217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) -- REVISED

PERMITTEE

Mapei Corporation
Attn: Mr. Brian LeMaster,
Regional EH&S Manager
530 Industrial Drive
West Chicago, Illinois 60185

Application No.: 06010038 I.D. No.: 043090ABL
Applicant's Designation: Date Received: October 13, 2011
Subject: Adhesive, Cleaner and Grout Mfg.
Date Issued: November 27, 2012 Expiration Date: March 25, 2016
Location: 530 Industrial Drive, West Chicago, DuPage County, 60185

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

Polymerization:

Two (2) Monomer Blending Tanks (TK-111302 and TK-111308) Controlled by Scrubber (SD-11950);
Two (2) Reactors (TK-111301 and TK-111307) Controlled by a Scrubber;
Three (3) Finishing Tanks (TK-111303, TK-111304, and TK-111309) Controlled by Scrubber (SD-11950);
Twelve (12) Catalyst Tanks (TK-11326, TK-11327, TK-11328, TK-11329, TK-11330, TK-11331, TK-11332, TK-11333, TK-11334, TK-11335, TK-11336, and TK-11337);
One (1) Polyvinyl Alcohol Mix Tank (TK-19165);
Thirteen (13) Intermediate Storage Transfer Tanks (T-123, T-125A, T-127, T-128, T-131, T-133, T-394, T-501, T-502, T-503, T-504, T-505, and T-506;
All Tanks in this Group Are Less Than 40,000 Gallons Each); Two (2) Blender Tank (T-301 and T-302) Controlled by Scrubber (SD-11950); One (1) Polymer Finishing Tank (T-303) controlled by Scrubber (SD-11950);
One (1) Vertical Condenser (HX-11709); One (1) Horizontal Condenser (HX-11710); Two (2) Vibrating Filters (VF-11750, VF-11751);
One (1) Blend/Col Tank (TK-11310); Three (3) Redox Tanks (TK-11341, TK-11342, and TK-11343);
One (1) Ammonia Hydroxide Day Tank (TK-11350); One (1) Caustic Day Tank (TK-11351); Two (2) Ammonia Tanks (T-307A, and T-307B);
One Cooling Water Tower (CH-80903)

Vinyl Acetate Monomer (VAM) Reclaiming Process:

Two (2) Condenser Tanks, RXR-11301 Reactor, and B/C11303 Finishing Tank Outlet Material is Routed to PU-8010 Total Recirculation Vacuum Pump System Comprised of (PU-8010 Liquid Ring Vacuum Pump, HX-8010 Water/Chilled Glycol Heat Exchanger, TK-8010 Discharge Separator, and Associated Piping) Controlled by Existing Scrubber (SD-11950);
T-8100 Condensate Overflow Tank;
T-8110 Condensate Accumulation Tank
HX-8000 Plate and Plate Condenser with Piping and PU-80900(Glycol Recirculation Pump)

Raw Material & Finished Goods Storage Tanks:

One (1) 7,080 Gallon Monomer Storage Tank (TK-02141);
One (1) 8,000 Gallon Propylene Glycol Storage Tank (TK-80174);
Two (2) 8,000 Gallon Polyvinyl Alcohol Storage Tanks (TK-19166 and T-19167);
Fourteen (14) 13,000 Gallon Raw Material and Product Storage Tanks (T-101, T-102, T-103A, T-103B, T-104, T-105, T-106, T-107A, T-107B, T-108A, T-108B, T-109, T-111, and T-113) with Carbon Adsorbers for Odor Control;
Six (6) Raw Material and Product Storage Tanks (T-110: 13,000 Gallons, T-125B: 7,250 Gallons, T-126: 7,250 Gallons, T-130: 12,000 Gallons, TK-02142: 7,080 Gallons, and TK-02143: 12,500 Gallons,); One (1) Recovery Drum (VC-02141);
Four (4) Raw Material Storage Tanks (T-129: less than 40,000 Gallons, T-132A: 7,250 Gallons, T-132B: 7,250 Gallons, and T-348: 1,000 Gallons);

Mastic Compounding:

Five (5) Raw Material and Product Storage Tanks (T-161, T-383, T-384, T-387, and T-396; All tanks in this group are less than 40,000 gallons each); Eight (8) Compounding Mixers (T-311, T-315, T-316, T-317, MIX-318, T-322, T-324, and T-342);
Four (4) Finished Goods Storage Tanks (T-392, T-381, T-386, and T-395; All tanks in this group are less than 40,000 gallons each);
Two (2) Resin Storage Tanks (T-162 and T-163; both tanks are less than 40,000 gallons);

