

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Engineered Polymer Solutions, Inc.
d/b/a: Valspar Coatings
Attn: Will Anderson - Plant Manager
1215 Nelson Boulevard
Rockford, Illinois 61104

<u>Application No.:</u> 96030206	<u>I.D. No.:</u> 201030AFE
<u>Applicant's Designation:</u>	<u>Date Received:</u> July 9, 2008
<u>Subject:</u> Coating Manufacturing	
<u>Date Issued:</u> March 26, 2014	<u>Expiration Date:</u> March 26, 2024
<u>Location:</u> 1215 Nelson Boulevard, Rockford, Winnebago County	

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

One (1) 3,500 Gallon Resin Storage Tank (RMT-1095);
Five (5) 4,847 Gallon Resin Storage Tanks (RMT-4003, RMT-4004, RMT-4005, RMT-4029, and RMT-4030);
Two (2) 9,700 Gallon Resin Storage Tanks (RMT-4006 and RMT-4007);
One (1) 4,160 Gallon Resin Storage Tank (RMT-4008);
One (1) 5,520 Gallon Resin Storage Tank (RMT-4009);
Three (3) 3,233 Gallon Resin Storage Tanks (RMT-4010, RMT-4011, & RMT-4012);
Two (2) 3,300 Gallon Resin Storage Tanks (RMT-4013 and RMT-4014);
Four (4) 4,700 Gallon Ethylene Glycol Storage Tanks (RMT-4023, RMT-4024, RMT-4025, and RMT-4026);
Four (4) 3,380 Gallon Raw Material Storage Tanks (RMT-4031, RMT-4032, RMT-4033, and RMT-4034);
Four (4) 11,000 Gallon Latex Storage Tanks (RMT-4035, RMT-4036, RMT-4037, and RMT-4038);
Two (2) 5,600 Gallon Raw Material Storage Tanks (RMT-4039 and RMT-4040);
Two (2) 3,150 Gallon Resin Storage Tanks (RMT-4041 and RMT-4042);
One (1) 6,500 Gallon Resin Storage Tank (RMT-4043);
Two (2) 7,500 Gallon Raw Material Storage Tank (RMT-4044 and RMT-4045);
One (1) 10,500 Gallon Raw Material Storage Tank (RMT-4046);
One (1) 10,000 Gallon Raw Material Storage Tank (RMT-4047);
Two (2) 7,200 Gallon Resin Storage Tanks (RPT-1081 and RPT-1083);
Three (3) 4,800 Gallon Resin Storage Tanks (RPT-1082, RPT-1091A, and RPT-1091B);
One (1) 5,400 Gallon Resin Storage Tank (RPT-1084);
Four (4) 7,500 Gallon Resin Storage Tanks (RPT-1085, RPT-1086, RPT-1087, and RPT-1088);
Two (2) 1,570 Gallon Resin Storage Tanks (RPT-2001 and RPT-2002);
Three (3) 11,750 Gallon Resin Storage Tanks (RPT-2003, RPT-2004, and RPT-2008);
One (1) 5,100 Gallon Resin Storage Tank (RPT-2007);
Two (2) Filling Points for Filling Containers with Colorant;
Filling Equipment (FP-6) for Filling Containers with Colorant Components;
One (1) High Speed Dispersion Mixer (CM-14);

