

**AIR EMISSION PERMIT NO. 12300410- 003**

**IS ISSUED TO**

Waldorf Corporation

WALDORF CORPORATION DBA A ROCK-TENN COMPANY

2250 Wabash Ave

St. Paul, Ramsey County, MN 55114

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

Permit Type	Application Date	Permit Action No.	Issue Date
Total Facility Operating Permit	April 1995	-001	04/17/2003
Minor Amendment	March 1996	-001	04/17/2003
Minor Amendment	July 1996	-001	04/17/2003
Major Amendment	06/27/2005	-002	Not issued, application withdrawn
Major Amendment	07/18/2006	-003	See below

This permit 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.

**Permit Type:** Federal; Pt 70/Major for NSR

Major Amendment

**Issue Date:** April 17, 2003

**Date:** March 8, 2007

**Expiration:** April 17, 2008

All Title I Conditions do not expire.

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

for Brad Moore  
Commissioner  
Minnesota Pollution Control Agency

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**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:**

Waldorf manufactures 100 percent recycled corrugated medium and boxboard at the St. Paul facility. The paper products are manufactured entirely from pre- and post-consumer corrugated board, white paper, newsprint, and boxboard. The papermaking processes are not a significant source of emissions, except for VOC emissions. The VOC emissions from the papermaking are primarily from material used for cleaning the papermaking machines, as well as from additives added to the paper.

Process steam is purchased and piped from the Xcel Energy High Bridge facility (High Bridge Plant) in St. Paul. Using combined heat and power (CHP) principles, the high pressure steam received from the High Bridge Plant is reduced to the required process pressure using an electrical generating back-pressure turbine. A steam plant, consisting of four boilers, is operational at Waldorf. The boilers have been maintained in a stand-by mode to provide steam in the event that the supply from Xcel is interrupted or discontinued. The boilers are allowed to burn natural gas, #2 or #6 fuel oil. The boilers are sources of particulate matter, nitrogen oxides, sulfur dioxide, carbon monoxide, VOC, and HAP emissions.

For the past several years, the actual emissions from the boilers have been very low, as most of the steam utilized by the facility has been purchased rather than produced on-site. When the High Bridge Plant is converted to natural gas, steam will no longer be supplied to Waldorf, and the boilers will once again be used on a regular basis by Waldorf to produce their own steam.

**PERMIT HISTORY:**

Permit Action -001

This was the original Part 70 Operating Permit

Permit Action -002

This permit action was not issued. The application was for two new natural gas fired boilers, and was withdrawn by the Permittee.

Permit Action -003 (this permit action)

The purpose of this permit action is to revise and delete certain permit provisions reflecting the recent retirement and removal of emission units associated with the folding carton operation; to change the current status of the web welder emission unit to conditionally exempt (under Minn. R. ch. 7008); to incorporate standard physical parameters required for compliance with ambient air standards based on air dispersion modeling; and to add recordkeeping requirements now standard in all permits for major sources under New Source Review.

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

03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

**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**

<b>What to do</b>	<b>Why to do it</b>
<b>SOURCE-SPECIFIC REQUIREMENTS</b>	hdr
<p>The parameters used in the modeling performed for determining emission and/or operational limits for this facility are listed in Appendix C of this permit. If the Permittee intends to change any of these parameters, the Permittee must submit the revised parameters to the Commissioner and receive written approval before making any changes. The revised parameter information submittal must include, but is not limited to: the locations, heights and diameters of the stacks; locations and dimensions of nearby buildings; velocity and temperatures of the gases emitted; and the emission rates. The plume dispersion characteristics due to the parameter revisions must equal or exceed the dispersion characteristics modeled for this permit, and the Permittee shall demonstrate this in the proposal.</p> <p>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.</p>	Minn. R. 7009.0020
<p>Parameters Used in Modeling (continued):</p> <p>For changes that do not involve an increase in an emission rate and that do not require a permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before making the change to any parameter.</p> <p>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 making the change to any parameter.</p> <p>For changes involving increases in emission rates and that require a permit amendment other than a minor amendment, the proposal must be submitted prior to or with the permit amendment application.</p> <p>This is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.</p>	Minn. R. 7009.0020
<b>DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NEW SOURCE REVIEW</b>	hdr
<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>	Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000
<p>Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following information:</p> <ol style="list-style-type: none"> <li>1. A description of the project</li> <li>2. Identification of the emission unit(s) whose emissions of an NSR pollutant could be affected</li> <li>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.</li> </ol> <p>The Permittee shall maintain records of this documentation.</p>	Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5
<p>Before beginning actual construction of any project which includes any electric utility steam generating unit (EUSGU), the Permittee shall submit a copy of the preconstruction documentation (items 1-3 under Preconstruction Documentation, above) to the Agency.</p>	Title I Condition: 40 CFR Section 52.21(r)(6)(ii) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5

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

03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

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.	Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5
For any project which includes any EUSGU, the Permittee must submit an annual report to the Agency, within 60 days after the end of the calendar year. The report shall contain:  a. The name and ID number of the facility, and the name and telephone number of the facility contact person b. The quantified annual emissions analyzed using the ATPA test, plus the potential emissions associated with the same project and analyzed using potential emissions c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection, if that is the case.	Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5
For any project which does not include any EUSGU, 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:  a. The name and ID number of the facility, and the name and telephone number of the facility contact person b. 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 rate is exceeded. c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection.	Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 & 5
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.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, supbs. 7A, 7L & 7M; Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080.
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, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
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 shall include a preventative maintenance program for that equipment, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment 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 the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subp. 14 and 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
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)

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

03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
<b>PERFORMANCE TESTING</b>	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
Performance Test Notifications and Submittals:  Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.  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	Minn. R. 7017.2030, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2
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 or group of units.	Minn. R. 7017.2025
<b>MONITORING REQUIREMENTS</b>	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)
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)
<b>RECORDKEEPING</b>	hdr
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)
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)
<b>REPORTING/SUBMITTALS</b>	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

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

03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

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
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)
Emission Inventory Report: due 91 days after end of each calendar year following permit issuance (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
If applicable, the Permittee is 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. A complete RMP must be submitted to the RMP Reporting Center, PO Box 3346, Merrifield, VA 22116. RMP submittal information may be obtained at <a href="http://www.epa.gov/swercepp">http://www.epa.gov/swercepp</a> 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.	40 CFR pt. 68