Compounding Mixers:

Nine (9) Compounding Mixers (MIX-311, MIX-315, MIX-316, MIX-317, MIX-322, MIX-324, MIX-341, MIX-342, and MIX-318) Controlled by Dust Collectors (F-300); Screw Conveyor (SC-318), Dynamic Air Bag Dump (BD-318) with Integral Jet Pulse Filter (FA-318), Filter (DB-318);

Latex Compounding:

Two (2) Blender Tanks (T-344 (BL1) and T-345 (BL2));
Three (3) Compounded Latex Storage Tanks (T-385, T-388, and T -393; All tanks in this group are less than 40,000 gallons each);

Resins Compounding:

One (1) Mixing/Storage Tank (T-312: less than 40,000 gallons);

Aqueous Solution Storage Tanks:

Ten (10) Aqueous Solution Storage Tanks (T-307B: 110 Gallons, T-11350: 110 Gallons, T-124B: 7,250 Gallons, T-11351, T-124A, T-2168, T-320B, T-346, T-347, and T-349; All tanks in this group are less than 40,000 gallons each)

Dry Materials & Powder:

Six (6) Raw Material and Product Storage Silos (T-201 through T-206) Controlled by Dust Collectors (F-201 through F-206);
Nine (9) Dry Material Transfer Weigh Hoppers (T-211B, T-212, T-213, T-214, T-230, T-215A, T-216, T-217A, and T-218) Controlled by Dust Collectors (F-201, F-202, F-203, F-204, F-205, F-206, F-214, F-15, F-216, F-217, and F-230);
Three (3) Calcium Carbonate Surge Tanks (T-221, T-222, and T-223) Controlled by Dust Collectors (F-221, F-222, and F-223);
One (1) Dry Material Transfer Hopper (T-213A) controlled by Dust Collectors (F-201 through F-206);
Four (4) Mixers/Powder Tanks (T-214, T-215, T-216, and T-217) Controlled by Dust Collectors (F-214, F-215, F-216, and F-217);
Four (4) Ground Hand Addition Hoppers (T-215A, T-215B, T-217A, and T-217B) Controlled by Two (2) Dust Collectors (F-300 and F-217A);
Six (6) Dry Packaging Hoppers (T-224A, T-224B, T-225, T-226, T-227, and T-227A) Controlled by Five (5) Dust Collectors (T-224A, F-224B, F-225, F-226, and F-227);
Six (6) Mixing Tanks (MIX-344, MIX-345, MIX-346, MIX-347, MIX-348, and MIX-349);
Pail Packaging Controlled by a Dust Collector (F-200B);
Bulk Sack Packaging Controlled by a Dust Collector (F-200B);
Bag Packer Blowers Controlled by Two (2) Dust Collectors (F-200A and F-200B); Product Packaging Line 229 comprised of Two (2) Hand Addition Hoppers (T-230A and T-230B) controlled by Two (2) Dust Collectors (F-235 and F-230A), a Mixer (Mix-230) Controlled by a Dust Collector (F-230A);
Collection Tank (T-235) controlled by a Dust Collector (F-235); a Rework Hand Addition Hopper (T-232), a Packer Blowers Loading Tank (T-233) Controlled by Two (2) Dust Collectors (F-235 and F-233), and a Super Sacks Loading Tank controlled by a Dust Collector (F-235);
Two (2) Bulk Bag Unloaders (D-236 and D-237) Controlled by Dust Collectors (F-236 and F-237);
Five (5) Bulk Bag Receiving Hoppers (T-236, T-237, T-238, T-239, and T-241) Controlled by a Dust Collector (F-235);
Four (4) VFFS-Guerzes (VFFS-236, VFFS-237, VFFS-238, and VFFS-239) Controlled by a Dust Collector (F-235);
One (1) Small Packaging Filler (BF-241) Controlled By Dust Collector (F-235)
Two (2) Bulk Bag Surge Hoppers (T-234 and T-241) Controlled By Dust Collector (F-230A); Mixing Hopper (T-231); Bag Palletizer (PLT-230); Paper Bag Air Bagger (AP-233A, B, C); Conveyors (CONV-232, CONV-232A, and CONV-233); Bag Filler (BB-234);