Three (1) High Speed Dispersion Mixers (M-23, M-24, and M-25);
Five (5) High Speed Dispersion Mixers (M-3, M-7, M-8, M-27 and M-28)
controlled by Dust Collector DC-4;
One (1) High Speed Dispersion Mixer (M-4) controlled by Dust Collectors DC-4
and DC-8);
One (1) High Speed Dispersion Mixer (M-26) controlled by Dust Collector DC-9;
Ten (10) Horizontal Mills (SM-6, SM-7, SM-11, SM-12, SM-1C, SM-7C through SM-
10C, SM-13);
Eleven (11) Product Blend Tanks (PT-2C through PT-12C);
Nineteen (19) Product Storage Tanks (PT-1: 4,800 Gallons, PT-2: 2,200
Gallons, PT-3: 4,000 Gallons, PT-4: 4,000 Gallons, PT-5: 4,000
Gallons, PT-6: 4,800 Gallons, PT-7: 5,500 Gallons, PT-8: 8,000
Gallons, PT-9: 6,000 Gallons, PT-10: 6,000 Gallons, PT-11: 4,000
Gallons, PT-14: 1,800 Gallons, PT-16: 6,000 Gallons, PT-17: 6,000
Gallons, PT-18: 8,000 Gallons, PT-19: 5,500 Gallons, PT-31: 4,000
Gallons, PT-74: 4,800 Gallons; and LD-11: 5,000 Gallons);
Three (3) Vacuum Mixers (VM-1 through VM-3);
Six (6) Vacuum Pumps (VP-1 through VP-6);
Six (6) Reducing Tanks (RT-1, RT-2, and RT-4 through RT-7);
One (1) Soil Vapor Extraction System;
One (1) 102 Brake Horse Power Emergency Fire Pump; and
Three (3) Natural Gas Fired Boilers (8.9 mmBtu/hour, 1.0 mmBtu/hour, and 2.1
mmBtu/hour)

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) and 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such 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.
 - ii. To establish federally enforceable production and operating limitations, which restrict the 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 subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry, 40 CFR 63 Subpart F.
 - iii. To establish federally enforceable production and operating limitations, which restrict the 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 subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic

Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater, 40 CFR 63 Subpart G.

- iv. To establish federally enforceable production and operating limitations, which restrict the 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 subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Equipment Leaks, 40 CFR 63 Subpart H.
 - v. To establish federally enforceable production and operating limitations, which restrict the 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 subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Site Remediation, 40 CFR 63 Subpart GGGGG.
 - vi. 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 subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing, 40 CFR 63 Subpart FFFF.
 - vii. 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 subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Coating Manufacturing, 40 CFR 63 Subpart HHHHH.
- b. Prior to the issuance of this permit, 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. This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Paints and Allied Products Manufacturing, 40 CFR 63 Subparts A and CCCCCC. The Illinois EPA is administering the NESHAP in Illinois on behalf of the USEPA under a delegation agreement.
 - b. Pursuant to 40 CFR 63.11599(a), you are subject to 40 CFR 63 Subpart CCCCCC if you own or operate a facility that performs paints and allied products manufacturing that is an area source of hazardous air pollutant (HAP) emissions and processes, uses, or generates materials containing HAP, as defined in 40 CFR 63.11607.

- c. Pursuant to 40 CFR 63.11600(a), if you own or operate an existing affected source, you must achieve compliance with the applicable provisions in 40 CFR 63 Subpart CCCCCC by December 3, 2012.
- d. Pursuant to 40 CFR 63.11601(a), for each new and existing affected source, you must comply with the requirements in 40 CFR 63.11601(a)(1) through (6). These requirements apply at all times.
 - i. You must add the dry pigments and solids that contain compounds of cadmium, chromium, lead, or nickel and operate a capture system that minimizes fugitive particulate emissions during the addition of dry pigments and solids that contain compounds of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling process.
 - ii. You must capture particulate emissions and route them to a particulate control device meeting the requirements of 40 CFR 63.11601(a)(6) during the addition of dry pigments and solids that contain compounds of cadmium, chromium, lead, or nickel to a process vessel. This requirement does not apply to pigments and other solids that are in paste, slurry, or liquid form.
 - iii. You must:
 - A. Capture particulate emissions and route them to a particulate control device meeting the requirements of 40 CFR 63.11601(a)(6) during the addition of dry pigments and solids that contain compounds of cadmium, chromium, lead, or nickel to the grinding and milling process; or
 - B. Add pigments and other solids that contain compounds of cadmium, chromium, lead, or nickel to the grinding and milling process only in paste, slurry, or liquid form.
 - iv. You must:
 - A. Capture particulate emissions and route them to a particulate control device meeting the requirements of 40 CFR 63.11601(a)(5) during the grinding and milling of materials containing compounds of cadmium, chromium, lead, or nickel; or
 - B. Fully enclose the grinding and milling equipment during the grinding and milling of materials containing compounds of cadmium, chromium, lead, or nickel; or
 - C. Ensure that the pigments and solids are in the solution during the grinding and milling of materials containing compounds of cadmium, chromium, lead, or nickel.
 - v. The visible emissions from the particulate control device exhaust must not exceed 10-percent opacity for particulate control devices that vent to the atmosphere. This requirement does not

apply to particulate control devices that do not vent to the atmosphere.

