

# ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation #26:

Permit #: 921-AOP-R2

IS ISSUED TO:

Quebecor World - Jonesboro Division  
4708 Krueger Drive  
Jonesboro, AR 72401  
Craighead County  
CSN: 16-0181

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

May 6, 1998 and May 5, 2003

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

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Keith A. Michaels

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Date Modified

**SECTION I: FACILITY INFORMATION**

PERMITTEE: Quebecor World - Jonesboro Division

CSN: 16-0181

PERMIT NUMBER: 921-AOP-R2

FACILITY ADDRESS: 4708 Krueger Drive  
Jonesboro, AR 72401

COUNTY: Craighead

CONTACT POSITION: Manager - Engineering and Maintenance -  
David Hakenewerth

TELEPHONE NUMBER: 870-935-7000

REVIEWING ENGINEER: Paul Osmon

UTM North-South (X): 3965.5 km N

UTM East-West (Y): 713.2 km E

Zone 15

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## **SECTION II: INTRODUCTION**

### **Summary of Permit Activity**

Permit No. 921-AOP-R2 is the second modification to the Title V permit for this facility. 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.

### **Process Description**

The Quebecor World - Jonesboro Division, located in Jonesboro, Arkansas is a heatset, web offset lithographic printing facility. The major processes associated with this facility include pre-press or plate making operations, the lithographic printing presses (which are the primary emission sources at this facility), and bindery operations.

The pre-press or plate room operations include film developing and plate making. This operation is used to transfer the printing image to printing plates. The film developing and plate making equipment use aqueous-based chemical and have very small associated air emissions.

The heatset, web offset printing presses consist of unwind reel stands, 6 to 9 print stations, natural gas fired dryers, chill stands and rollers, and folding equipment. Emissions of VOCs from the press dryers are controlled by two afterburner systems which use natural gas to support the combustion of VOC and maintain adequate afterburner temperatures. Propane is used as a backup fuel when natural gas is unavailable. The lithographic printing process is described in more detail below.

The raw materials used in the heatset process are the web (which is generally paper), inks, blanket wash, fountain solution and general cleaning solvents. The inks used in this process consist of pigments, binders, and high boiling point petroleum derived hydrocarbons.

The printing presses use an unwind stand, in-feed printing units, a dryer, a chill stand, and a folder. The web is continuously unwound from an unwind stand which also has the capability of splicing expiring web without stopping the printing process. After the web unwinds, it may pass through a heated web conditioner before entering the first print unit. In the first printing unit, ink and fountain solution are applied. Depending on the number of colors being printed, the web will pass either into a dryer or into additional printing units.

The dryers are recirculating hot air systems fueled by natural gas. The dryers raise the web

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temperature to approximately 275EF. The ink used in the heatset printing dries very quickly with the volatile portions of the ink exhausted from the dryer to the existing regenerative thermal oxidizer emission control devices. The web passes over chill rolls where it is cooled to about 20E above ambient temperature before folding and cutting. Blanket wash may be performed manually or automatically and are considered non-point sources.

After printing, the product is cut, folded, assembled, bound, and packaged for shipping in the binder operations. The binding of magazines involves cutting, folding and grinding operations. Waste paper from these operations is collected in a paper trim dust collection system which includes a baghouse paper separator, a bailer system for the collected paper, and an induced draft fan. Exhaust from the induced draft fan is vented inside the building. Emissions from the dust collection system have been quantified and the dust collection system has been identified as an insignificant emissions unit. The bindery operations also include the use of glues for binding magazines and inserts. These glues are typically polyvinyl acetate (PVA) glues which have negligible VOC emissions. Finally, the bindery uses inkjet printers to print labels for direct mailing and shipping products.

### **Regulations**

The facility is subject to regulation under the *Clean Air Act* as amended, the *Arkansas Water and Air Pollution Control Act*, *The Arkansas Air Pollution Control Code* (Regulation 18), the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19), and the *Regulations of the Arkansas Operating Air Permit Program* (Regulation 26).

The following table is a summary of emissions from the facility. Specific conditions and emissions for each source can be found starting on the page cross referenced in the table. This table, in itself, is not an enforceable condition of the permit.

