures in 40 CFR pt. 60, Appendix F.	40 CFR Part 60, Appendix F, Section 5.1.1; Minn. R. 7017.1170, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

Relative Accuracy Test Audit (RATA) Notification: due 30 days before each CEMS RATA.	Minn. R. 7017.1180, subp. 2
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter in which the CEMS RATA was conducted.	Minn. R. 7017.1180, subp. 3; 40 CFR Part 60, Appendix F, Section 1
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F shall be used to determine out-of-control periods for CEMS.	40 CFR Part 60, Appendix F, Section 4.1; 40 CFR Section 60.13(d)(1); Minn. R. 7017.1170, subp. 3
CEMS Cylinder Gas Audit (CGA): due before end of each calendar quarter following CEM Certification Test but in no more than three calendar quarters per calendar year. The RATA shall be conducted during the calendar quarter in which a CGA is not performed.	40 CFR Part 60, Appendix F, Section 5.1.2; Minn. R. 7017.1170, subp. 4
Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter following Cylinder Gas Audit (CGA).	Minn. R. 7017.1180, subp. 1; 40 CFR Part 60, Subp. Db); Minn. R. 7011.0565; 40 CFR Part 60, Appendix F, Section 1; Minn. R. 7017.1180, subp. 1
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. 7017.1130; 40 CFR Section 60.7(f)
Records of Startup, Shutdown, or Malfunction: Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	40 CFR Section 60.7(b)

TABLE B: SUBMITTALS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center
Permit Number: 06100001 - 008

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.

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 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

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.

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

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

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before 06/14/2004. An application for permit reissuance was submitted on 12/15/03.	Total Facility

TABLE B: RECURRENT SUBMITTALS

12/22/05

Facility Name: Blandin Paper/Rapids Energy Center

Permit Number: 06100001 - 008

What to send	When to send	Portion of Facility Affected
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 06/14/1999 for the monitors on EU 003 and EU 004 (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.	GP003
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 07/31/2000 (Submit Deviations Reporting Form DRF-1 as amended). The EER must contain all of the information requested in 40 CFR60.7(c). 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.	EU016
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 07/31/2000 (Submit Deviations Reporting Form DRF-1 as amended). The EER must contain all of the information requested in 40 CFR60.7(c). 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.	EU017
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 06/14/1999 . 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.	Total Facility
Compliance Certification	due 31 days after end of each calendar year starting 06/14/1999 (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner, and to the U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year. The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604.	Total Facility

APPENDIX B: Insignificant Activities List
 Facility Name: Blandin Paper/Rapids Energy Center
 Permit Number: 06100001-008

Insignificant Activities List

M.R. 7007.1300, subp. 3 - Insignificant Activities Required to be Listed

- A. Fuel Use: Space heaters fueled by kerosene, natural gas, or propane:
 - A#1 Space heater with a total maximum capacity of 20 MMBtu/hr
 - A#2 Several natural gas fired space heaters used for comfort heat only.

- D. Finishing Operations: Equipment vented inside a building used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding sawing, surface grinding, or turning of ceramic precision parts, leather, metals, plastics, masonry, carbon, wood, or glass, provided that emissions from the equipment are:
 - a. filtered through an air cleaning system; and
 - b. vented inside of the building 100% of the time
 D#1 Paper Trimmers

- E. Storage tanks:
 - 2. Non-hazardous air pollutant VOC storage tanks with a combines total tankage capacity not more than 10,000 gallons of non-hazardous air pollutant VOC's and with a vapor pressure of not more than 1.0 psia at 60 degrees F.