- e. Pursuant to 40 CFR 63.11601(b), for each new and existing affected source, you must comply with the requirements in 40 CFR 63.11601(b)(1) through (5).
 - i. Process and storage vessels that store or process materials containing benzene or methylene chloride, except for process vessels which are mixing vessels, must be equipped with covers or lids meeting the requirements of 40 CFR 63.11601(b)(1)(i) through (iii).
 - A. The covers or lids can be of solid or flexible construction, provided they do not warp or move around during the manufacturing process.
 - B. The covers or lids must maintain contact along at least 90-percent of the vessel rim. The 90-percent contact requirement is calculated by subtracting the length of any visible gaps from the circumference of the process vessel, and dividing this number by the circumference of the process vessel. The resulting ratio must not exceed 90-percent.
 - C. The covers or lids must be maintained in good condition.
 - ii. Mixing vessels that store or process materials containing benzene or methylene chloride must be equipped with covers that completely cover the vessel, except as necessary to allow for safe clearance of the mixer shaft.
 - iii. All vessels that store or process materials containing benzene or methylene chloride must be kept covered at all times, except for quality control testing and product sampling, addition of materials, material removal, or when the vessel is empty. The vessel is empty if:
 - A. All materials containing benzene or methylene chloride have been removed that can be removed using the practices commonly employed to remove materials from that type of vessel, e.g., pouring, pumping, and aspirating; and
 - B. No more than 2.5 centimeters (one inch) depth of residue remains on the bottom of the vessel, or no more than 3 percent by weight of the total capacity of the vessel remains in the vessel.
 - iv. Leaks and spills of materials containing benzene or methylene chloride must be minimized and cleaned up as soon as practical, but no longer than 1 hour from the time of detection.

- v. Rags or other materials that use a solvent containing benzene or methylene chloride for cleaning must be kept in a closed container. The closed container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.
- f. Pursuant to 40 CFR 63.11605, Table 1 of 40 CFR 63 Subpart CCCCCC shows which parts of the General Provisions in 40 CFR 63.1 through 63.16 apply to you.
- 3a. Pursuant to 35 Ill. Adm. Code 212.123(a), 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 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. 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 35 Ill. Adm. Code 212.321(c).
- 4a. Pursuant to 35 Ill. Adm. Code 215.122(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 facility 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 facility is equipped with submerged loading pipes, submerged fill, or a device that is equally effective in controlling emissions and is approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201.
- b. Pursuant to 35 Ill. Adm. Code 215.122(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, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201 or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 215.121(a) or

is fitted with a recovery system as described in 35 Ill. Adm. Code 215.121(b)(2).

- c. Pursuant to 35 Ill. Adm. Code 215.301, 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 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K shall apply only to photochemically reactive material.
- 5a. This permit is issued based on the facility Storage Tanks not being subject to the New Source Performance Standard (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 m³ 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 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure less than 15.0 kPa.
- b. This permit is issued based on the source not being subject to the New Source Performance Standard (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006, 40 CFR 60 Subpart VV, because the source does not produce, as intermediates or final products, one or more of the chemicals listed in 40 CFR 60.489.
- c. This permit is issued based on the source not being subject to the New Source Performance Standard (NSPS) for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes, 40 CFR 60 Subpart III, because the source does not produce, as a product, co-product, by-product, or intermediate any of the chemicals listed in 40 CFR 60.617.
- d. This permit is issued based on the source not being subject to the New Source Performance Standard (NSPS) for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations, 40 CFR 60 Subpart NNN, because the source does not produce, as a product, co-product, by-product, or intermediate any of the chemicals listed in 40 CFR 60.667.
- e. This permit is issued based on the source not being subject to the New Source Performance Standard (NSPS) for Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes, 40 CFR 60 Subpart RRR, because the source does not produce, as a product, co-product, by-product, or intermediate any of the chemicals listed in 40 CFR 60.707.
- 6a. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Equipment Leaks (Fugitive Emission Sources) of Benzene, 40 CFR 61