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

03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

**Subject Item: GP 001 Boilers****Associated Items:** EU 001 Boiler 1 - normal fired

EU 002 Boiler 2 - normal fired

EU 003 Boiler 3 - normal fired

EU 004 Boiler 4 - tangential fired

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input . This applies separately to each boiler. PTE for the boilers based on worst-case allowable fuels is 0.12 lb/mmBtu.	Minn. R. 7011.0510, subp. 1
Total Particulate Matter: less than or equal to 285 tons/year using 12-month Rolling Sum . Limit is for total PM emissions from boilers, as calculated using formula below.	Minn. R. 7009.0080 (State ambient air quality standards as demonstrated by modeling)
$PM = [NG * EF_{ng} * HVNG]/2000 + (EF_2 * FO_2)/2000 + (EF_6 * FO_6)/2000$ <p>Where:</p> <p>NG = Total volume of natural gas burned in boilers 1-4 based on 12-month rolling sum, in units of cf</p> <p>EF<sub>ng</sub> = emission factor for natural gas based on site-specific performance test (or from AP-42 if no site-specific data) in units of lb/mmBtu</p> <p>HVNG = Average heating value of natural gas as provided by supplier, in units of mmBtu/cf</p> <p>2000 = conversion factor, in units of lb/ton</p> <p>EF<sub>2</sub> = emission factor for #2 fuel oil, based on site-specific performance test (or from AP-42 if no site-specific data) in units of lb/1000 gallons</p> <p>EF<sub>6</sub> = emission factor for #6 fuel oil, based on site-specific performance test (or from AP-42 if no site-specific data) in units of lb/1000 gallons</p> <p>FO<sub>6</sub> = Total volume of #6 fuel oil burned based on 12-month rolling sum, in units of 1000 gallons</p> <p>FO<sub>2</sub> = Total volume of #2 fuel oil burned based on 12-month rolling sum, in units of 1000 gallons</p>	Minn. R. 7007.0800, subp. 4 and 5
Sulfur Dioxide: less than or equal to 1.6 lbs/million Btu heat input . This applies separately to each boiler.	Minn. R. 7011.0510, subp. 1
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 applies separately to each boiler.	Minn. R. 7011.0510, subp. 2
Sulfur Content of Fuel: less than or equal to 0.5 percent by weight for #2 fuel oil.	Minn. R. 7007.0800, subp. 2
Sulfur Content of Fuel: less than or equal to 1.5 percent by weight for #6 fuel oil.	Minn. R. 7007.0800, subp. 2
Fuel Type: Natural gas, No. 2 fuel oil, or No. 6 fuel oil only, by design.	Minn. R. 7005.0100, subp. 35a
Notification of Installation of Fuel Oil Storage Capacity: 90 days before installing any fuel oil storage tanks, the Permittee shall notify the Manager of the Air Quality Permits Section of the planned action.	Minn. R. 7007.0800, subp. 6
<b>MONITORING AND RECORDKEEPING REQUIREMENTS</b>	hdr
Emissions Monitoring: The owner or operator shall use a COMS to measure opacity emissions from the boilers.	Minn. R. 7007.0800, subp. 4
Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain records of the total quantity of all fuel used in the boilers.	Minn. R. 7007, subp. 4 and 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-6**

03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

<p>Monthly Recordkeeping - Total PM Emissions. By the 15th of the month, the Permittee shall calculate and record the following:</p> <ol style="list-style-type: none"> <li>1) The total fuel usage of each fuel used in the boilers for the previous calendar month using the fuel usage records.</li> <li>2) The average heating value, for the previous 12-month period, for each fuel type burned using the data provided by the fuel supplier.</li> <li>3) The 12 month rolling sum Total PM Emissions for the previous 12 month period using the formula specified in this permit.</li> </ol> <p>The Total PM emissions using the formula only needs to be calculated if fuel oil was combusted during the previous month. PTE for the boiler using natural gas shows that the emission limit is met.</p>	Minn. R. 7007.0800, subp. 4 and 5
<p>Fuel Records: The Permittee shall obtain and maintain a certification from the fuel supplier for each fuel oil delivery specifying the sulfur content of the fuel oil, in percent by weight, and the heating value of the fuel oil, in mmBtu/gal. The Permittee shall also obtain and maintain a certification from the natural gas supplier specifying the heating value of the natural gas, in mmBtu/cf. This information shall be maintained on site.</p>	Minn. R. 7007.0800, subp. 5
<p>Fuel usage records: the Permittee shall, on a monthly basis, record what boilers were operated during the month and the type of fuel burned and, if fuel oil was burned, the quantity of fuel oil burned, during the month. The Permittee shall also record the volume and type of fuel oils delivered to the facility during the month.</p>	Minn. R. 7007, subp. 4 and 5
<b>TESTING REQUIREMENTS</b>	hdr
<p>Performance Test: due 180 days after Initial Startup of EU001 on fuel oil, to measure PM emissions from EU001. Test should be done while burning No. 6 fuel oil.</p>	Minn. R. 7017.2020, subp. 1
<p>Performance Test: due 180 days after Initial Startup of EU002 on fuel oil, to measure PM emissions from EU002. Test should be done while burning No. 6 fuel oil.</p>	Minn. R. 7017.2020, subp. 1
<p>Performance Test: due 180 days after Initial Startup of EU003 on fuel oil, to measure PM emissions from EU003. Test should be done while burning No. 6 fuel oil.</p>	Minn. R. 7017.2020, subp. 1
<p>Performance Test: due 180 days after Initial Startup of EU004 on fuel oil, to measure PM emissions from EU004. Test should be done while burning No. 6 fuel oil.</p>	Minn. R. 7017.2020, subp. 1
<p>Performance Test Notifications and Submittals;</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 day before each Performance Test</p> <p>Performance Test Report: due 45 days after each Performance Test</p> <p>Performance Test Report - Microfiche Copy or CD: due 105 day 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. R. 7017.2030, subp. 1-4; Minn. R. 7017.2018 and Minn. R. 7017.2035, subp. 1-2

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

03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

**Subject Item: GP 004 Paper Machines, Boxboard Mill****Associated Items:** EU 013 CorMed Paper Machine 4

EU 014 CorMed Paper Machine 5

EU 015 Boxboard Mill 1

EU 016 Boxboard Mill 2

<b>What to do</b>	<b>Why to do it</b>
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. R. 7011.0735. This applies separately to each piece of industrial process equipment.	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 applies separately to each piece of industrial process equipment.	Minn. R. 7011.0710, subp. 1(B)
Periodic Monitoring: the Permittee shall perform proper maintenance of the paper and boxboard machines so as to prevent excessive amounts of particulate matter from being emitted from the associated stack/vents.	Minn. R. 7007.0800, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name:       Waldorf Corp - A Rock-Tenn Co  
Permit Number:       12300410 - 003

Subject Item:         EU 004   Boiler 4 - tangential fired

Associated Items:     GP 001   Boilers

SV 001   Boilers 1, 2, 3, and 4

What to do	Why to do it
Capacity: less than or equal to 232 million Btu's/hour . This is derated heat input used in modeling for PM SIP.	Minn. R. 7009.0080

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

03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

**Subject Item:** EU 018 Clay Coater Dryer**Associated Items:** SV 011 Clay Coater

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. R. 7011. 0735.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Sulfur Dioxide: less than or equal to 1.6 lbs/million Btu heat input . Potential emissions using allowed fuel is approximately 0.0006 lb/MMBtu.	Minn. R. 7011.0610, subp. 2(A)(1)
Fuel Type: Natural gas only, by equipment design.	Minn. R. 7005.0100, subp. 35a

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name:       Waldorf Corp - A Rock-Tenn Co  
Permit Number:       12300410 - 003

Subject Item:        FS 001   Paved Roads

What to do	Why to do it
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. Do not cause or permit a building or its appurtenances or a road, or a driveway, or an open are to be constructed, used, repaired, or demolished without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne. All persons shall take reasonable precautions to prevent the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate. The commissioner may require such reasonable measures as may be necessary to prevent particulate matter from becoming airborne including, but not limited to, paving or frequent clearing of roads, driveways, and parking lots; application of dust-free surfaces; application of water; and the planting and maintenance of vegetative ground cover.	Minn. R. 7011.0150

## TABLE B: SUBMITTALS

B-1 03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co  
Permit Number: 12300410 - 003

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

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.

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

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

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.

**TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS****B-2** 03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup on No. 6 fuel oil	EU001, EU002, EU003, EU004
Testing Frequency Plan	due 60 days after Performance Test for PM emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	EU001, EU002, EU003, EU004



**TABLE B: RECURRENT SUBMITTALS****B-3** 03/08/07

Facility Name: Waldorf Corp - A Rock-Tenn Co

Permit Number: 12300410 - 003

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 04/17/2003 . 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 starting 04/17/2003 (for the previous calendar year). To be submitted 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 B – Insignificant Activities****Facility Name:** Waldorf Corporation - A Rock-Tenn Company**Permit Number:** 12300410-003**Insignificant Activities Required to be Listed**

