Robert McVay LaPorte Herald - Argus 701 State Street LaPorte, IN 46305

Dear Robert McVay:

# Re: Exempt Construction and Operation Status, 091-13719-00077

The application from LaPorte Herald - Argus, received on December 28, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the operation of a printing press and dark room, to located at 701 State Street, LaPorte, IN 46305, Indiana, is classified as exempt from air pollution permit requirements:

- (a) One (1) non-heatset offset printing press, identified as UN17A, with maximum line speed of 1200 feet per minute and maximum printing width 32 inches.
- (b) One (1) dark room, for developing pictures on lithoplate.
- (c) Two (2) natural gas boilers, 213933 and 213934, each with capacity 0.5 mm Btu/hr, exhausting to stack S1 and S2.

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

This exemption is the second air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Quality

GS

cc: File – LaPorte County LaPorte County Health Department Air Compliance – Rick Massoels Northwest Regional Office Permit Tracking - Janet Mobley Technical Support and Modeling - Michele Boner Compliance Data Section - Karen Nowak

# Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for an Exemption

#### Source Background and Description

Source Name:	LaPorte Herald – Argus
Source Location:	701 State Street, LaPorte, IN 46305
County:	LaPorte
SIC Code:	2711
<b>Operation Permit No.:</b>	091-13719-00077
Permit Reviewer:	Gurinder Saini

The Office of Air Quality (OAQ) has reviewed an application from LaPorte Herald – Argus relating to the operation of a printing press and dark room.

#### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) non-heatset offset printing press, identified as UN17A, with maximum line speed of 1200 feet per minute and maximum printing width 32 inches.
- (b) One (1) dark room, for developing pictures on lithoplate.
- (c) Two (2) natural gas boilers, 213933 and 213934, each with capacity 0.5 mm Btu/hr, exhausting to stack S1 and S2.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

(a) Registration 091-4786-00077, issued on September 13, 1995

The TSD for this Registration states, "Allowable emissions (as defined in the Indiana Rule) of VOC are less than 25 tons per year, but greater than 15 pounds per day. Therefore, pursuant to 326 IAC 2-1, a registration is required". The OAQ is no longer basing permit level on allowable emissions. Therefore, an exemption letter will be issued to this source.

There are no enforcement actions pending.

#### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature ( <sup>0</sup> F)
S1	Boiler 213933	21.9	1'6''	4872	70
S2	Boiler 213934	21.9	1'	4500	70

#### Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 28, 2000.

#### **Emission Calculations**

See Appendix A page 1 and 2 of this document for detailed emissions calculations.

#### **Potential To Emit of Source Before Controls**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as Athe maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.@

Pollutant	Potential To Emit (tons/year)
PM	-
PM-10	-
SO <sub>2</sub>	-
VOC	6.55
СО	0.4
NO <sub>x</sub>	0.4
HAP₅	Potential To Emit (tons/year)
Single HAP	Less than 10
Combination HAPs	Less than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than 10 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.
- (b) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories

under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **County Attainment Status**

The source is located in LaPorte County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaPorte County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) LaPorte County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

#### **Source Status**

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	-
PM10	-
SO <sub>2</sub>	-
VOC	6.55
CO	0.4
NO <sub>x</sub>	0.4

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on Potential emissions from the source

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326 IAC 2-7 (Part 70 Permit Program)

This existing source, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source.

#### Federal Rule Applicability

- (a) New Source Performance Standards (NSPS):
  - 1. 40 CFR § 60.430, Subpart QQ Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing.

This NSPS applies to each publication rotogravure unit for which Construction, Modification or Reconstruction commenced after October 28, 1980.

As this unit does not produce and publication using Rotogravure Printing, this NSPS does not apply

- (b) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (c) National Emission Standards for Hazardous Air Pollutants (NESHAPs)
  - 1. 40 CFR § 63.820, Subpart KK National Emission Standards for the Printing and Publishing Industry.

This NESHAP applies to each publication rotogravure unit, which is a major source of HAPs.

As this unit does not use any HAPs, this NESHAP does not apply

(d) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

#### State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in LaPorte County and the potential to emit of any criteria pollutant is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a

continuous opacity monitor) in a six (6) hour period.