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Refer. Page
			lb/hr	tpy	
	Total Allowable Emissions	PM/PM <sub>10</sub>	0.8	3.0	
		SO <sub>2</sub>	0.1	0.1	
		VOC	84.4	259.6	
		CO	5.9	15.4	
		NO <sub>x</sub>	6.0	26.3	
		Glycol Ether <sup>a*</sup>	3.92	10.74	
		HAP: Relative Toxicity 1.0*	18.48	77.92	
		HAP: Relative Toxicity 0.1*	0.002	0.01	
SN-01	Press No. 922 Non-Stack Emissions	VOC	2.8	7.3	10
		Glycol Ether <sup>a*</sup>	0.27	0.72	
		HAP: Relative Toxicity 1.0*	0.13	0.34	
SN-02	Press No. 822-2 Non-Stack Emissions	VOC	3.8	9.8	12
		Glycol Ether <sup>a*</sup>	0.36	0.95	
		HAP: Relative Toxicity 1.0*	0.17	0.45	
SN-03	Press No. 822-3 Non-Stack Emissions	VOC	5.3	13.8	14
		Glycol Ether <sup>a*</sup>	0.51	1.33	
		HAP: Relative Toxicity 1.0*	0.24	0.63	
SN-04	Press No. 822-4 Non-Stack Emissions	VOC	4.7	12.2	16
		Glycol Ether <sup>a*</sup>	0.45	1.18	
		HAP: Relative Toxicity 1.0*	0.21	0.56	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Refer. Page
			lb/hr	tpy	
SN-05	Press No. 822-1 Non-Stack Emissions	VOC	2.5	6.5	18
		Glycol Ether <sup>a*</sup>	0.24	0.63	
		HAP: Relative Toxicity 1.0*	0.11	0.30	
SN-06	Press 623	Retired Equipment 1997			
SN-07 SN-09	Afterburner No. 1 & 2	PM/PM <sub>10</sub>	0.8	3.0	19
		SO <sub>2</sub>	0.1	0.1	
		VOC	28.5	78.5	
		CO	5.9	15.4	
		NO <sub>x</sub>	6.0	26.3	
		Glycol Ether <sup>a*</sup> HAP: Relative Toxicity 1.0*	0.27 0.02	0.68 0.05	
SN-08	Press No. 822-5 Non-Stack Emissions	VOC	7.4	19.6	21
		Glycol Ether <sup>a*</sup>	0.72	1.90	
		HAP: Relative Toxicity 1.0*	0.34	0.90	
SN-10	Press No. 822-6 Non-Stack Emissions	VOC	6.8	18.0	23
		Glycol Ether <sup>a*</sup>	0.59	1.54	
		HAP: Relative Toxicity 1.0*	0.33	0.86	
SN-11	Ink Jet Printers	VOC	12.2	53.3	25
		HAP: Relative Toxicity 1.0*	12.2	53.3	

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EMISSION SUMMARY					
Source No.	Description	Pollutant	Emission Rates		Cross Refer. Page
			lb/hr	tpy	
SN-12	Solvent & Adhesive Emissions	VOC	4.9	21.2	26
		HAP: Relative Toxicity 1.0*	4.48	19.62	
		HAP: Relative Toxicity 0.1*	0.002	0.01	
SN-13	Press No. 822-7 Non-Stack Emissions	VOC	5.5	19.5	27
		Glycol Ether <sup>a*</sup>	0.51	1.81	
		HAP: Relative Toxicity 1.0*	0.25	0.90	

\* - All HAPs are also a VOC

<sup>a</sup> - Glycol Ethers do not have a relative toxicity assigned

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### **SECTION III: PERMIT HISTORY**

The Jonesboro Division of World Color Press began operation in 1972.

921-A was the first permit issued to W. A. Krueger Company for this facility on February 28, 1989. The facility started operation in 1972 with one printing press. There were six printing presses by 1989. The only pollutant permitted was VOC and the amount permitted was 304 tons per year with no control equipment.

921-AR-1 was issued to Ringier America--Jonesboro Division on May 3, 1991. Permit limits for VOC was 199 tons per year. One afterburner was installed on the stack emissions from four of the presses. Two presses were operated without controls.

921-AR-2 was issued to Ringier America--Jonesboro Division on August 31, 1992. A seventh printing press and a second afterburner were installed at that time. Permit limits were 187.2 tons per year VOC, 21.22 tons of oxides of nitrogen, and 14.9 tons per year of carbon monoxide. Two presses operated without controls.

921-AR-3 was issued to Jonesboro Division of World Color Press, Inc. on July 10, 1997. One press (SN-06) was retired and the afterburner arrangement was changed such that only one press (SN-05) operated without controls. Facility emissions limits were 184.19 tons per year VOC, 25.04 tons per year of oxides of nitrogen, 15.33 tons per year of carbon monoxide, and 0.05 tons per year of sulfur dioxide.

921-AOP-R0 was issued to Jonesboro Division of World Color Press, Inc. on May 6, 1998. The afterburner arrangement was changed from the previous permit such that all presses were controlled via afterburners. HAPs were quantified for the first time in this permit. The ink jet printer and solvent and adhesive fugitive emissions were also quantified for the first time in this permit. Facility emissions limits were 220.8 tons per year VOC, 24.0 tons per year oxides of nitrogen, 14.9 tons per year carbon monoxide, 2.7 tons per year particulate matter and 0.1 tons per year sulfur dioxide.

921-AOP-R1 was issued to Jonesboro Division of World Color Press, Inc. on October 9, 1998. The modification was issued for the addition of another printing press (SN-13) and the addition of six new ink jet printers increasing the emissions at SN-11. Facility emission limits were 259.6 tons per year VOC, 26.3 tons per year oxides of nitrogen, 15.4 tons per year carbon monoxide, 3.0 tons per year particulate matter and 0.1 tons per year sulfur dioxide.



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**SECTION IV: EMISSION UNIT INFORMATION**

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SN-01  
Press No. 922  
Non-Stack Emissions

Source Description

Press No. 922 is a heatset web offset printing press. It includes a natural gas fired dryer and chill rolls for cooling the media after printing. Regular emissions from this press are ducted to one of the afterburners with only the non-stack emissions going to atmosphere.

Specific Conditions

1. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-01. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 7. Compliance with Plantwide Conditions 6 & 7 and Specific Condition 3 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	2.8	7.3

2. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-01. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 and Specific Condition 3 shall represent compliance with this source's applicable requirements.

