

A. Applicable Emission Limitations and/or Control Requirements

1. The total combined emissions from emissions units P101 and P102 shall not exceed the following:
 - a. 1925 pounds organic compounds (OC) per week and 26 tons OC per year as a rolling, 12-month summation from off-line wire and felt cleaning operations;
 - b. 378.1 pounds OC per day and 69 tons OC per year from all operations associated with emissions units P101 and P102 except off-line wire and felt cleaning operations and OC emissions from the natural gas/LPG dryers;
 - c. 7.5 pounds OC per day and 1.4 tons OC per year from combustion emissions from natural gas/LPG fired dryers;
 - d. 8.5 pounds PM-PM₁₀ per day and 1.5 tons PM-PM₁₀ per year from combustion emissions from natural gas/LPG fired dryers;
 - e. 269.1 pounds nitrogen oxides (NO_x) per day and 39.9 tons NO_x per year based upon a rolling, 12-month summation from combustion emissions from natural gas/LPG fired dryers;
 - f. 0.78 pound sulfur dioxide (SO₂) per day and 0.14 ton SO₂ per year from combustion emissions from natural gas/LPG fired dryers; and,
 - g. 45.4 pounds carbon monoxide (CO) per day and 8.3 tons CO per year from combustion emissions from natural gas/LPG fired dryers.
2. Visible particulate emissions from any stack associated with emissions unit P101 and P102 shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.
3. The OC emissions from emissions units P103 and P104 combined shall not exceed 82.6 pounds per day and 15.1 tons per year.
4. The following is a summary of the OC emissions from emissions units P101, P102, P103 and P104

Emissions unit	Pollutant	Baseline existing* emissions TPY	Allowable emissions TPY	Net Increase TPY
P101 Paper machine operations	OC	27.3	49.5	+ 22.2
P102 Paper machine operations**	OC	19.5	19.5	0
P101 & P102 off-line wire & felt cleaning operations	OC	19.15	26	+ 6.85
P101 & P102 dryer emissions**	OC	1.4	1.4	0
P103 & P104	OC	10.1	15.1	+ 5.0
Net emissions change	OC	77.45	111.5	+ 34.05

*Actual average emissions for 1996 and 1997

**As these operations are not being modified in this PTI, the baseline existing is the same as the existing allowable emissions.

B. Operational Restrictions

1. The use of photochemically reactive materials as defined in OAC rule 3745-21-01(C) (5) is prohibited in emissions units P101, P102, P103 and P104.

C. Monitoring and Recordkeeping Requirements

1. The permittee shall collect and record the following information each week for emissions units P101 and P102 combined:
 - a. the name and identification of each liquid organic material employed for off-line wire and felt cleaning;
 - b. the amount of each liquid organic material employed for off-line wire and felt cleaning;
 - c. the OC content of each liquid organic material employed for off-line wire and felt cleaning; and,
 - d. the total weekly OC emissions from off-line wire and felt cleaning operations in pounds per week calculated by taking the sum of (b) times (c) for each liquid organic material employed for off-line wire and felt cleaning.
2. The permittee shall collect and record the following information each month for emissions units P101 and

P102:

- a. the amount of air dried tons of product (ADTP) produced in emissions unit P101;
- b. the amount of air dried tons of product (ADTP) produced in emissions unit P102;
- c. the total monthly OC emissions calculated by using the following equation:

Monthly OC emissions (in pounds)
= [ADTP/mo. in P101 * 0.1142 lb OC emissions/
ADTP]
+ [ADTP/mo. in P102 * 0.1082 lb OC emissions/
ADTP]
+ [Total ADTP/mo. in P101 and P102 * 0.821 lb OC
emissions/ADTP]; and,

