

STATEMENT OF BASIS

for the issuance of Draft Air Permit # 921-AOP-R2

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality
8001 National Drive
Post Office Box 8913
Little Rock, Arkansas 72219-8913

2. APPLICANT:

Quebecor World - Jonesboro Division
4708 Krueger Drive
Jonesboro, Arkansas 72401

3. PERMIT WRITER:

Paul Osmon

4. PROCESS DESCRIPTION AND SIC CODE:

SIC Description: Printing Facility.
SIC Code: 2752

5. SUBMITTALS: January 12, 2001

6. REVIEWER'S NOTES:

This permit modification is issued to change the processes for minimizing emissions when a printing press must be operated while an afterburner system is down for emergency repairs. The name of the facility owner is also being changed in this modification. There are no changes in emission limits.

7. COMPLIANCE STATUS: The following summarizes the current compliance status of the facility including active/pending enforcement actions and recent compliance activities and issues.

There is an existing CAO (LIS 2000-188) which requires the permittee to incorporate an Air Pollution Control System Contingency Plan into their Title V permit. This modification completes that change to the permit.

8. APPLICABLE REGULATIONS:

A. Applicability

Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, et cetera) (Y/N) N
 Has this facility underwent PSD review in the past (Y/N) N Permit # _____
 Is this facility categorized as a major source for PSD? (Y/N) Y
 \$ 100 tpy and on the list of 28 (100 tpy)? (Y/N) _____
 \$ 250 tpy all other (Y/N) Y

9. EMISSION CHANGES:

The following table summarizes plantwide emission changes associated with this permitting action.

Plantwide Permitted Emissions (ton/yr)			
Pollutant	Air Permit 921-AOP-R1	Air Permit 921-AOP-R2	Change
PM/PM ₁₀	3.0	3.0	0
SO ₂	0.1	0.1	0
VOC	259.6	259.6	0
CO	15.4	15.4	0
NO _x	26.3	26.3	0
Glycol Ether	10.74	10.74	0
R.T. 1.0 HAP	77.92	77.92	0
R.T. 0.1 HAP	0.01	0.01	0

10. MODELING:

A. Criteria Pollutants

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ($\mu\text{g}/\text{m}^3$)	Averaging Time	Highest Concentration ($\mu\text{g}/\text{m}^3$)	% of NAAQS
PM ₁₀	3.0	50	Annual	Under 100 tpy - modeling is not required.	
		150	24-hour		
SO ₂	0.1	80	Annual		
		365	24-hour		
NO _x	26.3	100	Annual		
CO	15.4	10,000	8-hour		
		40,000	1-hour		

VOC: $\text{VOC}/\text{NO}_x = 259.6/26.3 = 9.87$
 Ozone Increment = $(259.6 - 100)(1.6-1.2)/(300-100) + 1.2$
 = 1.52 pphm = 0.0152 ppm
 = 13% NAAQS

11. B. Non-Criteria Pollutants

1st Tier Screening (PAER).

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The PAER was deemed by the Department to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m^3), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

SN(s)	Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11*TLV	Proposed lb/hr	Pass?
1, 2, 3, 4, 5, 7, 8, 9, 13	R.T. 1.0 HAP (Naphthalene CAS# 91-20-3)	52	5.72	3.6	Yes

1, 2, 3, 4, 5, 7, 8, 9, 13	Glycol Ether (Butyl Carbitol CAS#112-34-5) (Dipropylene Glycol Monomethyl Ether CAS# 34590-94-8)	369*	40.6	3.92	Yes
12	R. T. 0.1 HAP (Vinyl Acetate CAS# 108-54)	35	3.85	0.002	Yes
11	R.T. 1.0 HAP (Methanol CAS# 67-56-1)	262	28.82	10.4	Yes

* - Only Dipropylene Glycol Monomethyl Ether has a published TLV which is the value used.

12. CALCULATIONS:

At source locations for which no comments appear below, the emission calculations received the reviewer’s concurrence as submitted by the facility in the permit application.

KEY: Abbreviations used in the following tables: SN = Source Number, SC = Specific Condition.
For all sources deemed insignificant, the permit writer has reviewed submitted calculations, and concurs with the emission estimates.

SN	Basis for emission calculation of final permit limits.		Comment.
	lb/hr	ton/yr	
1, 2, 3, 4, 5, 8, 10, 11, , 12, 13	maximum capacity of equipment and content limits	material balance for VOC and HAP; maximum capacity for other pollutants	20 % of the VOC and HAP in the ink is calculated as being retained in the paper and 50 % of the manual blanket wash is shown as remaining in the rag.
7, 9	Output from SN 01, 02, 03, 04, 05, 08, 10, and 13 times a control efficiency of 95%		
6	This equipment no longer in service.		

13. TESTING REQUIREMENTS:

This permit requires stack testing of the following sources.

SN(s)	Pollutant	Test Method	Test Interval	Justification For Test Requirement
20	07 & 09	VOC	25A	Permittee is required to stack test the incinerators every 5 years to verify their 95% efficiency. This Specific Condition was in their original Title V Permit.

14. MONITORING OR CEMS

The following are parameters that must be monitored with CEMs or other monitoring equipment (temperature, pressure differential, etc), frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

SN	Parameter or Pollutant to be Monitored	Method of Monitoring (CEM, Pressure Gauge, etc)	Frequency*	Report (Y/N)**
07 & 09	Afterburner Operation	visual annunciator	continuously	N

* Indicate frequency of recording required for the parameter (Continuously, hourly, daily, etc.)
 ** Indicates whether the parameter needs to be included in reports.

15. RECORD KEEPING REQUIREMENTS

The following are items (such as throughput, fuel usage, VOC content of coating, etc) that must be tracked and recorded, frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

SN	Recorded Item	Limit (as established in permit)	Frequency *	Report (Y/N)**
Facility	Plantwide Conditions No. 6 through No. 11 have many usage and content limits too lengthy to reproduce here.		Monthly	Y

* Indicate frequency of recording required for the item (Continuously, hourly, daily, etc.)
 ** Indicates whether the item needs to be included in reports

16. OPACITY

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
07 & 09	5%	Department Guidance	fuel used

17. DELETED CONDITIONS:

The following Specific Conditions were included in the previous permit, but deleted for the current permitting action.

Former SC	Justification for removal
	None

18. VOIDED, SUPERSEDED OR SUBSUMED PERMITS

List all active permits for this facility which are voided/superseded/subsumed by issuance of this permit.

Permit #
921-AOP-R1

19. CONCURRENCE BY:

The following supervisor concurs with the permitting decision:

Thomas Rheaume, P.E.