Dry Material Packaging Line 224 Comprised of Paper Bag Air Bagger Line (AP-224A, B, C) Controlled by Dust Collectors (F-224A & F-224B); Product Reblender (Mix-224A) Controlled by Dust Collector (F-224A); Paper Bag Packaging Line (AP-225A,B) Controlled by Dust Collector (F-225); Bulk Bag Filler (BB-226) Controlled by Dust Collector (F-226);
Dry Material Packaging Line 227 Comprised of Bag Pelletizer (PLT-227) Controlled by Dust Collectors (F-227); Transfer Conveyor (Conv-227) and Mixer (Mix-227) Controlled by Dust Collector (F-227); HFFS Packaging Machine (HFFS-227W, E) Controlled by Dust Collector (F-227);
Grout Blender Line Transfer Weigh Tank Controlled by Dust Collectors (F-201 to F-206); Screw Conveyors (SC-201, SC-202, SC-203, SC-203A, SC-205, SC-205A, SC-205B, and SC-206);
One (1) Process Vessel T-234A (dry powder) Controlled by Dust Collector F-235;
One (1) Packaging Line 227 Controlled by Dust Collector F-200A;
One (1) Opticolor Packaging Equipment Line;
One (1) Bulk Bag Unloader (MH-19800) and Screw Conveyor (MH-19801); and
One (1) Bulk Bags Unloading System (BBU-230B) Controlled by Dust Collector (F-235) Comprised of Four (4) Bulk Bags Unloading Stations, Four (4) Surge Hoppers (T-230B-1, T-230B-2, T-230B-3, T-230B-4), Four (4) Screw Conveyors (SC-230-1, SC-230-2, SC-230-3, SC-230-4), One (1) Weight Hopper (WH-230B), One (1) Bucket Elevator (BE-230)

Material Drying:

One (1) Natural Gas-Fired Spray Dryer (SD2) Controlled by Two (2) Dust Collector/Strainer (F-5110a and F-5110B)

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 Particulate Matter less than 10 microns (PM_{10}) and Volatile Organic Material (VOM), and 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year for 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 Miscellaneous Coating Manufacturing, 40 CFR 63 Subpart HHHHH.

iii. To establish federally enforceable production and operating limitations, which restrict the maximum theoretical emissions to less than 90.7 Mg (100 tons) of VOM per calendar year in the absence of air pollution control equipment and the potential to emit for VOM from emission units not subject to 35 Ill. Adm. Code Part 218 Subpart B 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), 35 Ill. Adm. Code Part 218 Subpart RR (Miscellaneous Organic Chemical Manufacturing Processes) and 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units).

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. 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 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. 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.

e. Pursuant to 35 Ill. Adm. Code 212.307, 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.

f. Pursuant to 35 Ill. Adm. Code 212.308, crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

g. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 and 35 Ill. Adm. Code 212.316 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.

h. 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.

i. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent

with 35 Ill. Adm. Code 212 Subpart K and shall be submitted to the Illinois EPA for its review.

j. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, 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).

3. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

4a. 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 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, and further processed consistent with 35 Ill. Adm. Code 218.108.

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 or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, and further processed consistent with 35 Ill. Adm. Code 218.108, or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 218.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 218.121(b)(2).

c. Pursuant to 35 Ill. Adm. Code 218.142, no person shall cause or allow the discharge of more than 32.8 ml (2 cu in) of volatile organic liquid with vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions.

d. Pursuant to 35 Ill. Adm. Code 218.187(a)(1), on and after January 1, 2012 except as provided in 35 Ill. Adm. Code 218.187(a)(2), the requirements of 35 Ill. Adm. Code 218.187 shall apply to all cleaning operations which use organic materials at sources that emit a total of 226.8 kg per calendar month (500 lbs per calendar month) or more of VOM, in the absence of air pollution control equipment, from cleaning

operations at the source other than cleaning operations identified in 35 Ill. Adm. Code 218.187(a)(2). For purposes of 35 Ill. Adm. Code 218.187, “cleaning operation” means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance, or servicing, including but not limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;

e. Pursuant to 35 Ill. Adm. Code 218.187(b), no owner or operator of a source subject to 35 Ill. Adm. Code 218.187, other than manufacturers of coatings, inks, adhesives, or resins, shall perform any cleaning operation subject to 35 Ill. Adm. Code 218.187 unless the owner or operator meets the requirements in 35 Ill. Adm. Code 218.187(b)(l), (b)(2), or (b)(3). No owner or operator of a source that manufactures coatings, inks, adhesives, or resins shall perform any cleaning operation subject to 35 Ill. Adm. Code 218.187 unless the owner or operator meets the requirements in at least one of the following subsections: 35 Ill. Adm. Code 218.187(b)(1), (b)(2), (b)(3), (b)(4), or (b)(5).