<b>Minn. R. 7007.1300, subp.</b>	<b>Rule Description of the Activity</b>	<b>General Applicable Requirement</b>
3(A)	Fuel use: space heaters fueled by, kerosene, natural gas, or propane. <ul style="list-style-type: none"><li>• <i>Natural gas-fired space heaters</i></li></ul>	Minn. R. 7011.0515 (PM and opacity)
3(G)	Emissions from a laboratory. <ul style="list-style-type: none"><li>• <i>Analytical and QA/QC laboratories</i></li></ul>	Minn. R. 7011.0715 (PM and opacity)
3(H)(4)	Brazing, soldering or welding equipment.	Minn. R. 7011.0715 (PM and opacity)
3(H)(5)	Blueprint copiers and photographic processes.	Minn. R. 7011.0715 (PM and opacity)
4(B)	Emission units with potential emissions of less than 2.28 lb/hr or actual emissions of less than 1.0 ton/yr of PM, PM <sub>10</sub> , NO <sub>x</sub> , SO <sub>2</sub> , and VOCs. <ul style="list-style-type: none"><li>• <i>Fuel oil storage tank (day tank)</i></li><li>• <i>Lubricating oil storage tank</i></li><li>• <i>Feedstock paper storage piles and handling</i></li><li>• <i>Drum and tote storage of VOC-containing materials</i></li><li>• <i>Underground storage tank (UST) # 25 – diesel fuel</i></li></ul>	Minn. R. 7011.0715 (PM and opacity)
<b>Minn. R. 7008.4110 subp.</b>	<b>Rule Description of the Activity</b>	<b>General Applicable Requirement</b>
(2)	Equipment venting PM/PM <sub>10</sub> inside a building, provided that emissions from the equipment are filtered through an air cleaning system and vented inside of the building 100% of the time. <ul style="list-style-type: none"><li>• <i>Finishing operations that are filtered through an air cleaning system, and vented inside the building.</i></li><li>• <i>CorMed Web welder (EU017) is reconfigured to be filtered and exhausted inside the building 100% of the time</i></li></ul>	Minn. R. 7011.0715 (PM and opacity)



## APPENDIX C – Modeled Parameters

**Facility Name:** Waldorf Corporation - A Rock-Tenn Company

**Permit Number:** 12300410-003

The values in the following table are those that were used in the modeling in the Air Quality Impact Analysis of the Rock-Tenn Company Facility, March 2006. Per the permit application dated June 2006, “Scenario A” (all four boilers emitting through SV001) is the selected stack configuration.

Stack ID	Stack Height (ft)	Stack Temp (°F)	Design Flow Rate (acfm)	Stack Diameter (ft)	Source ID	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	Short-term SO <sub>2</sub> (lb/hr)	Long-term SO <sub>2</sub> (lb/hr)	Short-term PM <sub>10</sub> (lb/hr)	Long-term PM <sub>10</sub> (lb/hr)	Annual PM (ton/year)
SV001	197.0	382	414,840	12.7	EU001	42.95	11.0	215.1	906.4 <sup>(1)</sup>	16.9	65.06 <sup>(1)</sup>	285.0
					EU002	62.70	16.0	314.0		24.7		
					EU003	62.70	16.0	314.0		24.7		
					EU004	72.74	18.6	364.2		28.6		
SV010 <sup>(2)</sup>					EU017 <sup>(2)</sup>	N/A	N/A	N/A	N/A	0.34	0.34	N/A
SV011	49	80	1400	0.9	EU018	2.581	2.168	N/A	N/A	0.196	0.196	N/A
Fugitive					FS001a <sup>(3)</sup>	N/A	N/A	N/A	N/A	0.347	0.165	N/A
Fugitive					FS001b <sup>(3)</sup>	N/A	N/A	N/A	N/A	0.220	0.105	N/A
Fugitive					FS001c <sup>(3)</sup>	N/A	N/A	N/A	N/A	0.079	0.038	N/A
Fugitive					FS001d <sup>(3)</sup>	N/A	N/A	N/A	N/A	0.133	0.064	N/A
Fugitive					FS001e <sup>(3)</sup>	N/A	N/A	N/A	N/A	0.243	0.116	N/A
Fugitive					FS001f <sup>(3)</sup>	N/A	N/A	N/A	N/A	0.010	0.005	N/A
Fugitive					FS001g <sup>(3)</sup>	N/A	N/A	N/A	N/A	0.551	0.263	N/A
Fugitive					FS001h <sup>(3)</sup>	N/A	N/A	N/A	N/A	0.055	0.025	N/A
Fugitive					FS001i <sup>(3)</sup>	N/A	N/A	N/A	N/A	0.008	0.004	N/A

(1) Limited emission rate for the four boilers combined, based on the limited annual PM (total particulate matter) emissions.

(2) While EU017/SV010 was modeled using the listed parameters, the Permittee has elected to reconfigure the emissions such that they are routed through a particulate filter device and exhausted inside a building 100% of the time. This operation is thus considered a conditionally insignificant activity under Minn. R. 7008.4110.

(3) FS001a = Boxboard shipping paved roads  
 FS001b = Final boxboard shipping paved roads  
 FS001c = CorMed shipping paved roads  
 FS001d = Fuel oil delivery paved roads  
 FS001e = Boxboard scrap yard “M” paved roads  
 FS001f = Boxboard receiving warehouse “W” paved roads  
 FS001g = CorMed yard “S” & “C” paved roads  
 FS001h = Employee parking paved roads  
 FS001i = Bailer “B” paved roads

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**AIR EMISSION PERMIT NO. 12300410-003**

This technical support document 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:**

Applicant/Address	Stationary Source/Address (SIC Code: 2631)
Waldorf Corporation (dba Rock Tenn Company) 2250 Wabash Avenue St. Paul, MN 55114	2250 Wabash Avenue St. Paul Ramsey County
Contact: Steve Haselmann Phone: (651)641-4127	

**1.2. Description of the Facility**

Waldorf manufactures 100 percent recycled corrugated medium and boxboard at the St. Paul facility. The paper products are manufactured entirely from pre- and post-consumer corrugated board, white paper, newsprint, and boxboard. The papermaking processes are not a significant source of emissions, except for VOC emissions. The VOC emissions from the papermaking are primarily from material used for cleaning the papermaking machines, as well as from additives added to the paper.

Process steam is purchased and piped from the Xcel Energy High Bridge facility (High Bridge Plant) in St. Paul. Using combined heat and power (CHP) principles, the high pressure steam received from the High Bridge Plant is reduced to the required process pressure using an electrical generating back-pressure turbine. A steam plant, consisting of four boilers, is operational at Waldorf. The boilers have been maintained in a stand-by mode to provide steam in the event that the supply from Xcel is interrupted or discontinued. The boilers are allowed to burn natural gas, #2 or #6 fuel oil. The boilers are sources of particulate matter, nitrogen oxides, sulfur dioxide, carbon monoxide, VOC, and HAP emissions.

For the past several years, the actual emissions from the boilers have been very low, as most of the steam utilized by the facility has been purchased rather than produced on-site. When the High Bridge Plant is converted to natural gas, steam will no longer be supplied to Waldorf, and the boilers will once again be used on a regular basis, combusting fuel oil and/or natural gas to produce steam.

**1.3 Description of the Activities Allowed by this Permit Action**

The purpose of this permit action is twofold: 1) to remove requirements associated with equipment and operations that are no longer at the facility, and 2) to impose additional conditions associated with operating the boilers at capacity using fuel oil, such that the national and Minnesota ambient air quality standards are protected. This permit action does not authorize any new equipment or additional activities that were not already authorized under previous permits.

#### 1.4. Facility Emissions:

There are no increases in potential emissions authorized by this permit action. Several sources of emissions, particularly hazardous air pollutants, have been removed from the facility since the issuance of the last permit. The table below summarizes the current potential emissions of the facility, the potential emissions previously permitted, and the difference.

**Table 1. Total Facility Potential to Emit Summary**

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions – This permit <sup>(1)</sup>	293.1	253.1	3631	909.3	278.5	1963	7.4	22.3
Total Facility Limited Potential Emissions – Previous permit <sup>(2), (3)</sup>	290	290	3980	1075	285	2310	7.4	335
Total Facility Actual Emissions (2005)	0.23	0.23	0.02	2.97	2.45	433.1	HAPs not reported in emission inventory	

<sup>(1)</sup> Includes fugitive particulate emissions from traffic on paved roads, and HAPs from fuel combustion, which were excluded from the totals listed for the previous permit action.

