

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISION

PERMITTEE

Norwood Marking Systems, Inc.
Attn: Mr. Bud Williams
250 Industry Avenue
Frankfort, Illinois 60423

<u>Application No.:</u> 78030023	<u>I.D. No.:</u> 197040AAN
<u>Applicant's Designation:</u>	<u>Date Received:</u> May 1, 2006
<u>Subject:</u> Paper Coating (Mylar Film Label)	<u>Manufacturer</u>
<u>Date Issued:</u> August 17, 2006	<u>Expiration Date:</u> July 31, 2008
<u>Location:</u> 250 Industry Avenue, Frankfort, Will County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of an ink mixing and blending operation and three paper coating lines (all controlled by one single regenerative thermal oxidizer (RTO)), slitter equipment controlled by a baghouse, one hexane underground storage tank, and one isopropyl alcohol underground storage tank 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 Volatile Organic Material (VOM) and Hazardous Air Pollutants (HAPs) from the source to less than major source thresholds (i.e., 100 tons/year for VOM, 10 tons/year for a single HAP and 25 tons/year for combined HAPs). As a result, the source is excluded from the requirements 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 for this location.
2. This permit is issued based on the three paper coating lines being subject to the VOM emission limitations of 35 Ill. Adm. Code 218.204(c): Paper Coating. Compliance with these requirements is achieved due to the use of RTO with a 99.0 percent control efficiency in accordance with the requirements of Section 218.207(b).
- 3a. 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 source, 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 K: Use of Organic Material, shall apply only to photochemically reactive material.

- b. 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.
- 4. This permit is issued based on the RTO being subject to the operational and equipment requirements of 35 Ill. Adm. Code 218.105(c) and (d): Afterburner testing, monitoring and recordkeeping. The Permittee shall follow operating procedures and equipment requirements of Section 218.105.
- 5a. Emissions and operation of the ink mixing and blending operation and three paper coating lines, all controlled by a RTO shall not exceed the following limits:

<u>Process</u>	<u>Production and Usage of Ink</u>		<u>VOM Content</u>	<u>VOM Emissions</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Lbs/Gal)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
Mixing and Blending	57,100	685,000	7.7	0.8	8.5
Paper Coating	57,100	685,000	7.7	0.8	8.5

These limits are based on maximum ink production and usage, maximum VOM content, and overall VOM control efficiency, as verified in the latest stack test. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Emissions and operation of the RTO shall not exceed the following limits:

<u>Natural Gas Usage</u>		<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>		<u>(lbs/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
7.0	66	Nitrogen Oxide	100	0.4	3.3
		Carbon Monoxide	84	0.3	2.7

These limits are based on maximum firing rate (7.5 mmBtu/hour), maximum operating hours (8,760 hours/year), and standard AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- c. The emission of particulate matter from the slitter equipment shall not exceed 0.25 lb/hour and 0.88 tons/year. These limits are based on the allowable hourly emission rate per 35 Ill. Adm. Code 212.321 and 7,000 operating hours per year.
- d. This permit is issued based on negligible emissions of VOM from the hexane and isopropyl alcohol underground storage tanks. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.

- e. 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.

- 6a. 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 monthly records of the following items:
 - i. Name and usage of all inks, solvents, and other VOM-containing and HAP-containing materials used (gallons/month, gallons/year, lbs/gallon, lbs/gallon);
 - ii. VOM and HAP content of all inks, solvents, and other VOM-containing and HAP-containing materials used (weight %); and
 - iii. Natural gas consumption (mmscf/month, mmscf/year).

- 7a. The RTO shall be in operation at all times the associated emission units are in operation.

- b. The RTO combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation.
 - c. The RTO shall be equipped with a continuous monitoring device which is installed, calibrated, maintained, and operated according to vendor's specifications at all times that the RTO is in use. This device shall monitor the afterburner combustion chamber temperature.
8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three 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 request for records during the course of a source inspection.
 9. 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.
 10. 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
 Des Plaines, Illinois 60016
 11. The Permittee shall submit the following additional information from the prior calendar year, along with the Annual Emissions Report, due May 1st of each year:
 - a. Name, usage, VOM content, and HAP content of all inks, solvents, and other VOM-containing and HAP-containing materials used (gallons/year, lbs/gallon, lbs/gallon); and

Page 5

b. Natural gas consumption (mmscf/year).

Please note this permit has been revised to incorporate the Regenerative Thermal Oxidizer from Construction Permit 03120053 and reflect removal of the existing permitted afterburner.

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

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JRS:psj

cc: Illinois EPA, FOS Region 1
USEPA
PCF

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the mylar label manufacturing 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 involves production and usage of 685,000 gallons of coating ink and use of 396,000 gallons of hexane per year. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of VOM, 10 tons per year of single HAP, and 25 tons per year of combined HAPs 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>Equipment</u>	<u>VOM</u> <u>(T/Yr)</u>	<u>HAPs</u>		<u>NO_x</u> <u>(T/Yr)</u>	<u>CO</u> <u>(T/Yr)</u>	<u>PM</u> <u>(T/Yr)</u>	<u>SO₂</u> <u>(T/Yr)</u>
		<u>Combined</u> <u>(T/Yr)</u>	<u>Single</u> <u>(T/Yr)</u>				
Mixing and Blending	8.5	----	----	----	----	----	----
Paper Coating	8.5	----	----	----	----	----	----
Isopropyl Alcohol and Hexane Storage Tanks	0.88	----	----	----	----	----	----
Slitter equipment	----	----	----	----	----	0.88	----
Natural Gas	<u>0.2</u>	----	----	<u>3.3</u>	<u>2.7</u>	<u>0.25</u>	----
Totals:	<u>17.7</u>	< 25	< 10	<u>3.3</u>	<u>2.7</u>	<u>1.13</u>	----

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