



- 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 m (1000 ft) 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 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.
- d. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
- e. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
  - i. The name and address of the source;
  - ii. The name and address of the owner or operator responsible for execution of the operating program;
  - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
  - iv. Location of unloading and transporting operations with pollution control equipment;
  - v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 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.
- f. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- 3a. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission 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.
- b. Pursuant to 35 Ill. Adm. Code 218.666(a), every owner or operator of a polyester resin products manufacturing process subject to 35 Ill. Adm. Code 218 Subpart CC shall comply with the operating requirements below:
- i. Any of the following:
    - A. Use polyester resin material with a monomer content as follows:
      - I. For clear gel coat, a monomer content of no more than 50% by weight as applied;
      - II. For other pigmented gel coats, a monomer content of no more than 45% by weight as applied; or
      - III. For all other polyester resin materials, a monomer content of no more than 35% by weight as applied.
    - B. Use a closed-mold system or pultrusion system which will result in less than 4% weight loss of polyester resin materials;
    - C. Use any materials or processes that are demonstrated to the satisfaction of the Illinois EPA to achieve VOM emission levels equivalent to any of the above. This alternative must be approved by the Illinois EPA and the USEPA in a federally enforceable permit or as a SIP revision.

- ii. For spraying operations, in addition to the requirements specified in 35 Ill. Adm. Code 218.666(a)(1), use only high-volume low pressure (HVLP), airless, air-assisted airless, or electrostatic spray equipment, except for touch-up and repair using a hand-held, air-atomized spray gun which has a container for polyester resin material as part of the gun.
4. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reinforced Plastic Composites Production, 40 CFR 63 Subpart WWWW. This is a result of the federally enforceable production and operating limitations established in this permit, 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.
- 5a. Pursuant to 35 Ill. Adm. Code 218.666(b), any owner or operator of a polyester resin products manufacturing process subject to 35 Ill. Adm. Code 218 Subpart CC shall use closed containers for all polyester resin materials, cleaning materials which contain VOM (including waste cleaning materials), and other materials that contain VOM (including waste resin materials) in such a manner as to effectively control VOM emissions to the atmosphere and in accordance with the practices described in the certification pursuant to 35 Ill. Adm. Code 218.670(b)(2)(A).
- b. Pursuant to 35 Ill. Adm. Code 218.666(c), any owner or operator of a polyester resin products manufacturing process subject to 35 Ill. Adm. Code 218 Subpart CC which formulates polyester resin material at the source shall comply with the following operating requirements:
- i. A cover shall be in place on any tank, vat, or vessel with a capacity greater than 7.5 liters (2 gallons), including a container in which polyester resin materials are delivered to the source, while polyester resin materials are being formulated. The cover shall:
    - A. Completely cover the tank, vat, or vessel opening except for an opening no larger than necessary to allow for safe clearance for a mixer shaft;
    - B. Extend at least 1.27 cm (0.5 inch) beyond the outer rim of the opening or be attached to the rim;
    - C. Remain closed except when adding or removing material or when sampling or inspection procedures require access; and
    - D. Be maintained in good condition such that, when in place, the cover maintains contact with the rim of the opening for at least 90% of the circumference of the rim.
  - ii. Carry out emissions shall be minimized when a mixer used for formulation of polyester resin material is being removed from a tank, vat, or vessel containing polyester resin material by allowing the material retained on the mixer blades to drain back

into the tank, vat, or vessel before the mixer is completely removed from the tank, vat, or vessel.