- d. the updated rolling, 12-month summation of OC emissions from emissions units P101 and P102 from off-line wire and felt cleaning operations, calculated by adding the current month's total OC emissions to the total OC emissions for the preceding eleven calendar months.
3. The permittee shall collect and record the following information each month for emissions units P101 and P102:
- a. the combined amount of LPG used in the dryers associated with emissions units P101 and P102, in gallons per month;
 - b. the combined amount of natural gas used in the dryers associated with emissions units P101 and P102, in cubic feet per month;
 - c. the monthly combined NO_x emissions from the dryers associated with emissions units P101 and P102 using the following equation:

Monthly NO_x emissions (in pounds)
= [gallons/month LPG used (a) * 0.019 lb
NO_x/gallon]
+ [cubic feet/month natural gas used (b) * 0.00014
lb NO_x/cubic feet]; and,
 - d. the updated rolling, 12-month summation of NO_x emissions from the dryers associated with

emissions units P101 and P102, calculated by adding the current month's total NO_x emissions to the total NO_x emissions for the preceding eleven calendar months.

4. The permittee shall collect and record the following information each month for emissions unit P103 and P104:
 - a. the amount of air dried tons of products (ADTP) produced; and,
 - b. the total monthly OC emissions calculated by using the following equation:

$$\begin{aligned} &\text{Monthly OC emissions} \\ &= [\text{ADTP/mo.} * 0.2232 \text{ lb OC emissions/ADTP}] \end{aligned}$$

5. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created, unless otherwise specified in this permit. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

D. Reporting Requirements

1. The permittee shall submit required reports in the following manner:
 - a. reports of any required monitoring and/or recordkeeping information shall be submitted to the Hamilton County Dept. of Env. Services; and,
 - b. except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Hamilton County Dept. of Env.

Services. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly i.e., by January 30, April 30, July 30, and October 30 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06).

2. The permittee shall submit annual reports which specify the total combined organic compounds emissions from emissions units P101, P102, P103 and P104 for the previous calendar year. These reports shall be submitted by January 31 of each year.
3. The permittee shall submit annual reports which specify the total combined nitrogen oxides emissions from emissions units P101 and P102 for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Compliance Methods/Testing Requirements

1. Compliance with the emissions limits in Terms A.1.a, A.1.b and A.3 shall be demonstrated by the recordkeeping in Terms C.1, C.2 and C.4.
2. Compliance with the emissions limits in Terms A.1.c, A.1.d, A.1.f and A.1.g shall be demonstrated by multiplying the usage from Term C.3 with emissions factor for natural gas / LPG combustion from Compilation of Air Pollution Emissions Factors (AP-42), Chapters 1.4 and 1.5, Fourth Edition.
3. Compliance with the emissions limits in Term A.1.e shall be demonstrated by the recordkeeping in Term C.3.
4. Compliance with the visible emissions limitation in Term A.2 shall be demonstrated by Method 9, 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

1. If probable cause exist indicating the source is causing or contributing to a nuisance in violation of Ohio Administrative Code rule 3475-15-07, the owner or

operator of these emissions unit shall be required to submit and implement a control program which will bring them into compliance.

2. The following terms and conditions shall supersede all the Air Pollution Control requirements for emissions units P101, P102, P103 and P104 contained in the permit to install application number 14-4391 as issued on March 25, 1998:

A-F

3. The daily emissions limitations in Terms A.1.b - A.1.g and Term A.3 are based upon the maximum hourly/application rate at 24 hours per day and therefore, no daily records are required.

PERMIT REVIEW NARRATIVE
PTI 14-4560

Bay West Towel & Tissue Mill
700 Columbia Avenue
Middletown, OH 45042

Premise Number: 1409010043

Wausau-Mosinee Paper Corporation currently owns and operates three subsidiaries located on common property in Middletown, OH - Bay West Towel and Tissue Mill (Bay West), The Sorg Paper Company and Mosinee Holdings Inc. (MHI). Ohio EPA has recently ruled that the three facilities should be considered a single facility for New Source Review and Title V purposes.

Bay West had applied for a modification to PTI 14-4391 to increase the capacity of Paper Machine #1 (emissions unit P101) Natural De-inking (emissions unit P103) and Bleach De-inking (emissions unit P104). However, as the emissions units P101 and P102 (Paper Machine #2) have combined emissions factors and combined emissions limits, emissions unit P102 is also being included in the permit even though P102 is not being modified.

