

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Diagraph/ITW Company  
Attn: Deborah Johnson  
5307 Meadowland Parkway  
Marion, Illinois 62959

Application No.: 05060051

I.D. No.: 199055ACG

Applicant's Designation: HERRIN

Date Received: June 20, 2005

Subject: Ink and Stencil Manufacturing

Date Issued: May 14, 2007

Expiration Date: May 14, 2012

Location: 5307 Meadowland Parkway, Marion

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Ink Manufacturing and Filling, Including:

Replacement Automated Marker Assembly Machine from Construction Permit  
05070068

2 Ink Lines from Construction Permit 07020082

Paint Booth

Canary Board Coating Line

Clean Up Operations

pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued: to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons per year of volatile organic material (VOM), 25 tons per year of combined hazardous air pollutants (HAPs) and 10 tons per year of each single HAP). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. Pursuant to 35 Ill. Adm. Code 215.204(c)(1), all paper coatings, including oil applied in the canary board coating line, shall not exceed 2.9 lbs VOM/gallon of coating (minus water and any compounds which are exempted from the definition of VOM) as applied at each applicator.
3. Pursuant to 35 Ill. Adm. Code 215.204(j)(2), all coatings applied in the paint booth shall not exceed 3.5 lbs VOM/gallon of coating (minus water and any compounds which are exempted from the definition of VOM) as applied at each applicator.

- 4. This permit is issued based on emissions of volatile organic material (VOM) from each emission unit not exceeding 8 lbs/hour, pursuant to 35 Ill. Adm. Code 215.301.
- 5a. This permit is issued based on no heating involved in manufacturing any inks at the facility except on the new solvent-based ink manufacturing line.
- b. Emissions and operation of the following processes shall not exceed the following limits:

<u>Process</u>	<u>Production</u>		<u>VOM Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Ink Manufacturing (no heat applied)	392.0	3,916	5.90	58.8
New Solvent-based Ink Manufacturing Line (Heated)	28.5	285	0.60	5.7
All Ink Filling	420.0	4,201	<u>0.28</u>	<u>5.2</u>
		Totals	<u>6.80</u>	<u>69.7</u>

These limits are based on a 1.5% emission factor from AP-42, Section 6.4 Paint Mfg. for Ink manufacturing involving no heating, a 2% emission factor from AP-42 Section 6.7 for Heated Solvent-Based Inks containing Oils, and petroleum loading vapor displacement loss equation from AP-42, Section 5.2, for loading Inks into storage vessels and then loading into bottles for shipment.

- b. This permit is issued based on negligible VOM emissions from the replacement automated marker assembly machine. For this purpose, emissions shall not exceed nominal rates of 0.1 lb/hour and 0.44 tons/year.
- c. Emissions of volatile organic material (VOM) and operation of the paint booth shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>VOM Content</u> <u>(lbs/Gallon)</u>	<u>VOM Emissions</u>	
	<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>		<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Coating	100	1,000	3.5	0.18	1.75

These limits define the potential emissions of VOM and are based on maximum material usages and maximum VOM content, pursuant to 35 Ill. Adm. Code 215.204(j)(2).

- d. Emissions of volatile organic material (VOM) and operation of the canary board coating line shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>VOM Content</u> <u>(lbs/Gallon)</u>	<u>VOM Emissions</u>	
	<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>		<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Oil	1,400	14,000	0.38	0.266	2.66

These limits are based on maximum material usages, maximum VOM content, (pursuant to 35 Ill. Adm. Code 215.204(c)(1)) and all VOM emitted.

- e. Usage and emissions from all cleanup operations shall not exceed the following:

VOM Usage		VOM Emissions	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
2.5	24.5	2.5	24.5

These limits define the potential emissions of VOM and are based on maximum material usages and maximum VOM content.

- 7. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and Section 112(g) of the Clean Air Act.
- 8. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 9a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The

requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

- b. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. Amount of each type of ink produced and whether heated or not heated (gallons or tons/month and gallons or tons/year);
  - ii. Density of each ink produced and whether heated or not heated (lbs/gallon or weight %);
  - iii. Amount of solvents, including clean-up, coatings, and oils used (gallons or tons/month and gallons or tons/year);
  - iv. VOM and HAP contents of each solvent, including clean-up, coatings, and oils used (lb VOM/gallon or percent weight); and
  - v. Monthly and annual emissions of VOM and HAPs from all heated ink manufacturing, all non-heated ink manufacturing, all ink filling, coating line, paint booth, and clean up operations, with supporting calculations (tons/month and tons/year).
10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
11. If there is an exceedance of or deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
12. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

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and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

It should be noted that this permit includes the replacement automated marker assembly machine from Construction Permit 05070068.

Please also note the 2 Ink Manufacturing Lines from Construction Permit 07020082 has been added to this permit.

If you have any questions on this permit, please contact Randy Solomon at 217/782-2113.

Edwin C. Bakowski, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control

ECB:RBS:psj

cc: IEPA, FOS Region 3  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the ink and stencil manufacturing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is producing 4201 tons of ink annually. The resulting maximum emissions are below the levels, (e.g., 100 tons per year of VOM, 25 tons per year of combined HAPs and 10 tons per year of each single HAP) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

<u>All Equipment and Operations</u>	E M I S S I O N S		
	VOM (Tons/Year)	Combined HAPs (Tons/Year)	Single HAP (Tons/Year)
Ink Production	64.5		
Ink Filling	5.2		
Paint Booth	1.75		
Assembly Machine	0.44		
Canary Board	2.66		
Cleanup Solvent	<u>24.50</u>		
Totals	99.00	<u>&lt; 25</u>	<u>&lt; 10</u>

RBS:psj