FACILITY NUMBER	LOCATION	CONTENTS	SIZE (GAL)	SECONDARY CONTAINMENT	COLOR
MAIN MILL					
26	Main	#1 Dye Run Tank	225	Bldg	Silver
27	Main	#2 Dye Run Tank	225	Bldg	Silver
28	Main	#3 Dye Run Tank	225	Bldg	Silver
29	Main	#4 Dye Run Tank	225	Bldg	Silver
31	Bsmt	Kerosene	92	Bldg	Green
NO. 5 PAPER MACHING BUILDING					
16	Grd Flr	Kerosene	92	Bldg	Green
18	Mez	Ret. Aid Make Down	1982	Bldg	Silver
19	Mez	#1 Dye Make Down	360	Bldg	Silver
20	Mez	#2 Dye Make Down	360	Bldg	Silver
21	Opr Flr	Ret. Aid Tank		Bldg	Silver
COATING PREP					
6	Bsmt	Latex	20000	Bldg	Silver
7	Bsmt	Latex	20000	Bldg	Silver
22	Mez	#3 Starch Mix-Top	800	Bldg	Gray
23	Mez	#3 Starch Mix-Wire	700	Bldg	Gray
24	Mez	#3 Clay Mix-Top	1100	Bldg	Gray
25	Mez	#3 Clay Mix-Wire	1100	Bldg	Gray
26	Mez	#3 Cook Tank-Top	1100	Bldg	Gray
27	Mez	#3 Cook Tank-Top	1100	Bldg	Gray
28	Mez	#3 Stor. Tank-Top	1200	Bldg	Gray
29	Mez	#3 Stor. Tank-Top	1100	Bldg	Gray
30	Mez	#4 Starch Mix-Top	400	Bldg	Gray

31	Mez	#4 Starch Mix-Wire	400	Bldg	Gray
32	Mez	#4 Clay Mix-Top	1100	Bldg	Gray
33	Mez	#4 Clay Mix-Wire	1100	Bldg	Gray
34	Mez	#4 Cook Tank-Top	1100	Bldg	Gray
35	Mez	#4 Cook Tank-Wire	1100	Bldg	Gray
36	Mez	#4 Stor. Tank-Top	1100	Bldg	Gray
37	Mez	#4 Stor. Tank-Wire	1100	Bldg	Gray
38	Mez	#5 Starch Mix-Top	800	Bldg	Gray
39	Mez	#5 Starch Mix-Wire	800	Bldg	Gray
40	Mez	#5 Clay Mix-Top	1900	Bldg	Gray
41	Mez	#5 Clay Mix-Wire	1900	Bldg	Gray
42	Mez	#5 Cook Tank-Top	1800	Bldg	Gray
43	Mez	#5 Cook Tank-Wire	1800	Bldg	Gray
44	Mez	#5 Stor. Tank-Top	1900	Bldg	Gray
45	Mez	#5 Stor. Tank-Wire	1900	Bldg	Gray
46	Mez	#6 Starch Mix-Top	1800	Bldg	Gray
47	Mez	#6 Starch Mix-Wire	1800	Bldg	Gray
48	Mez	#6 Clay Mix-Top	4000	Bldg	Gray
FACILITY NUMBER	LOCATION	CONTENTS	SIZE (GAL)	SECONDARY CONTAINMENT	COLOR
49	Mez	#6 Clay Mix-Wire	4000	Bldg	Gray
50	Mez	#6 Cook Tank-Top	4000	Bldg	Gray
51	Mez	#6 Cook Tank-Wire	4000	Bldg	Gray
52	Mez	#6 Stor. Tank-Top	4000	Bldg	Gray
53	Mez	#6 Stor. Tank-Wire	4000	Bldg	Gray

COOPERAGE

2	Grd Flr	Latex	24000	Bldg	Off-White
3	Grd Flr	Latex	24000	Bldg	Off-White
6	Grd Flr	Ctg Plastic Pigment (Ropaque)	7850	Bldg	Brown
7	Grd Flr	City Plastic Pigment	7850	Bldg	Brown

NO. 6 PAPER MACHINE BUILDING

12	Mez	Ret. Make Down	2400	Yes	Silver
17	Opr Flr	Ret. Aid Run Tank	2400	Yes	Silver
21	Opr Flr	Dye Run Tank	750	Yes	Silver
22	Opr Flr	Dye Make Down	500	Yes	Silver
24	Grd Flr	Kerosene	92	Bldg	Yellow

G. Emissions from a laboratory, as defined in the form instructions:

G#1 Research Paper Coater – Coating could not be used for production.

H. Brazing, soldering, or welding equipment

H#1 Several maintenance welding stations located throughout the facility.