i. The VOM content of the as-used cleaning solutions does not exceed the following emissions limitations:

	kg/l	lb/gal
Cleaning of equipment used in manufacture of coatings, inks, adhesives, or resins	0.020	1.67

ii. The VOM composite vapor pressure of each as-used cleaning solution used does not exceed 8.0 mmHg measured at 20°C (68°F);

iii. An afterburner or carbon adsorber is installed and operated that reduces VOM emissions from the subject cleaning operation by at least 85 percent overall, or for sources that manufacture coatings, inks, adhesives, or resins, an afterburner or carbon adsorber is installed and operated that reduces VOM emissions from the subject cleaning operation by at least 80 percent overall and has a 90 percent efficiency. The owner or operator may use an emissions control system other than an afterburner or carbon adsorber if such device reduces VOM emissions from the subject cleaning operation in accordance with the applicable capture and control requirements of this 35 Ill. Adm. Code 218.187(b)(3), the owner or operator submits a plan to the Illinois EPA detailing appropriate monitoring devices, test methods, recordkeeping requirements, and operating parameters for such control device, and such plan is approved by the Illinois EPA and USEPA within federally enforceable permit conditions.

f 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, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material.

g. Pursuant to 35 Ill. Adm. Code 218.302(b), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by a vapor recovery system which adsorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere.

5. This permit is issued based on Storage T-101 to T-112, T-130, T-161, T-383, T-384, T-387, T-396, T-397, and T-398 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(a), except as provided in 40 CFR 60.110b(b), the affected facility to which 40 CFR 60 Subpart Kb applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

6a. This permit is issue based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Process Cooling Towers, 40 CFR 63 Subpart Q. This is also 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 cooling towers are not operated with chromium-based water treatment chemicals.

b. 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 Pollutant (HAP), and 25 tons/year of any combination of such HAPs.

c. This permit is issued based upon the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paints and Allied Products Manufacturing, 40 CFR 63 Subpart CCCCCCC because the source does not processes, uses, or generates materials containing HAP, as defined in 40 CFR 63.11607.

7a. This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 Ill. Adm. Code Part 205, pursuant to 35 Ill. Adm. Code 205.200. This is based on the source’s actual VOM emissions during the seasonal allotment

period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.

b. In the event that the source’s VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in a Clean Air Act Permit Program (CAAPP) permit or a Federally Enforceable State Operating Permit (FESOP).

c. Pursuant to 35 Ill. Adm. Code 205.316(a), any participating or new participating source shall not operate without a CAAPP permit or FESOP. Pursuant to 35 Ill. Adm. Code 205.316(a)(2), if a participating or new participating source does not have a CAAPP permit containing ERMS provisions and the source elects to obtain a permit other than a CAAPP permit, the source shall apply for and obtain a FESOP that contains, in addition to other necessary provisions, federally enforceable ERMS provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205.

8. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

9a. This permit is issued based on the storage tanks at this source not being subject to 35 Ill. Adm. Code 218.120, Control Requirements for Storage Containers for VOL. Pursuant to 35 Ill. Adm. Code 218.119, the limitations of 35 Ill. Adm. Code 218.120 shall apply to all storage containers of volatile organic liquid (VOL) with a maximum true vapor pressure of 0.5 psia or greater in any stationary tank, reservoir, or other container of 151 cubic meters (40,000 gallons) capacity or greater.

b. 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 volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

c. This permit is issued based upon the emission units not regulated by 35 Ill. Adm. Code Part 218 Subpart B (Organic Emissions from Storage and Loading Operations) not being subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart QQ (Miscellaneous Formulation Manufacturing Process), Subpart RR (Miscellaneous Organic Chemical Manufacturing Processes), Subpart TT (Other Emission Units). This is a result of the federally enforceable production and operating limitations, which restrict the maximum theoretical emissions to less than 90.7 Mg (100 tons) of VOM per calendar year in the absence of air pollution control equipment and the potential to emit for VOM of potentially affected emission units to less than 25 tons/year.

10a. Pursuant to 35 Ill. Adm. Code 218.187(b)(4),for sources that manufacture coatings, inks, adhesives, or resins, the owner or operator complies with the following work practices:

i. Equipment being cleaned is maintained leak-free;

ii. VOM-containing cleaning materials are drained from the cleaned equipment upon completion of cleaning;

iii. VOM-containing cleaning materials, including waste solvent, are not stored or disposed of in such a manner that will cause or allow evaporation into the atmosphere; and

iv. VOM-containing cleaning materials are stored in closed containers.

