217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Daubert Chemical Company
Attn: Mr. Mark Pawelski
4700 South Central Avenue
Chicago, Illinois 60638

Application No.: 73090167 I.D. No.: 031821AAS
Applicant's Designation: PUR PILOT REACTOR Date Received: August 15, 2007
Subject: Paint Manufacturing
Date Issued: February 27, 2008 Expiration Date: February 27, 2013
Location: 4700 South Central Avenue, Chicago, Cook County, 60638

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of four boilers (each 8.3 mmBtu/hour, gas fired), 54 storage tanks, metal working, and an industrial coating, adhesive manufacturing processes (including one 200 gal PUR pilot reactor with a vacuum pump), and V-DAMP process which includes three (3) mixers controlled by dust collector and two (2) silos, 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:

i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for VOM, 10 tons/year of a single HAP and 25 tons/year for total HAPs), as further described in Attachment A. As a result, the source is excluded from requirements to obtain a Clean Air Act Permit Program (CAAPP) permit.

ii. To establish federally enforceable production and operating limitations, which restrict a potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs so that the source is not being subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Coating Manufacturing, 40 CFR 63 Subpart HHHHH.

iii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

iv. To establish federally enforceable production and operating limitations, which restrict the potential to emit for VOM to less than 25 tons per year so that the source is not subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart QQ (Miscellaneous Formulation Manufacturing Process.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. 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. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 Ill. Adm. Code 212.301 and 212.314.

c. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

i. All normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.

ii. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

d. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

e. 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.

3a. Pursuant to 35 Ill. Adm. Code 218.122(a), no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading area having through-put of greater than 151 cubic meters per day (40,000 gallons/day) into any railroad tank car, tank truck or trailer unless such loading area is equipped with submerged loading pipes.

b. Pursuant to 35 Ill. Adm. Code 218.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 liters (250 gallons), unless such tank is equipped with a permanent submerged loading pipe.

c. Pursuant to 35 Ill. Adm. Code 218.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 218.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

d. 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 this 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.

e. The paint manufacturing operations are subject to the requirements of 35 Ill. Adm. Code Part 218, Subpart AA: Paint and Ink Manufacturing, pursuant to 35 Ill. Adm. Code 218.620 (b)(2) because the source manufactures more than 500,000 gallons per year of paint with less than 10 percent water.

f. Pursuant to 35 Ill. Adm. Code 218.624, no person shall operate an open-top mill, tank, vat or vessel, with a volume of more than 45 liters (12 gallons) for the production of paint unless:

   i. The mill, tank, vat or vessel is equipped with a cover which completely covers the mill, tank, vat or vessel opening, except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such cover shall extend at least 1.27 cm (0.5 in) beyond the outer rim of the opening or be attached to the rim.

   ii. The cover remains closed, except when production, sampling, maintenance, or inspection procedures require access.

   iii. The cover is maintained in good condition, such that when in place, it maintains contact with the rim of the opening for at least 90 percent of the circumference of the rim.

g. i. Pursuant to 35 Ill. Adm. Code 218.625(a), no person shall operate a grinding mill for the production of paint or ink which is not maintained in accordance with the manufacturer's specifications.

   ii. Pursuant to 35 Ill. Adm. Code 218.625(b), no person shall operate a grinding mill fabricated or modified after the effective date of this Subpart which is not equipped with fully enclosed screens.

   iii. Pursuant to 35 Ill. Adm. Code 218.625(c), the manufacturer's specifications shall be kept on file at the plant by the owner or operator of the grinding mill and be made available to any person upon verbal or written request during business hours.

h. i. Pursuant to 35 Ill. Adm. Code 218.626(a), the owner or operator shall equip tanks storing VOL with a vapor pressure greater than 10 kPa (1.5 psi) at 20°C (68□F) with pressure/vacuum conservation vents set as a minimum at +/-0.2 kPa (0.029 psi). These controls shall be operated at all times. . An alternative air pollution control system may be used if it results in a greater emission reduction than these controls.

   ii. Pursuant to 35 Ill. Adm. Code 218.626(b), stationary VOL storage containers with a capacity greater than 946 liters (250 gallons)

shall be equipped with a submerged-fill pipe or bottom fill. These controls shall be operated at all times.

i. Pursuant to 35 Ill. Adm. Code 218.628, the owner or operator of a paint or ink manufacturing source shall, for the purpose of detecting leaks, conduct an equipment monitoring program consistent with the following:

   i. Each pump shall be checked by visual inspection each calendar week for indication of leaks, that is, liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, the pump shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.

   ii. Any pump, valve, pressure relief valve, sampling connection, open-ended valve and flange or connector containing a fluid which is at least 10 percent VOM by weight which appears to be leaking on the basis of sight, smell, or sound shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.

   iii. A weather proof, readily visible tag, in bright colors such as red or yellow, bearing an identification number and the date on which the leak was detected shall be attached to leaking equipment. The tag may be removed upon repair, that is, when the equipment is adjusted or otherwise altered to allow operation without leaking.

   iv. When a leak is detected, the owner or operator shall record the date of detection and repair and the record shall be retained at the source for at least two years from the date of each detection or each repair attempt. The record shall be made available to any person upon verbal or written request during business hours.

j. Pursuant to 35 Ill. Adm. Code 218.630(a), no person shall clean paint or ink manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used.

k. Pursuant to 35 Ill. Adm. Code 218.630(b), no person shall store organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere.