I. Individual emission units at a stationary source which each have a potential to emit for each of the following pollutants less than:

- 1) 4000 lbs/year of carbon monoxide

- 2) 2000 lbs/year each of nitrogen oxide, sulfur dioxide, particulate matter, particulate matter less than ten microns, volatile organic compounds (including hazardous air pollutants containing VOC), and ozone.

- I#1 Clay Unload and Convey – Clay is received wet in slurry form and contains a very small amount of VOCs.
I#2 Log Debarking – all wood is wet.
I#3 Five – 5000 cfm 400,000 Btu Modine Recirculation Units in Building No. 5 Shipping
I#4 Ten - 5000 cfm 400,000 Btu Modine Recirculation Units in Kraft Warehouse
I#5 Natural gas-fired office boiler – 1.9 mmBtu/hr

M.R. 7007.1300, subp. 4 - Insignificant Activities Required to be Listed in a Part 70 Application

Several parts washers used for maintenance activities utilizing solvent containing high flash point solvents

Several makeup air units:

- TM2 Outside - 11 MMBtu/hr
- Calcium Carbonate Bldg. – 3.5 MMBtu/hr
- Building #5 Coater + Shop – 16.85 MMBtu/hr
- Old Powerhouse – 4.3 MMBtu/hr
- Old Powerhouse – 4.3 MMBtu/hr

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 06100001-008

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 preliminary determination to issue the draft/proposed permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Owner & Operator Address and Phone No. (Co-permittee)	Owner & Operator Address and Phone No. (Co-permittee)	<u>Facility Address</u> (SIC Code: 2611/2621)
Blandin Paper Company – Member, UPM Kymmene Group 115 1 st Street Southwest Grand Rapids, MN 55744 Facility Contact: Bill Spreeman - (218) 327-6306	Minnesota Power Rapids Energy Center 502 3 rd Street NW Grand Rapids, MN 55744 Permit Contact: Brandon Krogh – 30 West Superior Street Duluth, MN 55802-2093 (218) 723-3954	Blandin Paper Company/ Minnesota Power-Rapids Energy Center 115 1 st Street Southwest Grand Rapids, MN 55744 Itasca County Facility Contact: Bill Spreeman – (218) 327-6306

1.2. Description of the Facility

Blandin Paper Company (Blandin) and Minnesota Power operate a Pressurized Groundwood (PGW) pulp mill and paper facility in Grand Rapids, which is described in the TSD for the Title V permit issued on June 14, 1999. Blandin operates the pulp and paper mill while Minnesota Power operates the steam and electricity production facility.

Effective March 1, 2000, Blandin Paper Company and Minnesota Power signed an Agreement resulting in Minnesota Power being the operator of certain steam and electric production facilities located at the Blandin site. Minnesota Power uses its own employees, and then sells steam and electricity back to Blandin.

Blandin and Minnesota Power are considered co-permittees for this stationary source since the boilers act as a support facility for Blandin’s mill operations.

The Blandin/Minnesota Power site is an existing major source under federal Prevention of Significant Deterioration (PSD) requirements. Since this permit amendment is being pursued primarily by Minnesota Power staff, Minnesota Power will be referred to as the applicant throughout most of this TSD. This does not impact the co-permittee status at the facility.

1.3 Description of the Activities Allowed by this Permit Action

This permit action incorporates a major amendment application submitted on August 5, 2005. The amendment is to change monitoring requirements associated with NOx limits on the natural gas-fired boilers 7 and 8. The changes are needed because Minnesota Power has decided to install smaller burners, 1 mmBtu/hr center-fired burners rather than the 10 mmBtu/hr pilot burners, on boilers 7 and 8. Due to the small size of the burners, they cannot meet the 0.04 lb/mmBtu NOx limit when only the center-fired burners are operating. Therefore, this amendment makes a change so that this limit does not apply when only the center-fired burners are operating. However, the NSPS limit of 0.2 lb/mmBtu continues to apply at all times. In addition, the overall fuel use limit remains unchanged. The testing frequency for EU 017 (Boiler 8) was changed to match what had been approved in a Notice of Compliance letter issued following a performance test; the change should have been made earlier, but had been overlooked with previous permit amendments.