b. Pursuant to 35 Ill. Adm. Code 218.187(b)(5), sources that manufacture coatings, inks, adhesives, or resins may utilize solvents that do not comply with 35 Ill. Adm. Code 218.187(b)(1) or (b)(2) provided that all of the following requirements are met:

i. No more than 228 l (60 gal) of fresh solvent is used per calendar month. Solvent that is reused or recycled, either onsite or offsite, for further use in equipment cleaning or in the manufacture of coatings, inks, adhesives, or resins, shall not be included in this limit;

ii. Solvents, including cleanup solvents, are collected and stored in closed containers; and

iii. Records are maintained in accordance with 35 Ill. Adm. Code 218.187(e)(6).

c. Pursuant to 35 Ill. Adm. Code 218.187(c), the owner or operator of a subject source shall demonstrate compliance with 35 Ill. Adm. Code 218.187 by using the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.187(g) and by complying with the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.187(e).

d. Pursuant to 35 Ill. Adm. Code 218.187(d), the owner or operator of a source subject to the requirements of 35 Ill. Adm. Code 218.187 shall comply with the following for each subject cleaning operation. Such requirements are in addition to work practices set forth in 35 Ill. Adm. Code 218.187(b)(4) and (b)(5), as applicable:

i. Cover open containers and properly cover and store applicators used to apply cleaning solvents;

ii. Minimize air circulation around the cleaning operation;

iii. Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers;

iv. Utilize equipment practices that minimize emissions.

11a. 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 scrubbers, dust collectors, and baghouses such that the scrubbers, dust collectors, and baghouses are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

c. The spray dryer burners shall only be operated with natural gas as the fuel. The use of any other fuel in the spray dryer 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.

d. This permit is issued based on the cooling tower at this source not using chromium-based water treatment chemicals. As a result, this permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial Process Cooling Towers, 40 CFR 63 Subpart Q.

12a. Emissions and operation of the Adhesive, Cleaner and Grout Manufacturing source shall not exceed the following limits:

i. Production rate limits:

Emission Unit Group	Material Type	Tons/Mo	Tons/Yr
Polymerization	Total Polymers	6,100	61,000
	MC-54	1,656	16,564
Material Drying	Total Production	1,009	10,090

Emission Unit Group	Material Type	Tons/Mo	Tons/Yr
Raw Material	Total Latex	1,310	13,100
Storage and Wet Finished Goods Storage/Packaging	Various Materials	15,650	156,500
Mastic Compounding	Total Mastics	9,600	96,000
Eco Compounding	Total Ecos	1,800	18,000
Latex Compounding	Total Latex	316	3,158
	Keracret	63	625
Resin Compounding	Total Resins	231	2,310
Dry Raw Materials & Powder Products	All Materials	40,000	400,000

ii. Emissions of Particulate Matter (PM) and Volatile Organic Materials (VOM):

Emission Unit Group	Material Type	PM Emissions (lbs/T)	PM Emissions (T/Mo)	PM Emissions (T/Yr)	VOM Emissions (lbs/T)	VOM Emissions (T/Mo)	VOM Emissions (T/Yr)
Polymerization: (blending, mixing, reactor, cooling, & storage)	Polymers				2.97	0.27	2.72
	MC-54				2.97	0.07	0.74
Material Drying	Total Production	1.092	0.48	4.82	3.72	1.64	16.42
	Total Latex	1.092	0.02	0.21	0.0015	0.01	0.01
Raw Material Storage & Wet Finished Goods Storage/Packaging	Various				0.03	0.01	0.07
Mastic Compounding	Total Mastics				0.76	0.11	1.09
Eco Compounding	Total Ecos				0.54	0.01	0.15
Latex Compounding	Total Latex				0.09	0.01	0.01
	Keracret				0.74	0.01	0.01

Emission Unit Group	Material Type	PM Emissions (lbs/T)	PM Emissions (T/Mo)	PM Emissions (T/Yr)	VOM Emissions (lbs/T)	VOM Emissions (T/Mo)	VOM Emissions (T/Yr)
Resin Compounding	Total Resins				0.009	0.01	0.01
Dry Raw Materials & Powder Products	All Materials	0.2	4.00	40.00			
Fugitive Leaks from Pipes	Light Liquids			-----		0.28	2.84
			Totals:	45.03			24.07

These limits are based on the combined blenders, reactors and condensers/coolers control efficiency of 97%, this limit also restricts the Maximum Theoretical Emissions (MTE) from the Polymerization Group to less than 25 tons/year.

iii. Emissions of any Single HAP and any Combination of HAPs:

Emission Unit Group	Material Throughput T/M	Material Throughput T/Y	Emission Factor (L/T)	Single HAP (T/M)	Single HAP (T/Y)	HAPs Emission Factor (/L/T)	Combined HAPs Emissions (T/M)	Combined HAPs Emissions (T/Y)
Polymerization: (blending, mixing, reactor, cooling, & storage)	7,756	77,564	0.05157	0.26	2.56	0.063	0.31	3.10
Material Drying	883	8,828	0.933	0.41	4.12	2.903	1.28	12.81
Wet Finished Goods Storage/ Packaging	15,650	156,500	0.01627	0.13	1.25	0.036	0.28	2.82
Fugitive				0.14	1.42		0.28	2.84
Totals:					9.35			21.57

The above limits are based on the maximum production rates and conservatively assuming that 50% of total VOM are HAPs emission.

b. Operation and emission of natural gas combustion from spray dryer system, heaters, and boilers combined shall not exceed the following limits:

i. Natural Gas Usage: 10.44 mmscf/month, 104.4 mmscf/year.

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (Lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	84.0	0.29	4.38

Pollutant	Emission Factor (Lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Nitrogen Oxides (NO_x)	100.0	0.35	5.22
Particulate Matter (PM)	7.6	0.03	0.40
Sulfur Dioxide (SO_2)	0.6	0.01	0.03
Volatile Organic Material (VOM)	5.5	0.02	0.29

These limits are based on the total maximum firing rate of dryers, heaters, and boilers combined (11.92 mmBtu/hour), the 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).

c. Emissions and operation of the grout blending line process vessel T-234A (dry powder) and packaging line 227 shall not exceed the following limits:

Emission Unit	Throughput (Tons/Mo)	Throughput (Tons/Yr)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
Process Vessel T-234A and Packaging Line 2227	21,900	219,000	0.11	1.11

These limits are based on maximum throughputs and an emission factor of 0.0018 lb PM/1,000 lb of production (Table 11.26-1, AP-42, Fifth Edition, Volume I Supplement A, November 1995).

d. Emissions and operation of the vacuum group project (one re-circulating vacuum pump system, one condenser, one condensate overflow tank, one condensate accumulation tank, and associated equipment and process) shall not exceed the following limits:

Emission Unit	Throughput (Ton/Mo)	Throughput (Ton/Yr)	Emission Factor (VOM) (lbs/Ton)	VOM Emissions (Ton/Mo)	VOM Emissions (Ton/Yr)	HAP Emission (Ton/Mo)	HAP Emission (Ton/Yr)
Vacuum Pump	817	8,173	0.08	0.04	0.33	0.02	0.17
Condenser	1,396	13,960	0.08	0.06	0.56	0.03	0.28
			lbs/hr				
Fugitives*			0.0725	0.04	0.32	0.02	0.16
				Total:	1.21		0.61

* The fugitive emission rate is a sum of all process emission rates using SOCMI Average Emission Factors, Table 2-1, Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-017, November 1995.

These limits are based on maximum materials throughput, standard emission factors for continuous polystyrene process (Table 6.6.3-2, AP-42, Fifth Edition, Volume I, September 1991), 96% control efficiency for scrubber control, and an assumed 50% of total VOM are HAPs.

e. This permit is issued based on negligible emissions of particulate matter (PM) and volatile organic material (VOM) from the Opticolor line packaging equipment line. For this purpose emissions of each pollutant (PM and VOM) shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

f. This permit is issued based on negligible emissions of particulate matter (PM) and volatile organic material (VOM) from the Cooling Tower. For this purpose emissions of each pollutant (PM and VOM) shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

g. This permit is issued based on negligible emissions of Volatile Organic Material (VOM) and Hazardous Air Pollutants from the Eleven (11) Aqueous Solution Storage Tanks. For this purpose emissions of each pollutant from all such emission units combined, shall not exceed nominal emission rates of 0.10 lb/hour and 0.44 ton/year.

h. This permit is issued based on negligible emissions of Volatile Organic Material (VOM) and Hazardous Air Pollutants from the Wastewater. For this purpose emissions of each pollutant shall not exceed nominal emission rates of 0.10 lb/hour and 0.44 ton/year.

i. This permit is issued based on negligible emissions of Volatile Organic Material (VOM) and Hazardous Air Pollutants from the two (2) 695 gallons condensate storage tanks (T-8100 & T-8110). For this purpose emissions of each pollutant from all such emission units combined, shall not exceed nominal emission rates of 0.10 lb/hour and 0.44 ton/year.

j. 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).

13a. 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 14 and 15 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

14. 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.