Subpart J, because the pumps, compressors, pressure relief devices, sampling connections, systems, open-ended valves or lines, valves, flanges and other connectors, product accumulator vessels and storage tanks at the source are not in benzene service as defined in 40 CFR 61.111.

- b. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Equipment Leaks (Fugitive Emission Sources), 40 CFR 61 Subpart V, because pumps, compressors, pressure relief devices, sampling connections, systems, open-ended valves or lines, valves, flanges and other connectors, product accumulator vessels at the source are not in volatile hazardous air pollutant service as defined in 40 CFR 61.241.
- 7a. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry, 40 CFR 63 Subpart F. This is a result of the federally enforceable production and operating limitations, which restrict the 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 and the source does not manufacture as a primary product one or more of the chemicals listed in table 1 of 40 CFR 63 Subpart F.
- b. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater, 40 CFR 63 Subpart G. This is a result of the federally enforceable production and operating limitations, which restrict the 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 and because the source does not manufacture as a primary product one or more of the chemicals listed in table 1 of 40 CFR 63 Subpart F.
- c. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Equipment Leaks, 40 CFR 63 Subpart H. This is a result of the federally enforceable production and operating limitations, which restrict the 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 and the source is not subject to the provisions of a specific subpart in 40 CFR part 63 that references 40 CFR 63 Subpart H.
- d. This permit is issued based upon the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing, 40 CFR 63 Subpart FFFF. This is a result of the federally enforceable production and operating limitations, which restrict the 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.

- e. This permit is issued based on the Soil Vapor Extraction (SVE) System not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Site Remediation, 40 CFR 63 Subpart GGGGG. This is a result of the federally enforceable production and operating limitations, which were established in this permit to restrict the 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.
- f. This permit is issued based upon the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Miscellaneous Coating Manufacturing, 40 CFR 63, Subpart HHHHH. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutants (HAP) and 25 tons/year of any combination of such HAPs.
- g. This permit is issued based upon the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chemical Manufacturing Area Sources, 40 CFR 63 Subpart VVVVVV. The chemical manufacturing process units (CMPU) at this source do not use as feedstocks, generates as byproducts, or produces as products any of the hazardous air pollutants (HAP) listed in Table 1 to 40 CFR 63 Subpart VVVVVV.
- 8a. Pursuant to 35 Ill. Adm. Code 215.122(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).
- b. This permit is issued based on the source is not being subject to the requirements of 35 Ill. Adm. Code 215 Subpart Q (Leaks from Synthetic Organic Chemical and Polymer Manufacturing Plants). Pursuant to 35 Ill. Adm. Code 215.421, the owner or operator of a plant which processes more than 3660 mg/year (4033 tons/year) gaseous and light liquid VOM, and whose components are used to manufacture the synthetic organic chemicals or polymers listed in 35 Ill. Adm. Code Part 215, Appendix A, shall comply with 35 Ill. Adm. Code 215 Subpart Q.
- 9a. 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 Dust Collectors (DC-4, DC-8 and DC-9) such that Dust Collector (DC-4, DC-8 and DC-9) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

- c. The boilers shall only be operated with natural gas as the fuel. The use of any other fuel in boilers requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

10a. Emissions and operation of the Batch Processing shall not exceed the following limits:

- i. Volatile Organic Material (VOM) Emissions:

<u>Product</u>	<u>Throughput</u>		<u>VOM Emissions</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Waterbased Colorants	338,000	3,380,000	0.33	3.30
James Hardie	200,000	2,000,000		

These limits are based on the maximum production rates and use of emission factors developed using standard emission calculations (Emission Inventory Improvement Program (EIIP) Volume II, Chapter 8: Methods for Estimating Air Emissions from Paint, Ink, and Other Coating Manufacturing Facilities).