4. This permit is issued based on the 21,500 gallon storage tank #403 and 7 new storage tanks (404, 303, 305, 307, 308, 311 and 315) not being subject to New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60, Subpart Kb. Pursuant to 40 CFR 60.110b(b),

40 CFR 60 Subpart Kb does not apply to storage vessels with a capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

5a. 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.

b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

6a. Total combined emissions and operation of the metal working, industrial coating, V-DAMP process and adhesive manufacturing processes (including one 200 gallon PUR pilot reactor with a vacuum pump), including all clean up operations, shall not exceed the following limits:

Production Rate		VOM Emissions		PM Emissions	
(Gal/Mo)	(Gal/Yr)	(Tons/Mo)	(Tons/Yr)	(Tons/Mo)	(Tons/Yr)
1,555,000	15,550,000	2.3	22.7	0.45	3.0

These limits are based on emission factors that were derived from formulas and models contained in the Emission Inventory Improvement Program (EIIP), Vol. II, Chapter 8: Preferred and Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing Facilities (i.e., VOM emissions occur from vapor displacement during loading of liquid raw materials into a batch vessel, heating of raw materials in the vessel, mixing of batch material and transfer of batch material from the batch vessel to another container). PM emissions calculated using standard emission factors (Table 6.4-1 "Uncontrolled Emission Factors for Paint and Varnish Manufacturing," AP-42, Fifth Edition, Volume I, May 1983).

b. For determination of compliance with the above emission limit, batch emissions shall be determined by using the following equation:

i. Total combined VOM emissions equal the sum of vapor displacement during loading of liquid raw materials into a batch vessel, heating of raw materials in the vessel, mixing of batch material and transfer of batch material from the batch vessel to another container.

ii. VOM emissions from vapor displacement losses and transfer of material to vessels:

$$\text{VOM Emissions } (\text{lb / batch}) = \frac{12.46 \times 1.45 \times P \times Q \times M}{T}$$

$$M = \sum Y_i \left(\frac{P_i}{P}\right) = \text{Vapor molecular weight (lb/lb-mole)}$$

T = Temperature degrees in Rankine

Q = 1000 lb of material per batch

Y_i = Molecular weight of component i in liquid (lb/lb-mole)

X_i = Liquid mass fraction of component in the liquid (lb/lb)

$$P_i = P_T \frac{X_i / Y_i}{\sum (X_i / Y_i)}$$

P_T = True vapor pressure of component I at temperature T (psia)

P_i = Partial vapor pressure of component i at temperature T (psia)

P = $\sum P_i$ = The total vapor pressure of material in the vessel (psia)

iii. VOM Emissions from Vessel/Reactor Heating/Mixing Process:

$$\eta_s = \frac{\dfrac{\sum (P_i)_{T_1}}{14.7 - \sum (P_i)_{T_1}} + \dfrac{\sum (P_i)_{T_2}}{14.7 - \sum (P_i)_{T_2}}}{2} \times \Delta_n \times M$$

Where:

η_s = Lb - moles of VOC vapor displaced from the vessel being heated up (lb/batch).

P_i = Vapor pressure of each compound at specified temperature (psia).

Δ_n = Number of lb - moles of gas displaced (lb – moles/batch).

and

$$\Delta_n = \frac{V}{R}\left[\left(\frac{Pa_1}{T_1}\right) - \left(\frac{Pa_2}{T_2}\right)\right]$$

Where:

V = Volume of free space in the vessel in ft^3.

R = Gas law constant, 10.73 psia ft^3/lb-mole °R.

Pa_1 = Initial gas pressure in the vessel, psia.

Pa_2 = Final gas pressure, psia.

T_1 = Initial temperature of vessel °R.

T_2 = Final temperature of vessel °R.

iv. VOM emissions from surface evaporation:

$$\underset{(\text{lb / batch})}{E} = \sum E_i = \frac{(Y_i)(K_i)(P_i)(A)(H)(3600\ \text{sec/ hr})}{(R)(T)}$$

Where:

E_i = Emissions from component I in batch (lb).

$K_i = 0.00438 \times U^{0.78}\left[\frac{18}{Y_i}\right]^{1/3}$ = Gas-phase Mass transfer coefficient for component I (ft/sec).

U = Air movement (miles/hr).

A = Surface area of liquid (ft^2).