<sup>(2)</sup> Excludes fugitive particulate emissions from traffic on paved roads, and HAPs from fuel combustion

<sup>(3)</sup> Permit 12300410-001

**Table 2. Facility Classification**

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD	X		
Part 70 Permit Program	X		
Part 63 NESHAP			X

## 2. Regulatory and/or Statutory Basis

### New Source Review

The facility is an existing major source under New Source Review (NSR) regulations. No changes subject to NSR are authorized by this permit.

This was the topic of discussion when Waldorf/Rock Tenn first approached the MPCA for approval to replace steam from the High Bridge plant with steam generated on site. MPCA's initial reaction was that this would be a change in the method of operation, triggering review of the change in emissions under NSR. Review of previous EPA determinations on similar projects validated this belief. However, when the issue was discussed with EPA Region 5 staff, it became clear that EPA does not support this interpretation of the NSR rules. Because (1) the existing permit did not limit the use of the boilers, (2) the facility description portion of the permit stated that the boilers can be used in the event of loss of steam supply from the High Bridge Plant, (3) the boilers have been maintained and remain operational, and (4) Rock Tenn states that there is no need to replace the underground oil storage tank that was removed several years ago, EPA's position is that Rock Tenn is not proposing a physical change or change in the

method of operation of the boilers. In fact, EPA specifically pointed out their belief that if in the future Rock Tenn finds it necessary to install an additional fuel oil storage tank (rather than work only with the existing day tank and/or drawing oil directly from tanker trucks or railcars), such a change would constitute a change in the method of operation of the boilers. EPA did not put this determination in writing. The permit includes a requirement that if in the future Rock-Tenn decides that additional fuel oil storage is necessary, they must notify the MPCA AQ Permits Section, and the question of whether such an action would trigger review under NSR will be readdressed at that time.

#### Part 70 Permit Program

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

#### New Source Performance Standards (NSPS)

There are no New Source Performance Standards applicable to the operations at this facility. The boilers were constructed and installed prior to the applicability dates of all potentially-applicable NSPS (Subparts D, Da, Db, and Dc).

#### National Emission Standards for Hazardous Air Pollutants (NESHAP)

Equipment that was subject to MACT standards has been removed from the facility. As a result, the facility is no longer a major source of hazardous air pollutants, therefore, no NESHAPs apply.

#### Minnesota State Rules

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

- Minn. R. 7011.0510 Standards of Performance for Existing Indirect Heating Equipment
- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.0710 Standards of Performance for Pre-1969 Industrial Process Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment

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

EU, GP, or SV	Applicable Regulations	Comments:
Total Facility	Minn. R. 7009.0020	Facility is restricted to those physical parameters and emission rates that allowed them to model compliance with ambient air quality standards. This is a state only requirement.
GP001	Minn. R. 7009.0080	Limit set on combined annual PM emissions from the boilers, to be protective of ambient air quality standards. This is a state only requirement.
GP001 (EU001, EU002, EU003, EU004)	Minn. R. 7011.0510	Standards of Performance for Existing Indirect Heating Equipment. Determination of applicable limit from rule: <ul style="list-style-type: none"> <li>• the units were constructed in 1928, 1947, 1949, and 1964;</li> <li>• the facility is located in St. Paul;</li> <li>• each unit capacity is less than 250 MMBtu/hr; and the facility has greater than 250 MMBtu/hr of indirect heating equipment.</li> </ul>

EU, GP, or SV	Applicable Regulations	Comments:
GP004 (EU013, EU014, EU015, EU016)	Minn. R. 7011.0715	Standards of Performance for Pre 1969 Industrial Process Equipment.
EU018	Minn. R. 7011.0610	Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment

The language 'This is a state-only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act' refers to permit requirements that are mandated by state law rather than by the federal Clean Air Act. The language is to clarify the distinction between permit conditions that are required by federal law and those that are required by state law. State law requirements are not enforceable by U.S. EPA or by citizens under the federal Clean Air Act, but are fully enforceable by the MPCA and citizens under provisions of state law.

### **3. Technical Information**

#### **3.1 Calculations of Potential to Emit**

Attachment 1 to this TSD contains a summary of the PTE of the Facility, and a detailed spreadsheet showing the potential and limited boiler emissions. While the scope of what is permitted is unchanged (the permit does not allow any greater quantity or additional fuels that what was permitted in previous permits), the calculations were redone using more recently updated emission factors, and to include HAP emissions, which were previously excluded.

#### **3.2 Modeling**

Attachment 2 to this TSD contains a summary of the modeling done by the applicant to demonstrate that the ambient air quality standards are not compromised by the combustion of fuel oil in the boilers. The previous permit required modeling, and this permit incorporates the results of the modeling. The modeling exercise showed that the boiler stacks as previously configured did not provide adequate dispersion of combustion emissions. Therefore, the emissions from all four boilers must be routed through the taller stack (SV001). As is shown in the summary table in Attachment 2, this scenario results in adequate dispersion to be protective of the ambient air quality standards.

#### **3.3 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 4 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

**Table 4. Periodic Monitoring**

<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
Boilers: GP001	PM = 285 tons per year (total), on a 12 month rolling basis  (limit set to be protective of ambient air standards)	Recordkeeping: Ongoing records of fuel oil deliveries (for sulfur content); Daily records of fuel usage; Monthly calculations of emissions.	Calculation of PM emissions to be done per the equation listed in the permit.
Boilers: EU001, EU002, EU003, and EU004	PM: $\leq 0.4$ lb/MMBtu heat input, each boiler  SO <sub>2</sub> : $\leq 1.6$ lb/MMBtu heat input, each boiler (Minn. R. 7011.0510, subp. 1)  Opacity: $\leq 20\%$ , with allowed excursions (Minn. R. 7011.0510, subp. 2)	PM: Performance Testing  SO <sub>2</sub> : None  Opacity: COMS	Potential PM emissions when using the worst case allowed fuel are approximately 0.12 lb/MMBtu, or 30% of the allowable emissions; violation of this limit is unlikely. However, several commenters suggested that PM testing be done on the boiler. Since the emission factors used are an average, and the boilers are uncontrolled, MPCA has decided that testing is warranted for combustion of fuel oil.  Potential SO <sub>2</sub> emissions based on a mass balance of the maximum fuel usage and sulfur content are equivalent to the limit. Since you can't get more sulfur out that you put in, as long as the sulfur content limit of the fuel is adhered to, the limit will not be exceeded.

<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
Paper and boxboard machines : GP004 (EU013, EU014, EU015, and EU016)	PM: $\leq 0.3$ gr/dscf of exhaust gas Opacity: $\leq 20\%$ , with allowed excursions (Minn. R. 7011.0710)	Regular O&M	With proper operation and maintenance of the equipment, there is not expected to be any particulate emissions.
Clay Coater Dryer: EU018	PM: $\leq 0.3$ gr/dscf of exhaust gas Opacity: $\leq 20\%$ , with allowed excursions SO <sub>2</sub> : $\leq 1.6$ lb/MMBtu heat input, each boiler (Minn. R. 7011.0610)	None	This unit is limited to combustion of natural gas. Combustion of natural gas will not result in significant PM or SO <sub>2</sub> emissions. It is unlikely that the limits could be violated.

### 3.4 Insignificant Activities

Waldorf/Rock Tenn has several operations which are classified as insignificant activities. These are listed in Appendix B to the permit.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification for why no additional periodic monitoring is necessary for the current insignificant activities.

**Table 5. Insignificant Activities**

<b>Insignificant Activity</b>	<b>General Applicable Emission limit</b>	<b>Discussion</b>
Fuel use: space heaters fueled by, kerosene, natural gas, or propane	PM $\leq 0.6$ or $0.4$ lb/MMBtu, depending on year constructed Opacity $\leq 20\%$ with exceptions (Minn. R. 7011.0510/515)	For these units, based on the fuels used (natural gas) and EPA published emissions factors, it is highly unlikely that the applicable requirement could be violated. In addition, these types of units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.