- ii. Particulate Matter (PM) Emissions:

<u>Equipment</u>	<u>Throughput</u>		<u>PM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Solid material	40,000	400,000	0.1	0.95

These limits are based on the maximum production rates, standard emission factors (Table 6.4-1, AP-42, Fifth Edition, Volume I, May 1983), and 99% control efficiency of the dust collectors.

- b. Emissions and operation of the soil vapor extraction system shall not exceed the following limits:

<u>VOM Emissions</u>	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
0.22	2.20

These limits are based on the maximum actual emissions resulting from the maximum operation of the soil vapor extraction system. VOM and HAP emissions shall be calculated using the following equation:

$$\text{Emissions (tons)} = \left[\frac{\text{Total ME System Exhaust VOM/HAP Contaminant Concentration (ppmv)} \times \text{ME Exhaust Flowrate (scfm)} \times 100 \text{ lb/lb - Mole} \times 60 \text{ min/hr}}{1,000,000 \times 387 \text{ cu ft/lb - Mole}} \right] \times \frac{\text{Hours Operated}}{2000} \div \frac{\text{lb}}{\text{Ton}}$$

c. Emissions and operation of the three natural gas-fired boilers shall not exceed the following limits:

i. Natural Gas Usage:

<u>(mmscf/Month)</u>	<u>(mmscf/Year)</u>
1.03	103

ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>(Lbs/mmscf)</u>	<u>Emissions (Tons/Month)</u>	<u>(Tons/Year)</u>
Carbon Monoxide (CO)	84	0.43	4.33
Nitrogen Oxides (NO _x)	100	0.52	5.15
Particulate Matter (PM)	7.6	0.03	0.34
Sulfur Dioxide (SO ₂)	0.6	0.01	0.01
Volatile Organic Material (VOM)	5.5	0.03	0.28

These limits are based on the maximum total firing rate (12.0 mmBtu/hour), maximum operating hours (8,760 hours/year), and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Fugitive VOM emissions from the facility operations shall not exceed 0.4 tons/month and 4.0 tons/year. This limit is based on VOM emissions calculated using "Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017, June 1993).

e. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from this source 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.

- f. 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).
- 11a. Pursuant to 40 CFR 63.11602(a), for each new and existing affected source, you must demonstrate initial compliance by conducting the inspection and monitoring activities in 40 CFR 63.11602(a)(1) and ongoing compliance by conducting the inspection and testing activities in 40 CFR 63.11602(a)(2).
 - b. Pursuant to 40 CFR 63.11602(a)(1), you must conduct an initial inspection of each particulate control device according to the requirements in 40 CFR 63.11602(a)(1)(i) through (iii) and perform a visible emissions test according to the requirements of 40 CFR 63.11602(a)(1)(iv). You must record the results of each inspection and test according to 40 CFR 63.11602(b) and perform corrective action where necessary. You must conduct each inspection no later than 180 days after your applicable compliance date for each control device which has been operated within 60 days following the compliance date. For a control device which has not been installed or operated within 60 days following the compliance date, you must conduct an initial inspection prior to startup of the control device.
 - i. For each dry particulate control system, you must visually inspect the system ductwork and dry particulate control unit for leaks. You must also inspect the inside of each dry particulate control unit for structural integrity and condition.
 - ii. An initial inspection of the internal components of a wet or dry particulate control system is not required if there is a record that an inspection meeting the requirements of this subsection has been performed within the past 12 months and any maintenance actions have been resolved.
 - iii. For each particulate control device, you must conduct a visible emission test consisting of three 1-minute test runs using Method 203C (40 CFR part 51, appendix M). The visible emission test runs must be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling equipment. If the average test results of the visible emissions test runs indicate an opacity greater than the applicable limitation in 40 CFR 63.11601(a), you must take corrective action and retest within 15 days.
- 12a. 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:

- B. You must conduct inspections of the rigid, stationary ductwork for leaks, and the interior of the dry particulate control unit for structural integrity and to determine the condition of the fabric filter (if applicable) every 12 months.
- ii. For each particulate control device, you must conduct a 5- minute visual determination of emissions from the particulate control device every 3 months using Method 22 (40 CFR part 60, appendix A-7). The visible emission test must be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling equipment. If visible emissions are observed for two minutes of the required 5-minute observation period, you must conduct a Method 203C (40 CFR part 51, appendix M) test within 15 days of the time when visible emissions were observed. The Method 203C test will consist of three 1-minute test runs and must be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel HAP to a process vessel or to the grinding and milling equipment. If the Method 203C test runs indicates an opacity greater than the limitation in 40 CFR 63.11601(a)(5), you must comply with the requirements in 40 CFR 63.11602(a)(2)(iii)(A) through (C).
 - A. You must take corrective action and retest using Method 203C within 15 days. The Method 203C test will consist of three 1-minute test runs and must be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling equipment. You must continue to take corrective action and retest each 15 days until a Method 203C test indicates an opacity equal to or less than the limitation in 40 CFR 63.11601(a)(5).
 - B. You must prepare a deviation report in accordance with 40 CFR 63.11603(b)(3) for each instance in which the Method 203C opacity results were greater than the limitation in 40 CFR 63.11601(a)(5).
 - C. You must resume the visible determinations of emissions from the particulate control device in accordance with 40 CFR 63.11602(a)(2)(iii) 3 months after the previous visible determination.
- 15. 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.

- 16a. Pursuant to 40 CFR 63.11602(b), you must record the information specified in 40 CFR 63.11602(b)(1) through (6) for each inspection and testing activity.
 - i. The date, place, and time;
 - ii. Person conducting the activity;
 - iii. Technique or method used;
 - iv. Operating conditions during the activity;
 - v. Results; and
 - vi. Description of correction actions taken.

- b. Pursuant to 40 CFR 63.11603(c), you must maintain the records specified in 40 CFR 63.11603(c)(1) through (4) of this section in accordance with 40 CFR 63.11603(c)(5) through (6), for five years after the date of each recorded action.
 - i. As required in 40 CFR 63.10(b)(2)(xiv), you must keep a copy of each notification that you submitted in accordance with 40 CFR 63.11603(a), and all documentation supporting any Notification of Applicability and Notification of Compliance Status that you submitted.
 - ii. You must keep a copy of each Annual Compliance Certification Report prepared in accordance with 40 CFR 63.11603(b).

- iii. You must keep records of all inspections and tests as required by 40 CFR 63.11602(b).
 - iv. Your records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).
 - v. As specified in 40 CFR 63.10(b)(1), you must keep each record for 5 years following the date of each recorded action.
 - vi. You must keep each record onsite for at least 2 years after the date of each recorded action according to 40 CFR 63.10(b)(1). You may keep the records offsite for the remaining 3 years.
17. 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.
- 18a. 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. For each storage tank:
 - A. Names and identification number of materials transferred and/or stored;
 - B. Material throughput (gallons/month and gallons/year); and
 - C. Material true vapor pressure.
 - iii. Batch Processing throughput (gallons/month and gallons/year);
 - iv. Production rate (tons/month and tons/year);
 - v. VOM emission factor for each product (lbs/gallon);
 - vi. Name and amount of each VOM and HAP -containing material used (tons/month and tons/year);
 - vii. Natural gas consumption (mmft³/month and mmft³/year) for the boilers; and

