

217/782-2113

CONSTRUCTION PERMIT -- NESHAP SOURCE

PERMITTEE

Aargus Plastics, Inc.  
Attn: Scott Starr  
540 Allendale Drive  
Wheeling, Illinois 60090

Application No.: 07060055

I.D. No.: 031497AAN

Applicant's Designation:

Date Received: June 20, 2007

Subject: Flexographic Printing Process

Date Issued: May 7, 2008

Location: 540 Allendale Drive, Wheeling, Cook County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of modification to the existing seventeen flexographic printing units with natural gas-fired dryers to increase the permitted production and emissions, pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This permit is issued based on the emission of Hazardous Air Pollutants (HAP) as listed in Section 112(g) of the Clean Air Act being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements of Section 112(g) of the Clean Air Act.
- b. This permit is issued based on the modification the existing seventeen flexographic printing units not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203, Major Stationary Sources Construction and Modification. The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the volatile organic material (VOM) emissions from the existing seventeen flexographic printing units below the levels that would trigger the applicability of these rules.
2. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- 3a. The wide-web flexographic printing presses as this source are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63, Subparts A and KK. The Illinois EPA is administering the NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

- b. Pursuant to 40 CFR 63.820(a)(2), each new and existing facility at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated for which the owner or operator chooses to commit to and meets the criteria of 40 CFR 63.820(a)(2)(i) and (ii) for purposes of establishing the facility to be an area source of HAP with respect to 40 CFR 63 Subpart KK. A facility which establishes area source status through some other mechanism, as described in 40 CFR 63.820(a)(7), is not subject to the provisions of 40 CFR 63 Subpart KK.
  - i. Use less than 9.1 Mg (10 tons) per each rolling 12-month period of each HAP at the facility, including materials used for source categories or purposes other than printing and publishing, and
  - ii. Use less than 22.7 Mg (25 tons) per each rolling 12-month period of any combination of HAP at the facility, including materials used for source categories or purposes other than printing and publishing.
- c. Pursuant to 40 CFR 63.820(a)(3), each facility for which the owner or operator chooses to commit to and meets the criteria stated in 40 CFR 63.820(a)(2) shall be considered an area source, and is subject only to the provisions of 40 CFR 63.829(d) and 40 CFR 63.830(b)(1) of this subpart.
- d. Pursuant to 40 CFR 63.820(a)(4), each facility for which the owner or operator commits to the conditions in 40 CFR 63.820(a)(2) may exclude material used in routine janitorial or facility grounds maintenance, personal uses by employees or other persons, the use of products for the purpose of maintaining electric, propane, gasoline and diesel powered motor vehicles operated by the facility, and the use of HAP contained in intake water (used for processing or noncontact cooling) or intake air (used either as compressed air or for combustion).
- e. Pursuant to 40 CFR 63.820(a)(5), each facility for which the owner or operator commits to the conditions in 40 CFR 63.820(a)(2) to become an area source, but subsequently exceeds either of the thresholds in 40 CFR 63.820(a)(2) for any rolling 12-month period (without first obtaining and complying with other limits that keep its potential to emit HAP below major source levels), shall be considered in violation of its commitment for that 12-month period and shall be considered a major source of HAP beginning the first month after the end of the 12-month period in which either of the HAP-use thresholds was exceeded. As a major source of HAP, each such facility would be subject to the provisions of this subpart as noted in 40 CFR 63.820(a)(1) and would no longer be eligible to use the provisions of 40 CFR 63.820(a)(2), even if in subsequent 12-month periods the facility uses less HAP than the thresholds in 40 CFR 63.820(a)(2).
- f. Pursuant to 40 CFR 63.820(a)(6), an owner or operator of an affected source subject to 40 CFR 63.820(a)(2) who chooses to no longer be subject to 40 CFR 63.820(a)(2) shall notify the Illinois EPA or USEPA

of such change. If, by no longer being subject to 40 CFR 63.820(a)(2), the facility at which the affected source is located becomes a major source:

- i. The owner or operator of an existing source must continue to comply with the HAP usage provisions of 40 CFR 63.820(a)(2) until the source is in compliance with all relevant requirements for existing affected sources under 40 CFR 63 Subpart KK;
  - ii. The owner or operator of a new source must continue to comply with the HAP usage provisions of 40 CFR 63.820(a)(2) until the source is in compliance with all relevant requirements for new affected sources under 40 CFR 63 Subpart KK.
- 4a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
- b. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 Ill. Adm. Code 212.321.
5. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm.
6. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.
7. This permit is issued based upon the source not being subject to the requirements of 35 Ill. Adm. Code 218.401, Flexographic and Rotogravure Printing. This is consequence of the federally enforceable production and operating limitations, which restrict the maximum theoretical emissions of VOM from this facility to less than 100 tons per year and the potential to emit for VOM emissions to less than 25 tons per year.
8. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.