<b>Insignificant Activity</b>	<b>General Applicable Emission limit</b>	<b>Discussion</b>
Storage tanks: gasoline storage tanks with a combined total tankage capacity of not more than 10,000 gallons;.	PM, variable depending on airflow Opacity $\leq$ 20% (Minn. R. 7011.0710/715)	These types of units are not expected to emit particulate matter.
Emissions from a laboratory, as defined in Minn. R. 7007.1300, subp. 3(G)	PM, variable depending on airflow Opacity $\leq$ 20% (Minn. R. 7011.0710/715)	These are typically small, intermittent operations that typically do not have any emissions. It is highly unlikely that they could violate the applicable requirement.
Brazing, soldering or welding equipment	PM, variable depending on airflow Opacity $\leq$ 20% (Minn. R. 7011.0710/715)	For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Blueprint copiers and photographic processes	Opacity $\leq$ 20% (Minn. R. 7011.0105 or 7011.0110))	While no known emissions estimation method exists for these units, based on general knowledge of how they operate, it is highly unlikely that they could generate visible emissions. In addition, these units would be operated and vented directly into an office area, so monitoring or testing is not feasible.
Individual units with actual emissions less than 2000 lb/year of certain pollutants	PM, variable depending on airflow Opacity $\leq$ 20% (with exceptions) (Minn. R. 7011.0710)	These are oil storage tanks and drums containing VOC, none of which are expected to emit particulate matter.  Handling and storage of feedstock paper would result only in large emission (e.g., pieces of paper). It is unlikely that a ton of paper is lost to the atmosphere per year.
Equipment venting PM/PM <sub>10</sub> inside a building, 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	PM, variable depending on airflow Opacity $\leq$ 20% (Minn. R. 7011.0715)	For these units, it is highly unlikely that they could violate the applicable requirement. In addition, these units are vented inside a building, so testing for PM or opacity is not feasible.

### **3.5 Permit Organization**

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be tracked (e.g., limits, submittals, etc.), should be in Table A or B. The main reason is that the appendices are word processing sections and are not part of the tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these.

### **3.6 Comments Received**

Public Notice Period: 11/08/2006 – 12/21/2006 (Public Meeting held on 12/07/2006)

EPA 45-day Review Period: 01/22/2007 – 03/07/2007

Comments were received from the public during the public notice period. The comments received did include adverse comments on the permit, and did request additional monitoring for some of the applicable requirements. Changes to the permit were made as a result of the comments: a requirement to do performance testing on the boilers to measure PM emissions was added to the permit. The comments received and MPCA's response to these comments are included in Attachment 4 to this Technical Support Document.

The revised permit was received by EPA for their 45-day review on 01/19/2007. Comments were not received from EPA during their review period. No changes were made to the permit.

## **4. Conclusion**

Based on the information provided by Waldorf Corporation, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 12300410-003 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team:

- Toni Volkmeier (permit writer/engineer)
- Bob Berg/Scott Parr (enforcement)
- Curt Stock (stack testing)
- Paula Connell (peer reviewer)

Attachments:

1. PTE Summary and Calculation Spreadsheets
2. Modeling Summary
3. Facility Description and CD-01 Forms
4. Comment Letters and MPCA response

# **Attachment 1**

## **Calculations and PTE Summary**

*Paper copy only*

## **Attachment 2**

### **Modeling Information**

*Paper copy only*



## **Attachment 3**

### **Facility Description & CD-01 Forms**

*Paper copy only*

## **Attachment 4**

### **Comment Letters and MPCA Response**

**Response to Public Comments**  
**Waldorf Corporation d.b.a. Rock-Tenn Company**  
**Proposed Air Emission Permit No. 12300410-003**  
**Public Comment Period: 11/8/06 – 12/21/06**

The purpose of this document is to provide a comprehensive summary of the responses to all written comments and questions received during the public comment period for the Major Amendment to the Part 70 Operating Permit proposed to be issued to Waldorf Corporation d.b.a. Rock-Tenn Company (Rock-Tenn). Comments were accepted from November 8, 2006, through 4:30 p.m. on December 21, 2006. In all, eight comment letters and electronic submittals containing the commenter's full name and address were received. Seven were received prior to the deadline, and one was received late. Two of the letters were in support of Rock-Tenn and did not request changes or action on the part of the MPCA. Response to those letters is not required. From the remaining six letters, those comments that are germane to the permit are summarized below, with the associated MPCA response. In several instances, multiple individuals or organizations submitted the same question or comment. Duplicated questions or comments are paraphrased and answered together. The complete text of all comments submitted is part of the public record, and is available for public review through the normal file review procedures. [Call 651-296-3263 to schedule an appointment. Be prepared to describe exactly which files you would like to review, so the files can be ready when you arrive for your scheduled appointment.]

This document does not provide written answers to oral inquiries, including those issues raised during the public information meeting held on December 7, 2006. At that meeting, MPCA staff clearly stated that issues brought up during the meeting must also be submitted in writing to be part of the public record for the permit.

This response document is being sent to all parties who either submitted comment letters during the specified time frame and included their full name and mailing address, or who provided their full name and address on a list provided at the December 7, 2006 public meeting, to receive future mailings on this permit action.

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**A. Testing & Monitoring** - Several commenters requested that Rock-Tenn test the boilers and/or monitor the ambient air in the vicinity of Rock-Tenn. A summary of those comments follows:

- A stack sample should be taken upon startup and operation of the boilers to determine actual levels of particulate matter (PM) and other pollutants. This equipment has not been run as the primary source of steam for some time and the Technical Support Document (TSD) does show that PM<sub>10</sub> rates may exceed permit caps. A stack test would confirm emission rates. Since the stack test represents a significant cost we think that using that data would be acceptable to use for the next two years if it is determined to be representative. Confirmation of this test and results should be passed on to community stakeholders once complete.
- The MPCA should conduct a smokestack sample test for PM, and the stack sample test should occur shortly after the fuel burning boilers go back into daily use in 2007. The stack test should be done when fuel oil (not natural gas) is being used, and the results from the test should be submitted to the MPCA and be accessible to the public through an appropriate Data Practices Act request or otherwise.
- The only emission data currently available with regard to these boilers is modeling data based on estimates and existing standards. There must be current, specific samples of the stack emissions after the boilers go into use next year. If feasible and not cost prohibitive, over the duration of its boiler use, Rock-Tenn should conduct repeat annual or semi-annual stack sample tests when fuel oil is in use, so that emission levels can be properly monitored over time.

- To ascertain the increased emissions and any related health risks, stack samples are extremely important because PM/PM<sub>10</sub> emissions have been directly connected to increase health risks such as respiratory ailments.
- The MPCA should use their general local authority to conduct stack tests, etc., in order to insure compliance with federal standards as well as state and local air quality goals.
- The MPCA should require initial tests/monitoring to determine the level and type of emissions that are present when the four on-site boilers are first put into use. This would provide valuable baseline data that can be used later to evaluate emission trends and actual experience.
- For emissions reporting to be effective, the MPCA and Rock-Tenn should establish several permanent monitoring stations both at Rock-Tenn and in the surrounding neighborhood. These stations should be operating as soon as possible in order to develop a baseline assessment of ambient air quality prior to resumption of on-site fuel oil and/or natural gas combustion. Air quality monitoring should be conducted in representative and “at risk” portions of the neighborhood, before and after the resumption of emissions at Rock-Tenn.

### **MPCA Response**

A requirement has been added to the permit to require testing of PM emissions from the boilers after startup on No. 6 fuel oil. Results of stack testing must always be submitted to the MPCA, under Minn. R. 7017.2035. The purpose of testing the PM emission is to demonstrate compliance with the applicable PM limit as listed in the permit. The frequency of testing will be determined based on the results of the initial stack test. The closer the measured emissions are to the applicable standard, the more frequently testing will need to be repeated.