15a. Pursuant to 35 Ill. Adm. Code 218.187(g)(1), testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218.187 shall be conducted by the owner or operator within 90 days after a request by the Illinois EPA, or as otherwise specified in 35 Ill. Adm. Code 218.187. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Illinois EPA in writing 30 days in advance of conducting the testing to allow the Illinois EPA to be present during the testing;

b. Pursuant to 35 Ill. Adm. Code 218.187(g)(2), testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 218.187(b)(1), and to determine the VOM content of cleaning solvents and cleaning solutions, shall be conducted as follows:

i. The applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) shall be used, provided, however, Method 24 shall be used to demonstrate compliance; or

ii. The manufacturer’s specifications for VOM content for cleaning solvents may be used if such manufacturer’s specifications are

based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a), however, Method 24 shall be used to determine compliance. In the event of any inconsistency between a Method 24 test and the manufacturer's specifications, the Method 24 test shall govern.

c. Pursuant to 35 Ill. Adm. Code 218.187(g)(3), testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;

d. Pursuant to 35 Ill. Adm. Code 218.187(g)(5), an owner or operator using an emissions control system other than an afterburner or carbon adsorber shall conduct testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218.187(b)(3) as set forth in the owner's or operator’s plan approved by the Illinois EPA and USEPA as federally enforceable permit conditions pursuant to 35 Ill. Adm. Code 218.187(b)(3).

16. Pursuant to 35 Ill. Adm. Code 218.187(f)(3), if an emissions control system other than an afterburner or carbon adsorber is used to demonstrate compliance, the owner or operator of a source subject to 35 Ill. Adm. Code 218.187(b)(3) shall install, maintain, calibrate, and operate such monitoring equipment as set forth in the owner’s or operator’s plan approved by the Illinois EPA and USEPA pursuant to 35 Ill. Adm. Code 218.187(b)(3).

17. 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.

18. 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.

19a. Pursuant to 35 Ill. Adm. Code 218.187(e)(3), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187(b)(1) shall collect and record the following information for each cleaning solution used:

i. For each cleaning solution that is prepared at the source with automatic equipment:

A. The name and identification of each cleaning solution;

B. The VOM content of each cleaning solvent in the cleaning solution;

C. Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);

D. The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;

E. The VOM content of the as-used cleaning solution, with supporting calculations; and

F. A calibration log for the automatic equipment, detailing periodic checks.

ii. For each batch of cleaning solution that is not prepared at the source with automatic equipment:

A. The name and identification of each cleaning solution;

B. Date, time of preparation, and each subsequent modification of the batch;

C. The VOM content of each cleaning solvent in the cleaning solution;

D. The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and

E. The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are not prepared at the site but are used as purchased, the manufacturer's specifications for VOM content may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a).

c. Pursuant to 35 Ill. Adm. Code 218.187(e)(4), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187(b)(2) shall collect and record the following information for each cleaning solution used:

i. The name and identification of each cleaning solution;

ii. Date, time of preparation, and each subsequent modification of the batch;

iii. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;

iv. The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and

v. The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110.

d. Pursuant to 35 Ill. Adm. Code 218.187(e)(5), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187(b)(3) shall comply with the following:

i. Collect and record daily the following information for each cleaning operation subject to the requirements of 35 Ill. Adm. Code 218.187(b)(3):

A. Emissions control system monitoring data in accordance with 35 Ill. Adm. Code 218.187(f), as applicable;

B. A log of operating time for the emissions control system, monitoring equipment, and the associated cleaning equipment;

C. A maintenance log for the emissions control system and monitoring equipment detailing all routine and non-routine

maintenance performed, including dates and duration of any outages.

ii. Maintain records documenting the use of good operating practices consistent with the equipment manufacturer's specifications for the cleaning equipment being used and the emissions control system equipment. At a minimum, these records shall include:

A. Records for periodic inspection of the cleaning equipment and emissions control system equipment with date of inspection, individual performing the inspection, and nature of inspection;

B. Records for repair of malfunctions and breakdowns with identification and description of incident, date identified, date repaired, nature of repair, and the amount of VOM released into the atmosphere as a result of the incident.

e. Pursuant to 35 Ill. Adm. Code 218.187(e)(6), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187(b)(5) shall collect and record monthly the following information for each cleaning operation subject to the requirements of 35 Ill. Adm. Code 218.187(b)(5):

i. The name, identification, and volume of each VOM-containing cleaning solution as applied in each cleaning operation;

ii. The volume of each fresh cleaning solvent used for cleaning coating, ink, adhesive, or resin manufacturing equipment;

iii. The volume of cleaning solvent recovered for either offsite or onsite reuse or recycling for further use in the cleaning of coating, ink, adhesive, or resin manufacturing equipment.

f. Pursuant to 35 Ill. Adm. Code 218.187(e)(10), all records required by 35 Ill. Adm. Code 218.187(e) shall be retained by the source for at least three years and shall be made available to the Illinois EPA upon request.

g. 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.