H = hours/batch.

c. Emissions and operation of the 54 storage tanks shall not exceed the following limits:

Throughput		VOM Emissions	
(Gallons/Month)	(Gallons/Year)	(Tons/Month)	(Tons/Year)
840,000	8,400,000	0.08	0.8

These limits are based on maximum throughputs, vapor pressures, and standard emission factors (Section 7.1, AP-42, Fifth Edition, Volume I, November 2006) or the use of the TANKS program, Version 4.09D (October, 2005).

d. Emissions from operation of the 4 boilers and another non-process gas-fired sources at the plant shall not exceed the following limits:

Natural Gas Usage		EMISSIONS					
		NO_x		CO		VOM	
(mmscf/Mo)	(mmscf/Yr)	(Ton/Mo)	(Ton/Yr)	(Ton/Mo)	(Ton/Yr)	(Ton/Mo)	(Ton/Yr)
33	330	1.7	16.5	1.4	13.9	0.1	1.0

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

7. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA and is not subject to the NESHAP for Miscellaneous Coating Manufacturing, 40 CFR 63, Subpart HHHHH..

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 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Condition 10 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

10a Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Condition shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

11a. Pursuant to 35 Ill. Adm. Code 218.628, the owner or operator of a paint or ink manufacturing source shall, for the purpose of detecting leaks, conduct an equipment monitoring program as set forth below:

i. Each pump shall be checked by visual inspection each calendar week for indications of leaks, that is, liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, the pump shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.

ii. Any pump, valve, pressure relief valve, sampling connection, open-ended valve and flange or connector containing a fluid which is at least 10 percent VOM by weight which appears to be leaking on the basis of sight, smell or sound shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.

iii. A weather proof, readily visible tag, in bright colors such as red or yellow, bearing an identification number and the date on which the leak was detected shall be attached to leaking equipment. The tag may be removed upon repair, that is, when the equipment is adjusted or otherwise altered to allow operation without leaking.

12. 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.

13. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

14a. Pursuant to 35 Ill. Adm. Code 218.129(f), the owner or operator of each storage vessel specified in 35 Ill. Adm. Code 218.119 shall maintain

readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of 35 Ill. Adm. Code Part 218 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.

b. Pursuant to 35 Ill. Adm. Code 218.628(d), when a leak is detected, the owner or operator shall record the date of detection and repair and the record shall be retained at the source for at least two years from the date of each detection or each repair attempt. The record shall be made available to any person upon verbal or written required during business hours.

c Pursuant to 35 Ill. Adm. Code 218.637(b), every owner or operator of a source which is subject to the requirements of 35 Ill. Adm. Code 218 Subpart AA shall maintain all records necessary to demonstrate compliance with those requirements at the source for three years.

15a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the dust collectors:

A. Records for periodic inspection of the dust collectors with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. Molecular weight and vapor pressure at operating temperature of each VOM and/or HAP containing raw material;

iii. MSDS of all VOM and/or HAP containing material;

iv. All the detailed necessary data to determine VOM and HAP emissions using the equations specified in Condition 6(b);

v. Throughput and vapor pressures of the 54 storage tanks (gallons/month and gallons/year);

vi. Natural gas consumption (ft^3/month and ft^3/year);

vii. Amount of clean-up solvent used (gallons/month and gallons/year); and

viii. Monthly and annual CO, NO_x, PM, SO_2, VOM and HAP emissions from the source (tons/month and tons/year) with supporting calculations.

b. 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 USPEA request for records during the course of a source inspection.

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.

17. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

18a. Pursuant to 35 Ill. Adm. Code 218.637(a), upon request by the Illinois EPA, the owner or operator of an emission source which claims to be exempt from the requirements of 35 Ill. Adm. Code 218 Subpart AA shall submit records to the Illinois EPA within 30 calendar days from the date of the request which document that the emission source is in fact exempt from 35 Ill. Adm. Code 218 Subpart AA. These records shall include (but are not limited to) the percent water (by weight) in the paint or ink being produced and the quantity of Magie oil, glycol and other solvents in the ink being produced.

b. Pursuant to 35 Ill. Adm. Code 218.990, upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 Ill. Adm. Code 218 Subparts PP, QQ, RR, TT or 35 Ill. Adm. Code 218.208(b) shall submit records to the Illinois EPA within 30 calendar days from the date of the request that document that the emission unit is exempt from those requirements.

19. 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

It should be noted that this permit has been revised to incorporate the one (1) 200 gallon PUR pilot reactor with a vacuum pump from Construction Permit #07080032.

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

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

ECB:JRS:jws

cc: IEPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from metal working and industrial coating and adhesive 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. The resulting maximum emissions are well below the levels (e.g., 100 tons/year of VOM, 25 tons/year of combined HAPs and 10 tons/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.

Equipment	VOM (T/Yr)	HAPs Combined (T/Yr)	HAPs Single (T/Yr)	NO_x (T/Yr)	PM (T/Yr)	CO (T/Yr)	SO_2 T/Yr)
Metal working and industrial coating, new V-DAMP process and adhesive manufacturing processes (including one 200 gal PUR pilot reactor with a vacuum pump) including clean-up solvents	22.7	----	----	----	----	----	----
Storage Tanks	0.8	----	----	----	----	----	----
Four (4) Boilers	1.0	----	----	16.5	1.0	13.9	----
Totals:	24.5	22.5	9.0	16.5	1.0	13.9	0.0

JRS:jws