It is not necessary to require SO<sub>2</sub> testing to demonstrate compliance with the permit limit, since the sulfur content of fuel oil is limited. Using a mass balance, no more than 2 pounds of SO<sub>2</sub> can be released per 1 pound of sulfur that enters the boiler through the fuel. By considering the maximum capacity of the boilers to consume fuel, the maximum SO<sub>2</sub> that can be produced is less than the applicable limit. Rock-Tenn will continuously monitor opacity emissions.

Stack testing provides a “snapshot” of what is being emitted by the boilers at the time of the test. This snapshot tells us whether or not the emissions from the boiler at that point in time are in compliance with the applicable standards. The rules that govern stack tests require that the tests are conducted under “worst case” conditions. This means that the facility must conduct the tests at the maximum rate it wishes to operate at burning the most pollutant-emitting fuel it wishes to use.

Stack test results and monitoring data are public information, and are reviewable by the public under the normal file review procedures. Rock-Tenn will not be required to submit stack test results or monitoring directly to any other parties as a permit condition. An arrangement similar to the “Good Neighbor Agreement” would be an option for neighborhood organizations to receive data directly from Rock-Tenn.

Note that stack testing by itself does not tell us anything about the resulting air quality in the area, or subsequent health effects, if any. See the next section for discussion of that topic. However, the level of air pollution in the immediate vicinity of Rock-Tenn is already being monitored by an ambient monitor located at 2179 University Avenue. The data collected by this monitor can be viewed online by going to <http://www.pca.state.mn.us/data/edaAir/ambientSearch.cfm> and entering the Site ID, which is 801. For additional information about monitoring, visit <http://www.pca.state.mn.us/monitoring/index.html#programs>. There are many links on this page, and contact information if you cannot find specific information that you’re looking for.

Comment:

**B. Potential Emissions/Air Quality/Health Effects** - Several commenters had questions or comments on the level of emissions from the boilers and/or the health effects associated with those emissions.

- The public notice presents data describing the “Potential to Emit.” However, no context for these data are provided. What are the expected air quality and health impacts of such emissions?
- Per the MPCA web site, federal and state emission thresholds restrict facilities to 100 tons per year (tpy) of PM (known to cause respiratory and cardiovascular problems). Rock-Tenn’s permit application states that these PM emissions will have a potential to emit at nearly three times that limit (293 tpy). If state and federal agencies deem 100 tpy to be the highest safe level of PM emissions, and Rock-Tenn will significantly exceed this level, what will the effect of this type of unsafe increase have on the health and livability to the surrounding communities? What does tripling the federal and state deemed threshold levels mean for the health of people living in the surrounding communities? Why does the MPCA seemingly deem this significant violation of that threshold to be acceptable?
- According to the draft permit, a total of 7500 tpy of sulfur dioxide (SO<sub>2</sub>), PM, carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOC), and hazardous air pollutants (HAP) will be dumped on the community and environment.
- The draft permit makes no mention of minimizing air emissions but instead actually permits increased emissions of PM by 0.23 tpy over the previous permit and permits a total facility increase of 8.1 tons over the limit cap of 285 tons. Total facility emissions should be capped at the present limit of 285 tons, with the stipulation that the facility shall be evaluated for PM reductions to levels that are more protective of human health and the environment.
- We are very concerned that increased emissions from Rock-Tenn’s older boilers will negatively impact the air quality in our area. Any increase in current emissions, even within applicable federal limits, will likely have a direct and very real impact on our community.

#### **MPCA Response**

Potential to emit, or PTE, is defined as the maximum capacity while operating at the maximum hours of operation of an emissions unit, emission facility, or stationary source to emit a pollutant under its physical and operational design (Minn. R. 7005.0100, subp. 35a). If the entire facility (boilers and paper recycling operations) were to operate 24 hours per day, 365 days per year at full capacity using the worst case fuel or raw material, the maximum it could emit would be what is listed as the PTE for the draft permit amendment.

The thresholds listed on the MPCA web site, <http://www.pca.state.mn.us/air/permits/aboutairpermits.html>, are used to identify whether a facility requires a federal (Part 70) or a state operating permit based on the facility’s PTE. If the PTE of any of the listed pollutants is greater than the value listed in the “federal” column (100 tpy for PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC, and CO; 10 tpy for any single HAP; 25 tpy for any combination of two or more HAP), then the facility needs a federal Part 70 permit. If the potential emissions will be below all of these levels, but above any of the values in the “state” column, then the facility requires a state permit. These emission thresholds establish what type of permit an owner or operator must apply for. The thresholds are not an upper limit of allowable emissions nor do they indicate the level of safety of the emissions. The emissions permitted in the draft permit amendment are not in violation of any state or federal thresholds.

The permitted PTE under the restrictions of the draft permit is as follows:

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions – draft permit amendment	293.1	253.1	3631	909.3	278.5	1963	7.4	22.3

Since the potential emissions of PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC are all greater than 100 tpy, that means that Rock-Tenn must have a federal Part 70 permit. Rock-Tenn currently holds a Part 70 permit. The permit as amended will be a Part 70 permit.

If Rock-Tenn operated 24 hours per day, 365 days per year, at full capacity, the most the facility could emit from both the recycling operations and from the boilers would be 7075 tons. 7075 tons is the total of the PTE of PM, SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC emissions (PM<sub>10</sub> is a subset of PM, and HAP is a subset of VOC, and so are not counted twice). The draft permit does not say or imply that 7500 tons of pollutants will be released to the community or environment. The PTE is not the amount that will actually be emitted because the facility does not operate 24 hours per day, 365 days per year at full capacity.

Actual emissions in 2004 from the recycling operations were as follows:

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy
Total Facility Actual Emissions (2004) (tpy)	0.23	0.23	0.02	2.97	2.45	429.87

Actual HAP emissions are not reported in the annual emission inventory, but if one assumes that the actual HAP emissions are 1.1% of the actual VOC emissions (potential HAP of 22.3 tpy is approximately 1.1% of the potential VOC of 1963 tpy), we can project that the actual total HAP emissions would be roughly 4.7 tpy.

Further, the boilers are sized to accommodate a higher paper recycling rate than is currently achieved at the facility, and also to accommodate operations that are no longer in existence at the facility. Therefore, Rock-Tenn does not need to run the boilers at full capacity. The boilers are permitted to burn fuel oil that contains up to 1.5% sulfur by weight; fuel oil currently contains slightly less than 1% sulfur by weight. Rock-Tenn will not burn exclusively fuel oil; sometimes natural gas will be burned. If Rock-Tenn operates their boilers at 75% of capacity, using only fuel oil with 1% sulfur by weight, the expected boiler emissions would be:

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy
Projected actual boiler emissions (tpy)	213.75	183.83	2412.60	722.24	202.09	13.23

If one assumes that Rock-Tenn will continue to recycle at approximately the same rate as it did in 2004, and once the boilers are operating, will operate them at roughly 75% of capacity, the total projected actual emissions (boilers plus recycling activities) would be as follows:

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy
Projected actual total facility emissions (tpy)	213.98	184.06	2412.62	725.21	204.54	446.33

The draft permit amendment does not permit any new operations, fuels, or activities that result in an increase in PTE. The facility is not currently capped at 285 tpy of PM. The existing permit and the draft

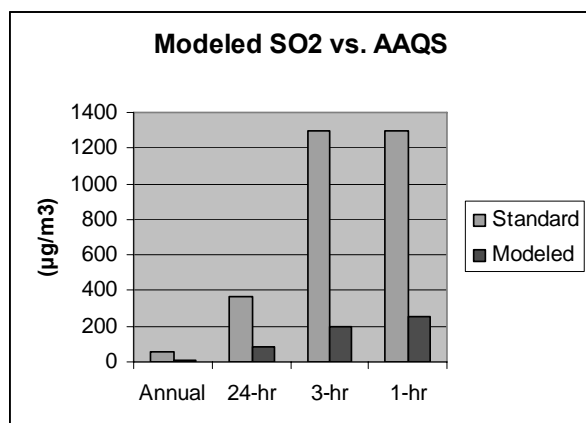
permit amendment both limit PM emissions from the boilers only to 285 tons per year. There are other activities at the facility that result in PM emissions. These operations include EU018 (clay coater) with potential PM emissions of roughly 0.9 tpy, and fugitive emissions from vehicle traffic, at 7.2 tons per year. These account for the 8.1 tpy allowed beyond the boiler limit of 285 tpy.