#### State Rule Applicability - Individual Facilities

326 IAC 8-5-9 (Miscellaneous operations: graphic arts operations)

This section applies to packaging rotogravure, publication rotogravure and flexographic printing sources. This source operates non-heatset offset printing press. Therefore requirements of this rule do not apply to this source.

- 326 IAC 8-1-6 (General provisions relating to VOC rules: general reduction requirements for new facilities) The potential emissions from non-heat offset printing press are less than 25 tons per year. Therefore, this rule is not applicable to this source. Any change or modification which result in potential emissions above this threshold will require a review under this rule.
- 326 IAC 8 (Volatile Organic Compounds Rules) There are no other Article 8 rules applicable to this source.
- 326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants)

The potential emissions of single HAP and combination of HAPs from the printing press are less than 10 tons and 25 tons per year respectively. Therefore requirements of 326 IAC 2-4.1 (Major Source of Hazardous Air Pollutants) rule does not apply to this source. Any change or modification which result in potential emissions above this threshold will require a review under this rule.

### Conclusion

The operation of this printing press and dark room shall be subject to the conditions of the attached proposed Exemption 091-13719-00077.

### Appendix A: Emissions Calculations

VOC From Printing Press Operations

Name	e: La	porte	Hera	ld /	Argus
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- Address City IN Zip: 701 State Street, LaPorte, IN 46305
  - CP: 091-13719
  - Pit ID: 091-00077
  - Reviewer: GS
    - Date: 01/16/2001

TIKOUGHFUT			
Press I.D.	MAXIMUM LINE SPEED (FEET/MIN)	MAXIMUM PRINT WIDTH (INCHES)	MMin <sup>2</sup> /YEAR
un17A	1200	32	242196

Company

INK VOCS					
Ink Name Press Id	Maxium Coverage '(Ibs/MMin^2)	Weight % Volatiles*	Flash Off %	Throughput (MMin^2/Year)	Emissions (TONS/YEAR)
Black Ink	0.775	20%	5.00%	242196	0.94
Colored Ink	0.465	8%	5.00%	242190	0.94
Hydro Clean	0.042	96%	100.00%	242196	4.88
Nova Pure	0.101	0%	100.00%	242196	4.00 0.00
Developer	0.038	11%	100.00%	242196	0.50
Finisher	0.038	0%	100.00%	242196	0.00
Fixer - A	0.047	0%	100.00%	242196	0.00
Fixer - B	0.047	0%	100.00%	242196	0.00
Developer	0.039	0%	100.00%	242196	0.00

Total VOC Emissions = 6.55 Ton/yr

\*VOC (Tons/Year) = Maximum Coverage pounds per MMin<sup>2</sup> \* Weight % volatiles (weight % of water & organics - weight % of water = weight % organics) \* Flash off \* Throughput \* 1 Ton per 2000 pounds

#### METHODOLOGY

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Throughput = Maxium line speed feet per minute \* Convert feet to inches \* Maximum print width inches \* 60 minutes per hour \* 8760 hours per year = MMin<sup>2</sup> per Year VOC = Maximum Coverage pounds per MMin<sup>2</sup> \* Weight percentage volatiles (water minus organics) \* Flash off \* Throughput \* Tons per 2000 pounds = Tons per Year NOTE: HEAT SET OFFSET PRINTING HAS AN ASSUMED FLASH OFF OF 80%. OTHER TYPES OF PRINTERS HAVE A FLASH OFF OF 100%. (Source -OAQPS Draft Guidance, "Control of Volatile Organic Compound Emisions from Offset Lithographic Printing (9/93) )

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Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 Small Industrial Boiler Company Name: Laporte Herald Argus Address City IN Zip: 701 State Street, LaPorte, IN 46305 CP: 091-13719 Plt ID: 091-00077 Reviewer: GS Date: 01/16/2001

Heat Input CapacityPotential ThroughputMMBtu/hrMMCF/yr

1.0

8.8

		Pollutant				
	PM*	PM10*	SO2	NOx	VOC	СО
Emission Factor in Ib/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.0	0.0	0.0	0.4	0.0	0.4

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

### Methodology

All emission factors are based on normal firing. MMBtu = 1,000,000 Btu MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

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