HAP - Relative Toxicity	lb/hr	tpy
Glycol Ether *	0.27	0.72
Relative Toxicity 1.0	0.13	0.34

\* - Glycol ethers do not have a relative toxicity

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3. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, Press No. 922 shall be operated with its stack emissions being processed through a functional afterburner during normal operations. The permittee shall follow the provisions of their latest Air Pollution Control System Contingency Plan during emergency failures of an afterburner. The initial plan dated May 15, 2000 is included as Appendix A.

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SN- 02  
Press No. 822-2  
Non-Stack Emissions

Source Description

Press No. 822-2 is a heatset web offset printing press. It includes a natural gas fired dryer and chill rolls for cooling the media after printing. Regular emissions from this press are ducted to one of the afterburners with only the non-stack emissions going to atmosphere.

Specific Conditions

- Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-02. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 7. Compliance with Plantwide Conditions 6 & 7 and Specific Condition 6 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	3.8	9.8

- Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-02. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 and Specific Condition 6 shall represent compliance with this source's applicable requirements.

HAP - Relative Toxicity	lb/hr	tpy
Glycol Ether *	0.36	0.95
Relative Toxicity 1.0	0.17	0.45

\* - Glycol ethers do not have a relative toxicity

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6. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, Press No. 822-2 shall be operated with its stack emissions being processed through a functional afterburner during normal operations. The permittee shall follow the provisions of their latest Air Pollution Control System Contingency Plan during emergency failures of an afterburner. The initial plan dated May 15, 2000 is included as Appendix A.

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SN-03  
Press No. 822-3  
Non-Stack Emissions

Source Description

Press No. 822-3 is a heatset web offset printing press. It includes a natural gas fired dryer and chill rolls for cooling the media after printing. Regular emissions from this press are ducted to one of the afterburners with only the non-stack emissions going to atmosphere.

Specific Conditions

7. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-03. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 7. Compliance with Plantwide Conditions 6 & 7 and Specific Condition 9 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	5.3	13.8

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8. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-03. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 and Specific Condition 9 shall represent compliance with this source's applicable requirements.

HAP - Relative Toxicity	lb/hr	tpy
Glycol Ether *	0.51	1.33
Relative Toxicity 1.0	0.24	0.63

\* - Glycol ethers do not have a relative toxicity

9. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, Press No. 822-3 shall be operated with its stack emissions being processed through a functional afterburner during normal operations. The permittee shall follow the provisions of their latest Air Pollution Control System Contingency Plan during emergency failures of an afterburner. The initial plan dated May 15, 2000 is included as Appendix A.

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SN-04  
Press No. 822-4  
Non-Stack Emissions

Source Description

Press No. 822-4 is a heatset web offset printing press. It includes a natural gas fired dryer and chill rolls for cooling the media after printing. Regular emissions from this press are ducted to one of the afterburners with only the non-stack emissions going to atmosphere.

Specific Conditions

10. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-04. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 7. Compliance with Plantwide Conditions 6 & 7 and Specific Condition 12 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	4.7	12.2



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11. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-04. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 and Specific Condition 12 shall represent compliance with this source's applicable requirements.

HAP - Relative Toxicity	lb/hr	tpy
Glycol Ether *	0.45	1.18
Relative Toxicity 1.0	0.21	0.56

\* - Glycol ethers do not have a relative toxicity

12. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, Press No. 822-4 shall be operated with its stack emissions being processed through a functional afterburner during normal operations. The permittee shall follow the provisions of their latest Air Pollution Control System Contingency Plan during emergency failures of an afterburner. The initial plan dated May 15, 2000 is included as Appendix A.

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SN-05  
 Press No. 822-1  
 Non-Stack Emissions

Source Description

Press No. 822-1 is a heatset web offset printing press. This press has a UV coating system which has negligible emissions. It includes a natural gas fired dryer and chill rolls for cooling the media after printing. Regular emissions from this press are ducted to one of the afterburners with only the non-stack emission going to atmosphere.

Specific Conditions

13. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 7. Compliance with Plantwide Conditions 6 & 7 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	2.5	6.5

14. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 shall represent compliance with this source's applicable requirements.

SN-#	HAP Relative Toxicity	lb/hr	tpy
	Glycol Ethers*	0.24	0.63
	Relative Toxicity: 1.0	0.11	0.30

\* - Glycol ethers do not have a relative toxicity

15. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, Press No. 822-1 shall be operated with its stack emissions being processed through a functional afterburner during normal operations. The permittee shall follow the provisions of their latest Air Pollution Control System Contingency Plan during

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emergency failures of an afterburner. The initial plan dated May 15, 2000 is included as Appendix A.

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SN-07 & SN-09  
Afterburner No. 1 & No. 2

Source Description

Afterburners No. 1 and No. 2 are Katec Model No. 2016 regenerative thermal oxidation systems, They have a rated efficiency of 95% by their manufacturer. Stack emissions from Press No. 922, No. 822-2, No. 822-3, No. 822-4, No. 822-1, No. 822-5, No. 822-6, and No. 822-7 are routed through the two afterburners.