The potential total facility PM emissions listed for the draft permit amendment are 293.1 tpy. The potential PM emissions for the previous permit action were 290 tpy, for a difference of 3.1 tpy. This is not an increase over what was previously allowed to occur. The fugitive PM from vehicle traffic was not included in the total listed for the previous permit action, even though the vehicle traffic existed at that time. The total PM listed for the previous permit action also included a total of 4.3 tpy from EU006, EU008, EU010, EU017, EU019, and EU020, which are no longer in operation at the facility. Starting with the 290 tpy permitted at the last permit action, adding the 7.2 tpy from previously-omitted vehicle traffic, and removing the 4.3 tpy from discontinued operations, you arrive at the 293.1 tpy listed for the draft permit amendment.

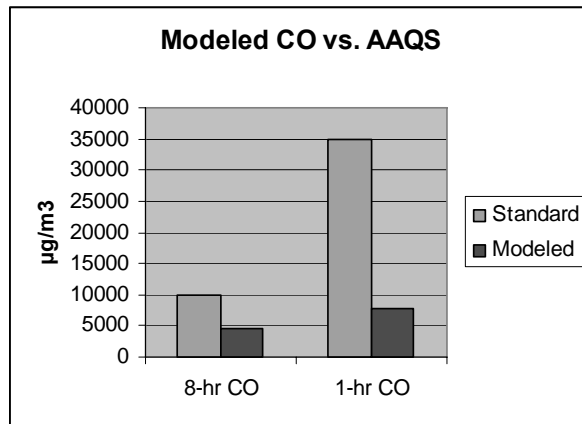
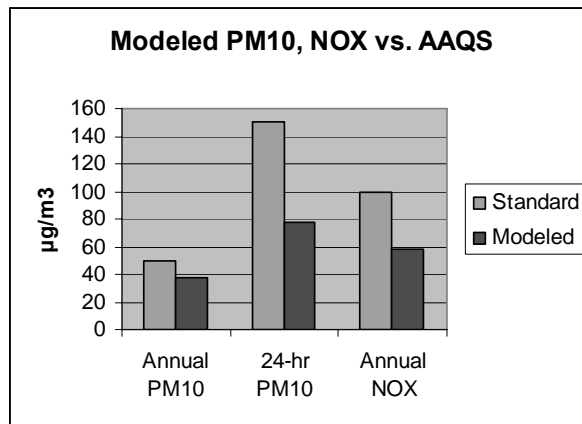
Effects on air quality can be and were predicted by using computer models. The computer model uses emission rates, facility parameters, prevailing weather patterns, terrain approximations, and background air pollutant levels to predict the concentration of a pollutant in the ambient air. Background air pollutant levels are what are in the air already from other sources, including other industrial sources, area sources such as gas stations and dry cleaners, and mobile sources. In this case, I-94 is a significant contributor to the background ambient concentrations in the area of Rock-Tenn's facility. The predicted concentration is then compared to National and Minnesota Ambient Air Quality Standards (NAAQS and MAAQS).

Primary NAAQS and MAAQS were designed to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary NAAQS and MAAQS are designed to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation, and buildings. Information on the NAAQS, including how and how often the standards are developed and/or readdressed can be found at <http://www.epa.gov/ttn/naaqs/>. In general, the Minnesota standards fill in where there is not a national standard, and in some cases are more restrictive than the national standard. The MAAQS are listed at <http://www.revisor.state.mn.us/arule/7009/0080.html>.

Rock-Tenn's PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO emissions were modeled and compared to the NAAQS and MAAQS. The worst case emissions were modeled, even though the facility will not operate in that manner. The highest predicted concentrations were then compared to the most restrictive standard (primary or secondary NAAQS or MAAQS). These comparisons are summarized in the charts below.







Since in all cases, the highest predicted resultant concentration (which includes concentrations already in the air now, prior to Rock-Tenn beginning operation of the boilers) is significantly less than the associated NAAQS or MAAQS standard, this means that the emissions from the Rock-Tenn boilers are not expected to cause adverse health or environmental effects.

**C. Fuel Use** - Several commenters provided input on the type of fuel that should be used by Rock-Tenn. A summary of those comments follows:

- Rock-Tenn should burn natural gas whenever possible. Although we realize that such a request is beyond the authority of the MPCA to order, we believe it is important that such a request be included in the public record. Rock-Tenn has stated that it will run its boilers with both natural gas and fuel oil. When Rock-Tenn uses natural gas, PM will not be a concern; however, when it burns fuel oil, PM emissions and the release of other pollutants will significantly increase. Pollution of these sorts will obviously greatly impact Rock-Tenn's neighbors, especially during the spring, summer, and fall months when windows of nearby homes are open and local parks experience their greatest use. Therefore, based on these concerns, we would like to encourage Rock-Tenn to burn natural gas whenever possible for the sake of the air quality, safety, and health of area residents.

- Fuels with the lowest potential for harmful emissions should be used by Rock-Tenn...encourage all measures to minimize emissions from its facility, including the use of best available technologies for pollution control.

#### **MPCA Response**

In an ideal world, all facilities in Minnesota would use the fuels that minimize their emissions. While there is no fuel that results in the lowest emissions for all pollutants, the MPCA has the authority to make facilities change fuels when fuel usage is known or suspected to cause violations of state or federal standards. That is not the case for Rock-Tenn. As was discussed in the previous section (B. Potential Emissions/Air Quality/Health Effects), and in Table 4 of the Technical Support Document, there is no indication that operation of the boilers using the worst case allowed fuels will cause violation of any state or federal standards.

Best available control technology is only required when a change is subject to New Source Review. The change authorized by this permit amendment is not subject to New Source Review. See Section E. New Source Review for further discussion of that topic.

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**D. Sharing of Emission Information/Community Involvement** - Several commenters requested notification of emission events at Rock-Tenn, distribution of annual emission inventories, and other public involvement. These requests are summarized as follows:

- A State-Only requirement should be added to inform surrounding stakeholders in the community about significant changes, releases, shut-downs, or any other activity that would relate to this permit and have a possible adverse impact on the surrounding neighborhoods. This requirement could be worked out with the facility to provide the notice directly in a manner that is determined to be timely. The neighborhoods would include but not be limited to: St. Anthony Park, Hamline-Midway, Merriam Park, and Southeast Como Improvement Association.
- Another requirement of the permit is to provide “Notification of Deviations Endangering Human Health or the Environment.” We wish to better understand the requirements involved in this notification, the conditions that require notification, and who is informed of such conditions. What actions are taken to remediate risks to human health or the environment? The timeliness and distribution of notifications and the actions taken to remediate the problems are of interest.
- While an annual EIR is required, we request more frequent sharing of emissions results, interpretation of data, and measures taken to reduce emissions. We suggest using Flint Hills Resources’ emissions monitoring and reporting practices as a model for Rock-Tenn to follow in creating a program of community involvement.
- The permit requires an annual Emissions Inventory Report (EIR). The permit should specifically require sharing the EIR with interested neighborhoods both through distribution of the report to representative councils and an annual meeting to present report content. We request an opportunity to view and comment on an example EIR from Rock-Tenn. We will emphasize the need for an easily understood report that can be used to track emissions of individual pollutants and their sum total.

#### **MPCA Response**

The permit will not require additional or more frequent reporting, or reporting directly to neighborhood groups. The MPCA is aware that Rock-Tenn has entered into a “Good Neighbor Agreement” with several neighborhood organizations, which is a more appropriate avenue for neighborhood organizations to pursue increased communication between the company and the community.