The following is an emissions summary:

Emissions unit	Pollutant	Baseline existing* emissions TPY	Allowable emissions TPY	Net Increase TPY
P101 Paper machine operations	OC	27.3	49.5	+ 22.2
P102 Paper machine operations**	OC	19.5	19.5	0
P101 & P102 off-line wire & felt cleaning operations	OC	19.15	26	+ 6.85
P101 & P102 dryer emissions**	OC	1.4	1.4	0
P103 & P104	OC	10.1	15.1	+ 5.0
Net emissions change	OC			+ 34.05

*Actual average emissions for 1996 and 1997

**As these operations are not being modified in this PTI, the baseline existing is the same as the existing allowable emissions.

As the net emissions increase is less than 40 TPY, this modification is a minor modification to a currently major facility.

BAT is satisfied by compliance with the emission limits and use of non-photochemically reactive materials.

The applicable regulations are OAC 3745-31-05, 3745-15-07 and 3745-21-07(G).

A preliminary synthetic minor permit to install should be issued as the emissions units are in compliance with the applicable regulations.

The permit fee is:	P101	\$1000 based on max PWR
	P102	\$1000 based on max PWR
	P103	\$1000 based on max PWR
	P104	\$1000 based on max PWR

Total permit fee = \$4000.

Ajay Bahri
April 29, 1998

Synthetic Minor Determination

Bay West Towel & Tissue Mill

PTI 14-4560

A. Emissions Units Description

The Permit to Install (PTI 14-4391) covers Bay West Paper Machines #1 and #2 each with a 27 MMBTU/HR Natural Gas/LPG fired dryer (emissions units P101 and P102) and Bay West Stock Preparation/De-inking Process (emissions units P103 and P104). The permittee has applied for a modification to PTI 14-4391. As PTI 14-4391 was issued as a federally enforceable synthetic minor, this PTI will also be issued as a federally enforceable synthetic minor PTI superseding PTI 14-4391.

B. Facility Emissions and Attainment Status

Wausau-Mosinee Paper Corporation currently owns and operates three subsidiaries located on common property in Middletown, OH-Bay West Towel and Tissue Mill (Bay West), The Sorg Paper Company and Mosinee Holdings, Inc. (MHI). Middletown, OH is located in Butler County which is designated a moderate non-attainment area for ozone, non-attainment for NOx for NSR purposes and attainment for all other criteria pollutants. Ohio EPA has recently ruled that the three facilities should be considered a single facility for New Source Review and Title V purposes.

Wausau-Mosinee Paper Corporation is currently a major source for nitrogen oxides (NOx) and volatile organic compounds (VOC) emissions. This permit will incorporate federally enforceable limitations limiting NOx emissions from these emissions units to less than 40 TPY. This permit will also incorporate federally enforceable limitations limiting the increase in VOC emissions over baseline actual emissions to less than 40 TPY.

C. Source Emissions

Potential emissions were calculated based on maximum capacity and 8760 hrs/yr of operation. The potential emissions from these emissions units in the absence of a federally enforceable PTI would be 49.11 TPY for NOx and 58.15 TPY increase in VOC emissions over the baseline actual emissions. The emission limitations outlined in this PTI limit NOx emissions to 39.9 TPY and VOC emissions such that

the net increase over baseline actual VOC emissions is less than 40 TPY. The facility will keep records and submit reports as described in the PTI to ensure compliance with the emission limits.

D. Conclusion

The terms and conditions in this PTI will limit the potential emissions to less than 40 TPY of NO_x and increase in VOC emissions over baseline actual emissions to less than 40 TPY. The permittee will maintain records and submit reports as outlined in the additional terms and conditions for all emissions units to demonstrate compliance. As this modification constitutes a minor modification to a facility major for NO_x and VOCs, the emissions offsets policy and PSD do not apply.

Prepared by: Ajay Bahri
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