Specific Conditions

16. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-07 and SN-09. The emission rates are based on the maximum capacity of the presses along with usage limits specified in Plantwide Conditions 6 & 7. Compliance with Plantwide Conditions 6 & 7 and Specific Condition 19 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
PM/PM <sub>10</sub>	0.8	3.0
SO <sub>2</sub>	0.1	0.1
VOC	28.5	78.5
CO	5.9	15.4
NO <sub>x</sub>	6.0	26.3

16. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-07 and SN-09. The emission rates are based on the maximum capacity of the presses along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 shall represent compliance with this source's applicable requirements.

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HAP Relative Toxicity	lb/hr	tpy
Glycol Ethers*	0.27	0.68
Relative Toxicity: 1.0	0.02	0.06

\* - Glycol ethers do not have a relative toxicity

17. Pursuant to §18.5 of Regulation 18, visible emissions from Afterburner No. 1 and No. 2 shall not exceed 5% opacity as measured by EPA Reference Method 9 (40 CFR Part 60 Appendix A). Permittee shall use only natural gas (utility natural gas or LPG) to fire the afterburner in order to assure compliance with this opacity limit.
  
19. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, thermal afterburner No. 1 and No. 2 will be equipped with a temperature controller which monitors, records, and controls the operating temperature at or above 1300°F any time a press controlled by the afterburner is operating.
  
20. Pursuant to §19.7 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall measure the VOC emissions from Afterburner No. 1 and No. 2 once every 5 years starting in August, 2002 using EPA Reference Method 25A or an equivalent method provided the equivalent method has been approved by the Department before use. The testing required shall be conducted during one entire shift (a consecutive eight hour period). The presses shall be operating normally during that period. These units were successfully stack tested on August 19-20, 1997.

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SN-08  
Press No. 822-5  
Non-Stack Emissions

Source Description

Press No. 822-5 is a heatset web offset printing press. It includes a natural gas fired dryer and chill rolls for cooling the media after printing. Regular emissions from this press are ducted to one of the afterburners with only the non-stack emissions going to atmosphere.

Specific Conditions

21. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-08. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 7. Compliance with Plantwide Conditions 6 & 7 and Specific Condition 23 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	7.5	19.6

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22. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-08. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 and Specific Condition 23 shall represent compliance with this source's applicable requirements.

HAP - Relative Toxicity	lb/hr	tpy
Glycol Ether *	0.72	1.90
Relative Toxicity 1.0	0.34	0.90

\* - Glycol ethers do not have a relative toxicity

23. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, Press No. 822-5 shall be operated with its stack emissions being processed through a functional afterburner during normal operations. The permittee shall follow the provisions of their latest Air Pollution Control System Contingency Plan during emergency failures of an afterburner. The initial plan dated May 15, 2000 is included as Appendix A.

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SN-10  
Press No. 822-6  
Non-Stack Emissions

Source Description

Press No. 822-6 is a heatset web offset printing press. It includes a natural gas fired dryer and chill rolls for cooling the media after printing. Regular emissions from this press are ducted to one of the afterburners with only the non-stack emissions going to atmosphere.

Specific Conditions

24. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-10. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 7. Compliance with Plantwide Conditions 6 & 7 and Specific Condition 26 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	6.8	18.0



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25. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-10. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 and Specific Condition 26 shall represent compliance with this source's applicable requirements.

HAP - Relative Toxicity	lb/hr	tpy
Glycol Ether *	0.59	1.54
Relative Toxicity 1.0	0.33	0.86

\* - Glycol ethers do not have a relative toxicity

26. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, Press No. 822-6 shall be operated with its stack emissions being processed through a functional afterburner during normal operations. The permittee shall follow the provisions of their latest Air Pollution Control System Contingency Plan during emergency failures of an afterburner. The initial plan dated May 15, 2000 is included as Appendix A.

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SN-11  
Ink Jet Printer Emissions

Source Description

Inkjet printers are used to print the mailing labels for magazines distributed directly from this facility.

Specific Conditions

27. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-11. The emission rates are based on the maximum capacity of the printers along with usage limits specified in Plantwide Conditions 6 & 8. Compliance with Plantwide Conditions 6 & 8 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	12.2	53.3

28. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-11. The emission rates are based on the maximum capacity of the printers along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 shall represent compliance with this source's applicable requirements.

HAP - Relative Toxicity	lb/hr	tpy
Relative Toxicity 1.0	12.2	53.3

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SN-12  
Press Room Emissions

Source Description

The maximum usage of miscellaneous solvents and adhesives at the facility 43,600 pounds per year of miscellaneous solvents and 4,000 pounds per year of miscellaneous adhesives . However, the actual usage on an annual basis is significantly lower than the maximum usages identified.

Specific Conditions

29. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-12. The emission rates are based on the usage limits specified in Plantwide Conditions 6 & 9. Compliance with Plantwide Conditions 6 & 9 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	4.9	21.2

30. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-12. The emission rates are based on the usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 shall represent compliance with this source's applicable requirements.

HAP - Relative Toxicity	lb/hr	tpy
Relative Toxicity 1.0	4.48	19.62
Relative Toxicity 0.1	0.002	0.01

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SN-13  
Press No. 822-7  
Non-Stack Emissions

Source Description

Press No. 822-7 is a heatset web offset printing press. It includes a natural gas fired dryer and chill rolls for cooling the media after printing. Dryer emissions from this press are ducted to one of the afterburners with only the non-stack emissions going directly to atmosphere.

31. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table at SN-13. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 7. Compliance with Plantwide Conditions 6 & 7 and Specific Condition 33 shall represent compliance with this source's applicable requirements.

Pollutant	lb/hr	tpy
VOC	5.5	19.4

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32. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the HAP emission rates set forth in the following table at SN-13. The emission rates are based on the maximum capacity of the press along with usage limits specified in Plantwide Conditions 6 & 10. Compliance with Plantwide Conditions 6 & 10 and Specific Condition 33 shall represent compliance with this source's applicable requirements.

HAP - Relative Toxicity	lb/hr	tpy
Glycol Ether *	0.51	1.81
Relative Toxicity 1.0	0.25	0.90

\* - Glycol ethers do not have a relative toxicity

33. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311 and 40 CFR 70.6, Press No. 822-6 shall be operated with its stack emissions being processed through a functional afterburner during normal operations. The permittee shall follow the provisions of their latest Air Pollution Control System Contingency Plan during emergency failures of an afterburner. The initial plan dated May 15, 2000 is included as Appendix A.

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## **SECTION V: COMPLIANCE PLAN AND SCHEDULE**

Quebecor World - Jonesboro Division is in compliance with the applicable regulations cited in the permit application. Quebecor World - Jonesboro Division will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

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## **SECTION VI: PLANTWIDE CONDITIONS**

1. Pursuant to §19.704 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
2. Pursuant to §19.410(B) of Regulation 19, 40 CFR Part 52, Subpart E, the Director may cancel all or part of this permit if the construction or modification authorized herein is not begun within 18 months from the date of the permit issuance or if the work involved in the construction or modification is suspended for a total of 18 months or more.
3. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
4. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
  1. Sampling ports adequate for applicable test methods
  2. Safe sampling platforms
  3. Safe access to sampling platforms
  4. Utilities for sampling and testing equipment
5. Pursuant to §19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.
6. Pursuant to A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the amount of ink, blanket wash solution (BW), and fountain solution (FS) used by the permittee shall not exceed the following values on a rolling 12 month average:

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SN-#	Press #	Annual Ink Usage (Lbs.)	Annual Manual Blanket Wash Usage (Lbs.)	Annual Automatic Blanket Wash Usage (Lbs.)	Annual Fountain Solution (Lbs.)
SN-01	922	649,428	15,732	7,872	29,028
SN-02	822-2	873,228	21,144	10,572	39,012
SN-03	822-3	1,227,120	29,724	14,868	54,840
SN-04	822-4	1,084,752	26,268	13,140	48,468
SN-05	822-1	576,600	13,968	6,984	25,776
SN-08	822-5	1,746,456	42,300	21,156	78,048
SN-10	822-6	893,520	40,212	20,112	54,840
SN-13	822-7	1,207,000	42,600	21,300	71,000
SN-11	Inkjet Printers				
	MeOh Ink		MeOH Wash	Makeup Solvent	
	7,314 Lbs/Yr		7,314 Lbs/Yr	93,315 Lbs/Yr	
SN-12	Miscellaneous Solvent and Adhesive Use in Press Room				
	Solvents			Adhesives	
	43,600 Lbs/Yr			4,000 Lbs/Yr	

7. Pursuant to A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311 and 40 CFR 70.6, the ink used by the permittee shall contain no more than 45 weight % VOC, the blanket wash solution (automatic and manual) shall contain no more than 100 weight % VOC, and the fountain solution concentrate will contain no more than 22.5 weight % VOC.
8. Pursuant to A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311 and 40 CFR 70.6, the wash used by the permittee (in the ink jet printers) shall not contain more than 100 weight % VOC, the bindery MEOH ink shall not contain more than 80 weight % VOC, and the ink jet printer make-up solvent shall not contain more than 100 weight % VOC.



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9. Pursuant to A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311 and 40 CFR 70.6, the miscellaneous solvents used by the permittee shall not contain more than 97 weight % VOC, and the press room adhesives used shall not contain more than 1.1 weight % VOC.
10. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the blanket wash, fountain solution, ink jet printer supplies, and miscellaneous solvents and adhesives used by the permittee shall contain only those compounds listed in the following table:

Product Used	HAP Relative Toxicity	Maximum Weight Fraction
Blanket Wash	Glycol Ethers* Relative Toxicity: 1.0	0.05 0.053
Fountain Solution	Glycol Ethers*	0.09
Ink Jet Printer Wash	Relative Toxicity: 1.0	1.0
Bindery MEOH Ink	Relative Toxicity: 1.0	0.8
Ink Jet Printer Make-up Solution	Relative Toxicity: 1.0	1.0
Miscellaneous Solvents	Relative Toxicity: 1.0	0.9
Miscellaneous Adhesives	Relative Toxicity: 0.1	0.005

\* - Glycol Ethers do not have a relative toxicity

The permittee may use compounds other than those listed in the permit application provided that they first receive approval to do so from this Department. This approval will be granted if the alternate compounds will not result in an increase in HAP emissions and if they will not adversely affect air quality.

