217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Universal Chemicals & Coatings, Inc.
Attn: Frederick V. Chin
1975 Fox Lane
Elgin, Illinois 60123

Application No.: 86010079
I.D. No.: 089438AEU
Applicant's Designation:
Date Received: February 15, 2007
Subject: Coating Manufacturer
Date Issued: August 25, 2008
Expiration Date: August 25, 2013
Location: 1975 Fox Lane, Elgin, Kane County

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of sixty-three mixers, eighteen raw materials, intermediate and final product storage tanks, mixers cleaning operations, two sandmills all controlled by a baghouse and laboratory spray booth 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 volatile organic material (VOM), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for totaled HAP). 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.

ii. 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.

iii. To establish federally enforceable production and operating limitations, which restrict the potential to emit for VOM to less than 25 tons per year and solvent based paints production rate to 500,000 gal per calendar year of paint or ink formulations which contain less than 10% (by weight) water so that the source is not subject to the control requirements of 35 Ill. Adm. Code Part 218, Subpart AA: Paint and Ink Manufacturing.

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.

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 212.306, 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.

d. 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.

e. 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 218 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,

f. 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/hr (8 lbs/hr) 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 gal/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 1 (250 gal), 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/hr (8 lbs/hr) 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.

4. Pursuant to 35 Ill. Adm. Code 218.208(a), the limitations of 35 Ill. Adm. Code 218 Subpart F shall not apply to coating lines within a source, that otherwise would be subject to the same subsection of 35 Ill. Adm. Code 218.204 (because they belong to the same coating category, e.g. can coating), provided that combined actual emissions of VOM from all lines at the source subject to that subsection never exceed 6.8 kg/day [15 lbs/day] before the application of capture systems and control devices. (For example, can coating lines within a source would not be subject to the limitations of 35 Ill. Adm. Code

218.204(b) if the combined actual emissions of VOM from the can coating lines never exceed 6.8 kg/day [15 lbs/day] before the application of capture systems and control devices.) Volatile organic material emissions from heavy off-highway vehicle products coating lines must be combined with VOM emissions from miscellaneous metal parts and products coating lines to determine applicability. Any owner or operator of a coating source shall comply with the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105 (a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(a) if total VOM emissions from the subject coating lines are always less than or equal to 6.8 kg/day [15 lbs/day] before the application of capture systems and control devices and, therefore, are not subject to the limitations of 35 Ill. Adm. Code 218.204. Once a category of coating lines at a source is subject to the limitations in 35 Ill. Adm. Code 218.204 the coating lines are always subject to the limitations in 35 Ill. Adm. Code 218.204.

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 odor nuisance.

b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the baghouse 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. Plant-wide VOM usage in raw materials and clean-up solvents and plant-wide VOM emissions from the coating manufacturing operations shall not exceed the following limits:

VOM Usage		VOM Emissions	
(Tons/Mo)	(Tons/Yr)	(Tons/Mo)	(Tons/Yr)
60	590	2.0	21.0

b. VOM emissions from the coating manufacturing process shall be calculated as follows:

$$E = \Sigma\ (SU_i * VP_i) * PEF \div 2000$$

Where:

E = VOM emissions (tons)
SU_i = Usage for a Solvent (lb)
VP_i = Vapor Pressure for a Solvent (psia)
PEF = Plant Emission Factor (lb/lb * psia) = 0.0121 lb/lb * psia

These limits are based on requested emission limits and special emission factors developed from stack testing as submitted in the permit application.

c. VOM emissions from the test painting operations shall not exceed 15 pounds per day and 1.0 ton per year.

d. This permit is issued based on negligible emissions of particulate matter from the coating manufacturing process and laboratory equipment. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.

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.

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 Conditions 10 and 11 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.

11. Pursuant to 35 Ill. Adm. Code 218.211(a), the VOM content of each coating 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 218.211.

12a. 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 five 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 218.211(b)(3), any owner or operator of a coating line which is exempted from the limitations of 35 Ill. Adm. Code 218.204 because of 35 Ill. Adm. Code 218.208(a) or (b) shall for sources exempt under 35 Ill. Adm. Code 218.208(a), on and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a coating line or group of coating lines referenced in this 35 Ill. Adm.

Code 218.211(b) shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:

i. The name and identification number of each coating as applied on each coating line; and

ii. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

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 baghouse:

A. Records for periodic inspection of the baghouse 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. Names and amount of VOM-containing raw materials and solvents used (tons/month and tons/year);

iii. VOM and HAP content of the materials in item (iii) (weight %); and

iv. Monthly and annual PM, VOM and HAP emissions, with supporting calculations (tons/month and tons/year).

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 218.211(b)(5), any owner or operator of a coating line which is exempted from the limitations of 35 Ill. Adm. Code 218.204 because of 35 Ill. Adm. Code 218.208(a) or (b) shall on and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a coating line or group of coating lines exempted from the limitations of 35 Ill. Adm. Code 218.204 because of 35 Ill. Adm. Code 218.208(a) shall notify the Illinois EPA of any record showing that total VOM emissions from the coating line or group of coating lines exceed 6.8 kg (15 lbs) in any day 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.

b. 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.

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

<u>and</u> one (1) copy shall be sent to the Illinois EPA 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

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

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

Date Signed: _____

ECB:JRS:jws

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the Paint Manufacturing Facility 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 use of 590 tons of VOM in paint manufacturing per year. The resulting maximum emissions are well below the levels (e.g., 100 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled 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 material is handled, and control measures are more effective than required in this permit.

	Emissions (Tons/Year)			
Emission Units	VOM	PM	Single HAP	Total HAP
Coating Manufacturing	20.0	0.44		
Paint Booth	1.0			
Plant-wide total	21.0	0.44	9.0	22.5

JRS:jws