- viii. Monthly and annual CO, NO_x, PM, SO₂ VOM and HAP emissions from the source 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 storage device) 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.
- 19a. Pursuant to 40 CFR 63.11603(a)(2), if you own or operate an existing affected source, you must submit a Notification of Compliance Status in accordance with 40 CFR 63.9(h) of the General Provisions by June 3, 2013. If you own or operate a new affected source, you must submit a Notification of Compliance Status within 180 days after initial start-up, or by June 1, 2010, whichever is later. If you own or operate an affected source that becomes an affected source in accordance with 40 CFR 63.11599(b)(3) after the applicable compliance date in 40 CFR 63.11600(a) or (b), you must submit a Notification of Compliance Status within 180 days of the date that you commence processing, using, or generating materials containing HAP, as defined in 40 CFR 63.11607. This Notification of Compliance Status must include the information specified in 40 CFR 63.11603(a)(2)(i) and (ii).
- i. Your company's name and address;
 - ii. A statement by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification, a description of the method of compliance (i.e., compliance with management practices, installation of a wet or dry scrubber) and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63 Subpart CCCCCC.
- b. Pursuant to 40 CFR 63.11603(b), you must prepare an annual compliance certification report according to the requirements in 40 CFR 63.11603(b)(1) through (b)(3). This report does not need to be submitted unless a deviation from the requirements of 40 CFR 63 Subpart CCCCCC has occurred. When a deviation from the requirements of 40 CFR 63 Subpart CCCCCC has occurred, the annual compliance certification report must be submitted along with the deviation report.
- i. You must prepare and, if applicable, submit each annual compliance certification report according to the dates specified in 40 CFR 63.11603(b)(1)(i) through (iii).
 - A. The first annual compliance certification report must cover the first annual reporting period which begins the day of the compliance date and ends on December 31.

- B. Each subsequent annual compliance certification report must cover the annual reporting period from January 1 through December 31.
 - C. Each annual compliance certification report must be prepared no later than January 31 and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance certification report must be submitted along with the deviation report, and postmarked no later than February 15.
- ii. The annual compliance certification report must contain the information specified in 40 CFR 63.11603(b)(2)(i) through (iii).
 - A. Company name and address;
 - B. A statement in accordance with 40 CFR 63.9(h) of the General Provisions that is signed by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63 Subpart CCCCCC; and
 - C. Date of report and beginning and ending dates of the reporting period. The reporting period is the 12-month period beginning on January 1 and ending on December 31.
 - iii. If a deviation has occurred during the reporting period, you must include a description of deviations from the applicable requirements, the time periods during which the deviations occurred, and the corrective actions taken. This deviation report must be submitted along with your annual compliance certification report, as required by 40 CFR 63.11603(b)(1)(iii).
- c. Pursuant to 40 CFR 63.11603(d), if you no longer process, use, or generate materials containing HAP after December 3, 2009, you must submit a Notification in accordance with 40 CFR 63.11599(d), which must include the information specified in 40 CFR 63.11603(e)(1) and (2).
 - i. Your company's name and address;
 - ii. A statement by a responsible official indicating that the facility no longer processes, uses, or generates materials containing HAP, as defined in 40 CFR 63.11607, and that there are no plans to process, use or generate such materials in the future. This statement should also include the date by which the company ceased using materials containing HAP, as defined in 40 CFR 63.11607, and the responsible official's name, title, phone number, e-mail address and signature.

20. 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.
- 21a. If there is an exceedance of or a 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 or 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.
- b. 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
5207 North University
Peoria, Illinois 61614

If you have any questions on this permit, please contact Jocelyn Stakely at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

REP:JRS:psj

cc: Illinois EPA, FOS Region 2
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the Coating Production 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 67,262,000 tons/year of colorant coatings and 25,240,000 tons/year of James Hardie Coatings). The resulting maximum emissions are below the levels, (e.g., 100 tons/year of VOM, 10 tons/year for any single HAP, and 25 tons/year for any combination of such 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>Emission Unit</u>	E M I S S I O N S (Tons/Year)						
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>	<u>Single HAP</u>	<u>Combined HAPs</u>
Batch Processing			0.95		3.30		
Fugitive VOM emissions					4.00		
Soil Vapor Extraction System					2.20		
Boilers	<u>4.33</u>	<u>5.15</u>	<u>0.34</u>	<u>0.01</u>	<u>0.28</u>	<u>-----</u>	<u>-----</u>
Totals:	4.33	5.15	1.29	0.01	9.78	9.00	22.50

JRS:psj