11. Pursuant to §19.7 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall keep records of the ink, automatic blanket wash, manual blanket wash, fountain solution, ink jet printer supplies, and miscellaneous solvents and adhesives used at this facility. These records shall be sufficient to enable the Department to determine the amount of materials used per year and per month, the identity of these compounds, and the percent of volatile material and hazardous air pollutants in the materials. The rolling 12-month averages/totals will be calculated within 30 days of the end of each month for the previous 12-month period. Reports shall be submitted in accordance with General Provision No. 7.

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12. Pursuant to Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit subsumes and incorporates all previously issued air permits for this facility.

**Title VI Provisions**

13. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:
  1. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
  2. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  3. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
  4. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
14. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  2. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  3. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  4. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC-like appliance” as defined at §82.152.)
  5. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
  6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

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15. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
16. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

17. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

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### **SECTION VII: INSIGNIFICANT ACTIVITIES**

Pursuant to §26.304 of Regulation 26, the following sources are insignificant activities. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §304 of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated July 10, 1997.

Space Heating - 40 units less than 1 MMBTU/Hr; 2 units with capacity between 1-2 MMBTU/Hr and less than 5 tpy emissions

Prepress Sources - 2 Film Processors; 2 Plate Processors; 1 Preheat Oven; 1 Postbake Oven; and 1 Blueline Developer

Cooling Tower - Water Emissions Only

Storage Tanks - LPG and Napthalene; less than 5 tpy emissions

Bindery Operations - Baghouse which vents indoors and glue used is polyvinyl acetate.

Pursuant to §26.304 of Regulation 26, the emission units, operations, or activities contained in Regulation 19, Appendix B, have been determined by the Department to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

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### **SECTION VIII: GENERAL PROVISIONS**

1. Pursuant to 40 CFR 70.6(b)(2), any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. Pursuant to 40 CFR 70.6(a)(2) and §26.7 of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), this permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later.
3. Pursuant to §26.4 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due.
4. Pursuant to 40 CFR 70.6(a)(1)(ii) and §26.7 of Regulation #26, where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.
5. Pursuant to 40 CFR 70.6(a)(3)(ii)(A) and §26.7 of Regulation #26, records of monitoring information required by this permit shall include the following:
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and

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- f. The operating conditions existing at the time of sampling or measurement.
- 6. Pursuant to 40 CFR 70.6(a)(3)(ii)(B) and §26.7 of Regulation #26, records of all required monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
- 7. Pursuant to 40 CFR 70.6(a)(3)(iii)(A) and §26.7 of Regulation #26, the permittee shall submit reports of all required monitoring every 6 months. If no other reporting period has been established, the reporting period shall end on the last day of the anniversary month of this permit. The report shall be due within 30 days of the end of the reporting period. Even though the reports are due every six months, each report shall contain a full year of data. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as defined in §26.2 of Regulation #26 and must be sent to the address below.

Arkansas Department of Environmental Quality  
Air Division  
ATTN: Compliance Inspector Supervisor  
Post Office Box 8913  
Little Rock, AR 72219

- 8. Pursuant to 40 CFR 70.6(a)(3)(iii)(B), §26.7 of Regulation #26, and §19.601 and 19.602 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department by the next business day after the occurrence. The initial report may be made by telephone and shall include:
  - a. The facility name and location,
  - b. The process unit or emission source which is deviating from the permit limit,
  - c. The permit limit, including the identification of pollutants, from which deviation occurs,
  - d. The date and time the deviation started,
  - e. The duration of the deviation,
  - f. The average emissions during the deviation,
  - g. The probable cause of such deviations,
  - h. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and

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- i. The name of the person submitting the report.

A full report shall be made in writing to the Department within five (5) business days of discovery of the occurrence and shall include in addition to the information required by initial report a schedule of actions to be taken to eliminate future occurrences and/or to minimize the amount by which the permits limits are exceeded and to reduce the length of time for which said limits are exceeded. If the permittee wishes, they may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence and such report will serve as both the initial report and full report.

9. Pursuant to 40 CFR 70.6(a)(5) and §26.7 of Regulation #26, and A.C.A. §8-4-203, as referenced by §8-4-304 and §8-4-311, if any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable.
10. Pursuant to 40 CFR 70.6(a)(6)(i) and §26.7 of Regulation #26, the permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation #26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Any permit noncompliance with a state requirement constitutes a violation of the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) and is also grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
11. Pursuant to 40 CFR 70.6(a)(6)(ii) and §26.7 of Regulation #26, it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
12. Pursuant to 40 CFR 70.6(a)(6)(iii) and §26.7 of Regulation #26, this permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
13. Pursuant to 40 CFR 70.6(a)(6)(iv) and §26.7 of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.

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14. Pursuant to 40 CFR 70.6(a)(6)(v) and §26.7 of Regulation #26, the permittee shall furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may be required to furnish such records directly to the Administrator along with a claim of confidentiality.
15. Pursuant to 40 CFR 70.6(a)(7) and §26.7 of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.
16. Pursuant to 40 CFR 70.6(a)(8) and §26.7 of Regulation #26, no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for elsewhere in this permit.
17. Pursuant to 40 CFR 70.6(a)(9)(i) and §26.7 of Regulation #26, if the permittee is allowed to operate under different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which the facility or source is operating.
18. Pursuant to 40 CFR 70.6(b) and §26.7 of Regulation #26, all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act unless the Department has specifically designated as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.
19. Pursuant to 40 CFR 70.6(c)(1) and §26.7 of Regulation #26, any document (including reports) required by this permit shall contain a certification by a responsible official as defined in §26.2 of Regulation #26.
20. Pursuant to 40 CFR 70.6(c)(2) and §26.7 of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:



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- a. Enter upon the permittee's premises where the permitted source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements.
21. Pursuant to 40 CFR 70.6(c)(5) and §26.7 of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:
- a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The compliance status;
  - c. Whether compliance was continuous or intermittent;
  - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
  - e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and 504(b) of the Act.
22. Pursuant to §26.7 of Regulation #26, nothing in this permit shall alter or affect the following:
- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
  - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

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23. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.