20a. 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 scrubbers, dust collectors, and baghouses:

A. Records for periodic inspection of the scrubbers, dust collectors, and baghouses 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. Polymerization production rates for each material type (batches/month and batches/year);

iii. Material drying raw material throughput or production rate for each material type (tons/month and tons/year);

iv. Throughput and identification of materials stored for all storage tanks (gallons/month and gallons/year);

v. Raw Material Storage and Wet Finished Goods Storage/Packaging production rate (tons/month and tons/year);

vi. Mastic Compounding production rates for each material type (batches/month and batches/year);

vii. Eco Compounding production rates (tons/month and tons/year);

viii. Latex Compounding production rates for each material type (batches/month and batches/year);

ix. Resin Compounding production rates (tons/month and tons/year);

x. Dry Raw Materials & Powder Products (tons/month and tons/year);

xi. Total natural gas usage for the spray dryer (mmscf/month and mmscf/year); and

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

b. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:

i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as appropriate, to determine actual VOM emissions during the seasonal allotment period;

ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures that may be specified in this permit; and

iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.

c. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer 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.

21. 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.

22a. Pursuant to 35 Ill. Adm. Code 218.187(e)(2)(B), all sources subject to the requirements of 35 Ill. Adm. Code 218.187 shall at least 30 calendar days before changing the method of compliance between 35 Ill. Adm. Code 218.187(b)(1), (b)(2), (b)(4), or (b)(5) and 35 Ill. Adm. Code 218.187(b)(3), notify the Illinois EPA in writing of such change. The notification shall include a demonstration of compliance with the newly applicable subsection;

b. Pursuant to 35 Ill. Adm. Code 218.187(e)(5), All sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187(b)(3) shall comply with the following: If testing of an emissions control system is conducted pursuant to 35 Ill. Adm. Code 218.187(g), the owner or operator shall, within 90 days after conducting such testing, submit a copy of all test results to the Illinois EPA and shall submit a certification to the Illinois EPA that includes the following:

i. A declaration that all tests and calculations necessary to demonstrate compliance with 35 Ill. Adm. Code 218.187(b)(3) have been properly performed;

ii. A statement whether the subject cleaning operation is or is not in compliance with 35 Ill. Adm. Code 218.187(b)(3); and

iii. The operating parameters of the emissions control system during testing, as monitored in accordance with 35 Ill. Adm. Code 218.187(f);

c. Pursuant to 35 Ill. Adm. Code 218.187(e)(9), all sources subject to the requirements of 35 Ill. Adm. Code 218.187(b) and (d) shall notify the Illinois EPA of any violation of 35 Ill. Adm. Code 218.187(b) or (d) by providing a description of the violation and copies of records documenting the violation to the Illinois EPA within 30 days following the occurrence of the violation.

d. 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.

23a. 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

<u>and</u> 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

This permit has been revised so as to include operation of the equipment described in Construction Permit #11030019.

It should also be noted that this permit has been revised so as to revise the production limits and emission limits in Condition 12(a) and the natural gas usage limit and emission limits in Condition 12(b).

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

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

Date Signed: _____

ECB:GB:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the Adhesive, Cleaner and Grout Manufacturing source 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 below the levels, (e.g., 100 tons/year for PM_{10} and 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.

	E M I S S I O N S (Tons/Year)						
Emission Unit	CO	NO_x	PM	SO_2	VOM	Single HAP	Combined HAPs
Polymerization					3.46	2.56	3.10
Material Drying			4.84		16.43	4.12	12.81
Raw Material Storage & Wet Finished Goods Storage/Packaging					0.07	1.25	2.82
Mastic Compounding					1.09		
Eco Compounding					0.15		
Latex Compounding					0.02		
Resin Compounding					0.01		
Dry Materials & Powder Products			40.00				
Fugitive Leaks from Pipes					2.84	1.42	2.84
Natural Gas Combustion (Spray Dryer, Heaters, & Boilers)	4.38	5.22	0.40	0.03	0.29		
Process Vessel T-234A & Packaging Line 227			1.11				
Re-circulating vacuum pump system					1.21		0.61
Two 695 gal condensate storage tanks					0.44		0.44
Opticolor Line Packaging Equipment Line			0.44		0.44		
Cooling Tower			0.44		0.44		
Wastewater					0.44		0.44
11 Aqueous Solution Storage Tanks	-----	-----	-----	-----	0.44	-----	0.44
Totals	4.38	5.22	47.23	0.03	27.77	9.35	23.50

GB:psj