The permit requires Rock-Tenn to report shutdowns and breakdowns that result in increased releases of air pollutants. This is standard language that is included in all permits. It typically applies to control equipment breakdowns or shutdowns. When control equipment breaks down or is shut down, there is often a temporary increase in air emissions. The reporting requirement also applies to emissions units, although when an emissions unit is shut down or breaks down, one would typically see a decrease in emissions, rather than an increase.

The proposed permit includes a requirement that Rock-Tenn notify the MPCA of any excessive or abnormal unpermitted emissions. This standard requirement goes into every federal Part 70 and state operating permit. Events that trigger a “Notification of Deviations Endangering Human Health or the Environment” are rare. An example might be a chemical facility fire resulting in a release of toxic emissions. MPCA Emergency Response staff would be the most likely to deal with the issue.

The permit will not require direct sharing of the EIR with the community. The company is required to submit an annual report to the MPCA which is available for public review upon request. If Rock-Tenn is agreeable to reporting emissions on a more frequent basis directly to the community or neighborhood organizations, this is something that would more appropriately be worked out directly between the company and those organizations.

The format and content of the EIR is not open for public comment at this time. The format of Rock-Tenn’s EIR is and will continue to be the same as that for other point sources in the state. In the emissions inventory, a company reports throughputs, production rates, fuel usage, etc. The emissions are then calculated by the MPCA. Attached is the final summary for 2004, which is the most recent year for which final data is available. Rock-Tenn submitted the quantities of fuels, inks, and solvents used, and the amounts of paper processed and boxboard produced. The air emissions summary report is produced from that information.

Hard copies of past reports are available for review following the normal file review procedures. You can also find historical data on emissions from Rock-Tenn or any point source in the state at <http://www.pca.state.mn.us/data/edaAir/pointSearch.cfm>. To get information for Rock-Tenn, enter Permit Number 12300410. At this time, you can access annual emissions data from 1990 through 2004. The 2005 emission inventory has not yet been completed – 2005 data were submitted in April 2006, and it takes some time for staff to review data and finalize reports for all sources in the state.

It was suggested that Flint Hills Resources’ (FHR) emissions monitoring and reporting practices could be used as a model for Rock-Tenn to follow in creating a program of community involvement. That program is a collaboration between Flint Hills Resources and the Minnesota Center for Environmental Advocacy (MCEA). It was not required by the MPCA as a permit condition.

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#### **E. New Source Review (NSR) Applicability**

- It appears that MPCA and EPA Region V have conflicting views on whether the activities authorized by the draft permit are subject to NSR (40 CFR § 52.21). According to the Technical Support Document, MPCA originally determined that the running of the boilers for steam would trigger NSR. However, EPA Region V did not support this determination, and MPCA has decided to concur with EPA. The commenter cites a list of reasons why this is troubling, including the following:
  - EPA has been challenged for its interpretation of NSR as being too lenient, and EPA officials have resigned.
  - Official documentation of EPA’s determination was not made available when requested.

- The response to this question provided at the public meeting was inadequate.
- The MPCA's decision to concur with EPA's interpretation yields the impression of being corrupted by the Bush Administration. MPCA has authority to impose state requirements, and if the use of the boilers by Rock-Tenn is subject to NSR, MPCA should act accordingly and impose the requirements of NSR.
- We have concerns regarding the EPA Region V office and their interpretation of NSR.

### **MPCA Response**

The MPCA's initial determination, prior to reviewing other determinations, was that Rock-Tenn's operation of the boilers would constitute a change in the method of operation under federal Prevention of Significant Deterioration (PSD) requirements. PSD is the portion of NSR that is used in areas that are in attainment with all National Ambient Air Quality Standards (NAAQS). All of Minnesota is in attainment with all NAAQS. It appeared to MPCA that to go from operation as back-up units to "normal use" operation would constitute a change in the method of operation and would therefore be a major modification under 40 CFR § 52.21(b)(2). This was originally communicated to Rock-Tenn in a letter dated September 13, 2004.

In early 2006, in an effort to determine whether this view was consistent with past EPA determinations, MPCA found determinations that supported a different conclusion. One particular determination (Watertown Power Plant, November 19, 1991) was clear that an entire plant, although shutdown for nine years, was not subject to PSD upon startup, because the plant had been maintained, the permit was current and the shutdown was not intended to be permanent. The determination referred to an EPA policy memo, dated September 6, 1978, which established this guidance.

MPCA sent a copy of the September 13, 2004 letter to EPA Region V staff, and discussed the Rock-Tenn situation informally with EPA Region V staff. EPA's view of the situation was that Rock-Tenn could operate the boilers without going through NSR, which is consistent with the 1978 policy. The basis for EPA's determination is that:

- While the boilers have been infrequently used since startup of the steamline from the Xcel Energy High Bridge plant, they have been maintained in a stand-by condition since that time.
- The boilers have been continuously included in the permit and emission inventory, and the existing permit clearly states that Rock-Tenn is authorized to use the boilers in the event of loss of steam supply from the High Bridge Plant. There is no evidence of intent to permanently shutdown the boilers.
- No physical modifications to the boilers are needed; they are currently capable of operating, and capable of using natural gas or fuel oil.

There may have been some misunderstanding of the type of documentation that MPCA has. Although MPCA supplied EPA with a copy of the September 13, 2004, MPCA letter to Rock-Tenn, there were no written exchanges between MPCA and EPA Region V regarding Rock-Tenn. MPCA and EPA discussed the question and EPA Region V communicated its views orally. MPCA staff reviewed actual documentation of past determinations (not the Rock-Tenn case) which are available by searching EPA's web site. MPCA staff documented EPA Region V's determination in the Technical Support Document.

Minnesota does not have its own New Source Review program. We are delegated the authority to implement the federal program, and are required to implement it as EPA would implement it. This is why Minnesota defers to EPA's interpretation of the NSR rules. Some other states have their own state NSR programs, and can operate those programs differently.

The MPCA has authority to require sources to take action to mitigate their emissions if they exceed a state or federal limit or are required to do so by existing rules. The MPCA does not have the authority to require a facility to reduce their emissions because less is better or new technologies exist that would reduce emissions. The standards and rules that are in place to protect the public health and the environment also establish a known set of requirements that industries must design to meet. We have done modeling and shown that NAAQS are not in danger of violation with use of the boilers at Rock-Tenn and current rules do not require that they must install new or additional air pollution control devices on the boilers. We have done analyses to determine whether the boilers will be in compliance with applicable limits (PM and SO<sub>2</sub> limits from state Standards of Performance), and are requiring performance testing to demonstrate compliance. If testing shows non-compliance, then further action will be taken. There are no other regulatory thresholds or standards that apply at this time.

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**F. Miscellaneous** – The following comments do not fit into any other category

- Rock-Tenn should implement additional energy efficiency changes, such as efficient pumps, lighting, and motors. Since point sources account for approximately 15% of Minnesota's air pollution, Permittees such as Rock-Tenn should pay a pro-rated portion of 15% of the public health costs through energy or pollution prevention improvements.

**MPCA Response**

This is beyond the scope of this permit action.

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- The MPCA must deny the draft air permit as written. This will allow citizens to work with the MPCA and Rock-Tenn to find a solution that will both increase Minnesota's air quality and ensure Rock-Tenn's economic viability.

**MPCA Response**

Denial of the permit amendment will result in Rock-Tenn continuing to operate under their existing permit, which allows operation of the boilers using fuel oil or natural gas. The proposed permit amendment requires Rock-Tenn to make stack configuration changes to maximize air dispersion, and to keep additional records on changes that Rock-Tenn determines do not trigger NSR. These are actions that MPCA sees as critical to ensuring that NAAQS and Minnesota Ambient Air Quality Standards (MAAQS) are protected, and that changes that may be subject to New Source Review are analyzed appropriately.

Further, the MPCA must have a regulatory basis for denying a permit application. There is currently no regulatory basis to deny Rock-Tenn's permit amendment application.

*Comment letters are available as paper copies only.*