**APPENDIX A**  
**AIR POLLUTION CONTROL SYSTEM CONTINGENCY PLAN**

**AIR POLLUTION CONTROL SYSTEM  
CONTINGENCY PLAN**

**QUEBECOR WORLD – JONESBORO DIVISION  
JONESBORO, ARKANSAS**

**MAY 15, 2000**

Prepared For:

Quebecor World  
Jonesboro Division  
4708 Krueger Drive  
Jonesboro, Arkansas 72401

Prepared By:

Applied Environmental Sciences, Inc.  
2110 Luann Lane  
Madison, Wisconsin 53713  
608-277-9933

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**APPENDICES**

**APPENDIX A ..... DISPERSION MODELING ANALYSIS PROTOCOL**

## **1. INTRODUCTION**

Quebecor World – Jonesboro Division operates a heatset web offset printing facility and associated bindery operations. Printed materials include periodicals (monthly magazines) that must be delivered to customers on strictly adhered to schedules. An unexpected malfunction of the thermal oxidizer air pollution control system, because of the time sensitive nature of the materials printed by the Jonesboro Division, may require unavoidable brief periods of uncontrolled press operation to meet delivery schedules. The following Contingency Plan was developed to reduce the likelihood of an oxidizer malfunction, shorten the outage time caused by an unexpected malfunction, and minimize the potential impact to health and the environment that could result from uncontrolled press operation.

## 2. AIR POLLUTION CONTROL SYSTEM MAINTENANCE

The Jonesboro facility will maintain and monitor the performance of the oxidizer system with the following inspection and maintenance schedule that exceeds the manufacturer recommendations:

1. A visual annunciation system to be installed in the maintenance department, will provide the following information: Afterburner A Ready/Not Ready, Afterburner B Ready/Not Ready. This system will confirm the operation of the oxidizer units. An emergency blue strobe light, located in the electric maintenance shop, will be triggered and locked in if one or both of the afterburners is not ready, and a press is not being controlled for more than 30 minutes. The alarm system can only be silenced by a shift supervisor, through a key lock.
2. The oxidizer units will be added to the guard's key punch list, so that daily visual inspection can be monitored and confirmed.
3. One-day shift machinist will be assigned to visually inspect the mechanical condition of the unit on a weekly basis. This inspection will consist of the main blower bearings, fan, and the valve linkages to the system.
4. A monthly inspection of the control chart will be performed by a plant electrician to verify that the chart recorder is properly recording the information and that the system is running within normal operating ranges.
5. A semi-annual systems check will be performed by the manufacturer to verify correct operating controls. This check will be a running inspection.
6. An annual inspection will be performed by the manufacturer, which will be a complete shutdown and tear down of the unit to inspect the internal operation of the gas chamber.

A copy of the maintenance report from each routine maintenance and repair activity will be maintained for a period of two years and, if requested, made available to the ADEQ. In addition, a spare parts inventory will be maintained on-site to facilitate oxidizer system repair and minimize system outage time.

### **3. MALFUNCTION IMPACT MINIMIZATION**

In the event of a malfunction of one or both of the facility's thermal oxidizer air pollution control systems, Jonesboro will proceed with the following measures to minimize the impact of this occurrence. The following measures and actions assume that, upon ADEQ approval of this Contingency Plan, limited uncontrolled press operation will be allowed for a 72-hour period following the malfunction incident, if the procedures outlined below are utilized by the Quebecor World Jonesboro facility. If uncontrolled press operation is required beyond 72-hours, the facility will perform an impact analysis of the uncontrolled emissions and will contact ADEQ for specific approval to continue limited operation beyond the initial 72-hour period.

#### **3.1. Immediately Following Malfunction**

1. Complete safe shutdown of uncontrolled presses as soon as practical.
2. Contact maintenance personnel and the control system supplier as appropriate to initiate problem identification and repair.
3. Evaluate production scheduling, the need to complete time sensitive publications, and the availability of controlled presses to complete critical printing jobs. Re-assign presses and printing jobs to maximize use of controlled presses to complete critical jobs.
4. If uncontrolled press operation is required, contact ADEQ<sup>1</sup> as soon as practical for notification of the incident and the need for uncontrolled operation of presses.
5. If uncontrolled press operation is not required, contact ADEQ<sup>1</sup> within 48-hours of oxidizer malfunction to report the incident.