9a. Emissions and operation of all printing shall not exceed the following limits:

i. Volatile Organic Material (VOM) emissions from all printing operations shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Lbs/Day)</u>	<u>(Tons/Yr)</u>	<u>(Lbs/Day)</u>	<u>(Tons/Yr)</u>
Inks (As Applied)	124.47	18.67	124.47	18.67
Other Solvents (Cleanup, Etc.)	34.00	10.10	34.00	<u>5.10</u>
			Total:	<u>23.77</u>

ii. Hazardous Air Pollutants (HAP) emissions from all printing operations shall not exceed the following limits:

<u>Individual HAP* Usage</u>		<u>Individual HAP* Emissions</u>	
<u>(Lbs/Day)</u>	<u>(Tons/Year)</u>	<u>(Lbs/Day)</u>	<u>(Tons/Year)</u>
52.67	7.9	52.67	7.9
<u>Combined HAP* Usage</u>		<u>Combined HAP* Emissions</u>	
<u>(lbs/Day)</u>	<u>(Tons/Year)</u>	<u>(lbs/Day)</u>	<u>(Tons/Year)</u>
116.67	17.5	116.67	17.5

iii. These limits are based on the maximum material usage and a minimum of 50% of the cleanup solvents recovered for recycle. The above limitations contain revisions to previously issued Permit 03020011. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the FESOP application contains the most current and accurate information for the source. Specifically, the limits on VOM usage and emissions have been increased from 17.5 tons/year to 23.77 tons/year.

b. Emissions and operation of natural gas-fired press dryers shall not exceed the following limits:

- i. Total Natural Gas Usage: 0.8 mmscf/month, 8.0 mmscf/year
- ii. Emissions from the combustion of natural gas:

Pollutant	Emission	Emissions	
	Factor (Lbs/mmscf)	(Tons/Mo)	(Tons/Yr)
Nitrogen Oxides (NO <sub>x</sub> )	100	0.04	0.40
Carbon Monoxide (CO)	84	0.03	0.34
Particulate Matter (PM)	7.6	0.01	0.03
Volatile Organic Material (VOM)	5.5	0.01	0.02

These limits are based on the maximum firing rate and standard emission factors (Tables 1.4-1 and 1.4-2 of AP-42, Volume I, Fifth Edition, Supplement D, July 1998).

- 10. Compliance with the annual limits of this permit shall be determined on a daily basis from the sum of the data for the current day plus the preceding 364 days (running 365 daily total).
- 11. Pursuant to 35 Ill. Adm. Code 218.404(a), the VOM content of each coating and ink and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.404.
- 12. Pursuant to 40 CFR 63.829(d), the owner or operator of each facility which commits to the criteria of 40 CFR 63.820(a)(2) shall maintain records of all required measurements and calculations needed to demonstrate compliance with these criteria, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.
- 13a. Pursuant to 35 Ill. Adm. Code 218.404(b)(2), any owner or operator of a printing line which is exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402 shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:
  - i. The name and identification number of each coating and ink as applied on each printing line.
  - ii. The VOM content and the volume of each coating and ink as applied each year on each printing line.
- b. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

- i. The amount of solvent-based inks (pounds/day and tons per year (running total));
  - ii. The amount of water-based inks (pounds/day and tons per year (running total));
  - iii. The amount of solvent used (pounds/day and tons per year (running total));
  - iv. The amount of VOM recovered for recycling with supporting VOM content verification data and VOM calculations.
  - v. The maximum VOM and HAP contents of the inks (weight %); and
  - vi. Monthly and annual CO, NO<sub>x</sub>, PM, VOM and HAP emissions with supporting calculations (lbs/day, tons/month and tons/year).
- c. 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.
14. Pursuant to 40 CFR 63.830(b)(6)(ii), each owner or operator of an affected source subject to 40 CFR 63 Subpart KK shall submit to the Illinois EPA or USEPA a summary report specified in 40 CFR 63.10(e)(3) shall be submitted on a semi-annual basis (i.e., once every 6-month period). These summary reports are required even if the affected source does not have any control devices or does not take the performance of any control devices into account in demonstrating compliance with the emission limitations in 40 CFR 63.824 or 40 CFR 63.825. In addition to a report of operating parameter exceedences as required by 40 CFR 63.10(e)(3)(i), the summary report shall include exceedences of either of the criteria of 40 CFR 63.820(a)(2).
  15. Pursuant to 35 Ill. Adm. Code 218.404(b)(3), any owner or operator of a printing line which is exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402 shall notify the Illinois EPA of any record showing that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year before the application of capture systems and control devices by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.
  16. 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.

11. 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

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  
9511 West Harrison Street  
Des Plaines, Illinois 60016

If you have any questions on this permit, please call John Blazis at 217/782-2113.

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

Date Signed: \_\_\_\_\_

ECB:JPB:jws

cc: Region 1