1.4. Facility Emissions:

The potential emissions for the center-fired burners are presented below. There is not an increase in the potential to emit (PTE) for the facility, since the center-fired burners have lower PTE than the previously permitted pilot burners.

Table 1. Center-fired Burner Potential to Emit Summary

	PM tpy	PM ₁₀ tpy	SO ₂ tpy	NO _x tpy	CO tpy	VOC tpy
Center-fired Burners	0.06	0.06	0.006	1.4	0.72	0.04

Table 2. Facility Classification

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

2. Regulatory and/or Statutory Basis

New Source Review

The facility is an existing major source under New Source Review. This permit does not change the status of the facility.

Part 70 Permit Program

This facility is an existing major source under the Part 70 Permit Program.

New Source Performance Standards (NSPS)

There are no New Source Performance Standards triggered by or applicable to the changes authorized by this permit action.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

There is no installation of a major source of hazardous air pollutants authorized by this permit amendment. The boilers on site will be subject to the 40 CFR pt. 63 Subp. DDDDD NESHAP when it becomes effective. The initial notification has been submitted. The facility will also be subject to the 40 CFR pt. 63 Subp. JJJJ NESHAP (Paper and Other Web Coating), when it becomes effective. The compliance date for Subpart JJJJ is December 4, 2005. The initial notification for this subpart has been submitted.

Minnesota State Rules

There are no Minnesota Standards of Performance triggered by or applicable to the changes authorized by this permit action.

The following table shows specific changes that were made in the permit.

Table 3. Regulatory Overview of Units Affected by the Modification/Permit Amendment

EU, GP, or SV	Applicable Regulations	Comments:
EU 016, EU 017 Natural gas-fired boilers 7 and 8	<p>NO_x emission limit (365-day rolling average basis)</p> <p>Old: This standard applies at all times including periods of startup, shutdown and malfunction.</p> <p>New: This standard does not apply during times when only the center-fired burner is operating, but does apply at all other times including periods of startup, shutdown and malfunction of the main burner. Hours when only the center-fired burner is operating may be excluded in the calculation of the 365-day rolling average.</p>	<p>This change was made on both boilers (EU 016, EU 017). The limit does not apply during times when only the center-fired burners are operating, as these burners cannot meet this emission rate.</p>

	<p>NO_x emission limit (30-day rolling average basis)</p> <p>Old: This standard applies at all times including periods of startup, shutdown and malfunction.</p> <p>New: This standard applies at all times including periods of startup, shutdown and malfunction and during periods when only the center-fired burner is operating.</p>	<p>This change was made on both boilers (EU 016, EU 017). This is a clarification to make it clear that this limit <i>does</i> apply even during times when only the center-fired burner is operating.</p>
EU 017 Boiler 8	<p>Old: Performance Test: due before end of each 36 months starting 06/15/02 of EU016 to measure carbon monoxide emissions.</p> <p>New: Performance Test: due before end of each 60 months starting 02/19/02 of EU017 to measure carbon monoxide emissions</p>	<p>This change was overlooked with previous permit amendments. A Notice of Compliance letter was sent to the Rapids Energy Center after the January, 2003 testing. In the letter, the MPCA approved the schedule which corresponds to the schedule being corrected in this permit amendment.</p>

3. Technical Information

3.1 Emissions Calculations

Calculations for potential to emit for the center-fired burners are attached to this document. Updated GI-07 forms (emissions summary form) are also attached. Netting was performed as part of a previous permit action (06100001-006); the permit incorporated a major amendment for replacing the burners in the boilers, and installing 10 mmBtu pilot burners. The center-fired burners that will now be installed have potential emissions less than the pilot burners, so the previous netting analysis is not affected.

3.2 Comments Received

Public Notice Period: November 3, 2005 – December 2, 2005

EPA 45-day Review Period: November 3, 2005 – December 19, 2005

No comments were received during the comment period.

4. Conclusion

Based on the information provided by Minnesota Power, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 06100001-008, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Paula Connell (permit writer/engineer)
 Robert Beresford (enforcement)
 Jenny Reinertsen (peer reviewer)

Attachments: Emissions Calculation Spreadsheets, Facility Description and CD-01 Forms