#### **3.2. Uncontrolled Press Operation: 24-Hour Period After Malfunction Occurrence**

1. Expedite repair of the oxidizer system(s), using paid overtime for facility personnel, premium time for supplier's personnel, and rapid delivery of parts and supplies.
2. Develop, as soon as possible, an estimate of the expected duration of the malfunction outage. Communicate this schedule to ADEQ<sup>1</sup> and also notify ADEQ of the intent to operate certain critical presses uncontrolled to complete time sensitive printing.
3. Refuse new printing work from other Quebecor World facilities that would require or increase the use of uncontrolled presses. Also, refuse new, non-contract work from customers.

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<sup>1</sup> ADEQ will be notified initially by telephone, if malfunction incident or the need for subsequent reporting occurs during normal ADEQ working hours. If a malfunction occurs outside of normal working hours, ADEQ will be notified by facsimile. Written notification no later than the day following the upset condition will be provided in any event.



4. Use, to the extent possible, inks that do not list an oil mist TLV on the current MSDS, for presses that are to be operated uncontrolled.
5. Minimize, to the extent possible, the use of VOC containing clean-up materials.

### **3.3. Uncontrolled Press Operation: 24 to 48-Hour Period Following Malfunction Incident**

In addition to the mitigating measures listed above, the Jonesboro Division will also take the following steps to reduce the potential impact of the malfunction incident:

1. Contact other Quebecor World facilities to determine if time sensitive printing work can be completed at other locations and shift work from uncontrolled presses to other locations, if feasible.
2. Update the oxidizer repair schedule, based on the best information currently available. Communicate updated repair schedule to ADEQ and notify ADEQ of the need to continue to operate certain presses uncontrolled to complete critical time sensitive printing.
3. Contact customers of printing work requiring uncontrolled press operation and explore the possibility of delivery delays to minimize uncontrolled operation time.

### **3.4. Uncontrolled Press Operation: Beyond 72-Hours Following Malfunction Incident**

In addition to the mitigating measures listed above, the Jonesboro Division will also take the following steps to reduce the potential impact of the malfunction incident:

1. Evaluate, using air dispersion modeling techniques, the potential impact of emissions from the actual and projected future uncontrolled periods of operation. A Dispersion Modeling Analysis Protocol, which describes the assumptions and techniques to be used in the analysis, is included in Appendix A of this plan. This potential impact assessment will take into account sensitive receptors and utilize projected actual production rates for the uncontrolled presses.
2. Based on the potential impacts projected above and the schedule for completion of necessary oxidizer repairs, develop a plan of uncontrolled operation that will minimize impacts to health and the environment. This plan will be sent to ADEQ for review on the fourth day following the malfunction incident. ADEQ will respond to the plan as soon as practical following receipt. Jonesboro shall be authorized to continue operating (subject to the provisions of this plan) pending review by ADEQ.
3. Continue to move printing work that must be completed using uncontrolled presses to other Quebecor World facilities to the extent possible.
4. Shutdown other non-essential printing jobs to minimize total facility emissions.

5. Use inks, to the maximum extent possible, that do not list a TLV for oil mist on the product MSDS.
6. Obtain and use low VOC clean-up materials, to the maximum extent possible.
7. Provide daily updates to ADEQ on status of oxidizer and the extent of controlled and uncontrolled emissions.

## **APPENDIX A**

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### **DISPERSION MODELING ANALYSIS PROTOCOL**

**Dispersion Modeling Analysis Protocol  
Quebecor World – Jonesboro Division  
Air Pollution Control System  
Contingency Plan**

Quebecor World – Jonesboro Division will utilize U.S. EPA's ISCST3 (Version 99152) model to evaluate the ambient air quality impact resulting from the limited uncontrolled operation of printing presses during an oxidizer malfunction. For this evaluation, the ISCST model will be setup with the following default values and site specific information:

1. The ISCST model will be run using the following default values:
  - a. Default wind profile exponents for rural mode;
  - b. Default vertical potential temperature gradients;
  - c. Pre-specified point source locations for the facility oxidizer system stacks and by-pass stacks and a 100-meter receptor grid;
  - d. Straight line plume transport to all downwind distances;
  - e. Rural dispersion coefficients;
  - f. Six default stability classes; and
  - g. No decay factors for air pollutants.
2. An enhanced electronic USGS topographical base map of the area immediately adjacent to the Jonesboro facility will be prepared to facilitate the location of predicted maximum receptor points. This base map will include labeled sensitive receptors (schools, hospitals, nursing homes and residences) and allow the capability of estimating the distance from a maximum impact point to the nearest sensitive receptor.
3. The best available representative wind speed, wind direction, and temperature data of the area will be used to prepare a predicted weather data set for the dispersion modeling. This data set will be for the projected period of uncontrolled press operation. Weather forecast information will be obtained from the appropriate National Weather Service information center and/or other local weather sources.
4. Air emissions resulting from predicted actual facility operation for the anticipated period of uncontrolled operation will be used as model inputs. Oil mist emissions will be modeled for uncontrolled presses using inks that list an oil mist TLV on the current material MSDS. Other listed Hazardous Air Pollutants (HAPs) will also be included in the evaluation for those raw materials actually scheduled for use.
5. Press by-pass stack conditions (for uncontrolled presses) and oxidizer stack conditions will be used as modeling inputs, as appropriate.

The highest second high 24-hour predicted concentration will be used as the basis for evaluating the potential impact of limited uncontrolled press operation for each day of operation. Projected impacts will

be re-evaluated, on each subsequent day of uncontrolled operation, to take into account updated weather forecast information.