- c. Pursuant to 35 Ill. Adm. Code 218.666(d), any owner or operator of polyester resin products manufacturing processes subject to 35 Ill. Adm. Code 218 Subpart CC which as a group use more than 4 gallons per day of cleaning materials which contain more than 200 grams of VOM per liter (1.7 pound per gallon) shall use a solvent recovery system for such materials. Solvent recovery may be done at the source or by using an off-site commercial solvent recovery service. The waste residue from a solvent recovery system located at the source shall not contain more than 20% VOM by weight.
- 6a. Notwithstanding 35 Ill. Adm. Code 218.666(a)(1)(A)(iv), (Condition 3(b)(i)(A)(II)), pigmented gel coats with monomer content greater than 45% may be used, if the actual sum of the daily weighted average emissions of all resins, clear gel coats and pigmented gel coats for that day shall not exceed the sum of the daily weighted average emissions that would be allowed based on the maximum allowable monomer content as indicated in 35 Ill. Adm. Code 218.666(a)(1)(A)(iii), (a)(1)(A)(iv), and (a)(1)(A)(v) (Conditions 3(b)(i)(A)(I), (b)(i)(A)(II) and (b)(i)(A)(III)) for gel coats and resins used, as provided in 35 Ill. Adm. Code 218.666(a)(1)(D) (Condition 3(b)(i)(C)).
- b. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 7a. Emissions and operation of the gel-coat spray booth and resin mixing operation shall not exceed the following limits:

<u>(lbs/Day)</u>	VOM and HAP Emissions <u>(Tons/Month)</u>	<u>(Tons/Year)</u>
1.29	1.15	9.20

These limits are based on the maximum gel coat and resin usage, the monomer content of the gel coats and resins, and standard emission factors for "Polyester Resin Plastic Products Fabrication" (Table 4.4-2, AP-42, Fifth Edition, Volume I, Updated February 2007).

- b. Note that there is a "nested" limit on the emissions of HAPs as a result of the limit on VOM emissions. The HAPs emitted at this source have been determined to be VOMs and therefore limiting VOM emissions also limits HAP emissions.
- c. 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).
- 8a. 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 9 and 10 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
9. 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.
10. Pursuant to 35 Ill. Adm. Code 218.668(b), when in the opinion of the Illinois EPA it is necessary to conduct sampling and analysis to demonstrate compliance with 35 Ill. Adm. Code 218.668, the owner or operator of a polyester resin products manufacturing process subject to the requirements of 35 Ill. Adm. Code 218 Subpart CC shall, at his own expense, conduct such sampling and analysis in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.668(a). The Illinois EPA's decision to invoke 35 Ill. Adm. Code 218.668 may be based on such factors including, but not limited to, a change in operation of the polyester resin products manufacturing process, or a reasonable belief that a previous test resulted in erroneous data.

11. 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.
12. 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.
- 13a. Pursuant to 35 Ill. Adm. Code 218.672(a), any owner or operator of a polyester resin products manufacturing process which is subject to the requirements of 35 Ill. Adm. Code 218 Subpart CC shall comply with the following:
  - i. On and after a date consistent with 35 Ill. Adm. Code 218.106 or on and after initial start-up date, the owner or operator of a subject process shall collect and record the following information to maintain a complete record of all polyester resin materials which are used by such polyester resin products manufacturing process. This information shall be maintained at the source for a period of three years:
    - A. The name and identification number of each polyester resin material used in the process;
    - B. The particular operating requirement with which each polyester resin material will comply, the actual monomer

content of the material (percent by weight) and other relevant data to show compliance with the operating requirement, including:

- I. For each polyester resin material which is applied in a closed-mold or pultrusion system so as to comply with 35 Ill. Adm. Code 218.666(a)(1)(B), the weight loss from the polyester resin material (percent by weight) during molding;
  - II. For each polyester resin material which is approved by the Illinois EPA and the USEPA in a federally enforceable permit or as a SIP revision so as to comply with 35 Ill. Adm. Code 218.666(a)(1)(D), information showing the VOM emission level which is achieved and the VOM emissions which would result from compliance with 35 Ill. Adm. Code 218.666(a)(1)(A), (B), or (C);
- C. A description of the testing which was performed, in accordance with 35 Ill. Adm. Code 218.668, to determine the monomer content of polyester resin materials and the information in 35 Ill. Adm. Code 218.672(a)(1)(C)(ii), (iii) and (iv) and (a)(1)(D), including data, calculations, and descriptions and results of the sampling and analysis that the owner or operator has relied upon to show compliance with 35 Ill. Adm. Code 218.666(a)(1);
- D. The processes and applications for which each polyester resin material may be used in compliance with applicable operating requirements, including:
- I. For each polyester resin material which is applied in a closed-mold or pultrusion system so as to comply with 35 Ill. Adm. Code 218.666(a)(1)(B), the required process temperature and minimum mold cycle time or maximum pultrusion speed;
  - II. For each polyester resin material which is approved by the Agency and approved by the USEPA as a SIP revision so as to comply with 35 Ill. Adm. Code 218.666(a)(1)(D), the required process operating conditions or product specifications; and
- E. For each polyester resin material which is applied in a spraying operation, the type of spray equipment with which the material will be applied so as to comply with Section 218.666(a)(2) of this Subpart.
- ii. On and after the date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject process shall collect and record all of the following information each day for each process and maintain the information at the source for a period of three years:

- A. The name, identification number and amount of each polyester resin material applied on each process; and
  - B. The specific data identified pursuant to 35 Ill. Adm. Code 218.672(a)(2)(D) to confirm that the polyester resin material was applied in such a manner that it complied with the applicable operating requirement.
- b. Pursuant to 35 Ill. Adm. Code 218.672(b)(2), any owner or operator of a polyester resin product manufacturing process subject to the requirements of 35 Ill. Adm. Code 218 Subpart CC shall collect and record all the following information and maintain the information at the source for a period of three years:
- i. The date, time and duration of scheduled inspections performed to confirm the proper use of closed containers to control VOM emissions, and any instances of improper use of closed containers, with descriptions of actual practice and corrective action taken, if any;
  - ii. Information on a daily basis confirming the proper use of a recovery system if one is required or is used, including operation of a recovery system at the source to produce a waste residue that is 20% or less VOM by weight and information identifying any observation of noncompliance; and
  - iii. Information on a daily basis on the use of cleaning materials which contain more than 200 grams of VOM per liter (1.7 pound per gallon) if a recovery system is not required or is not used. This information shall include the name, identification number, amount used and VOM content of each such cleaning material.
- c. Pursuant to 35 Ill. Adm. Code 218.672(c)(2), any owner or operator of a polyester resin product manufacturing process subject to the requirements of 35 Ill. Adm. Code 218 Subpart CC that formulates polyester resin material at the source shall collect and record all the following information and maintain the information at the source for a period of three years:
- i. The date, time, and duration of scheduled inspections to confirm the proper use and maintenance of covers on vats, vessels, and tanks and proper drainage of mixers and any instance of improper use, with description of actual practice and corrective action taken, if any;
  - ii. A maintenance log for covers on vats, vessels, and tanks, detailing all routine and non-routine maintenance performed and initial use of new covers, including dates of such activities.
- 14a. The Permittee shall maintain the following records to demonstrate compliance with the conditions of this permit.
- i. Name and identification of each gel-coat and resin used;

- ii. The weight percent monomer content each gel coat and resin used (% by weight);
  - iii. The amount of each gel coat and resin used (lb/day and ton/year);
  - iv. On any day when pigmented gel coat with monomer content greater than 45% is used, the Permittee shall calculate the actual sum of the daily weighted average emissions of all resins, clear gel coat and pigmented gel coats used for that day and also, the daily weighted average emissions based on the actual usage and maximum allowable monomer content as indicated in Conditions 3(b)(1)(A)(I), (b)(1)(A)(II), (b)(1)(A)(III), and 4; and
  - v. Monthly and annual emissions of VOM and HAPs with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
15. 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.
- 16a. Pursuant to 35 Ill. Adm. Code 218.672(a)(4), any owner or operator of a polyester resin products manufacturing process which is subject to the requirements of 35 Ill. Adm. Code 218 Subpart CC shall notify the Illinois EPA:
- i. Of any violation of the operating requirements of 35 Ill. Adm. Code 218 Subpart CC by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation; and
  - ii. At least 30 calendar days before changing the method of compliance with this Subpart from one operating requirement among 35 Ill. Adm. Code 218.666(a)(1)(A), (B), (C), or (D) to another operating requirement, of compliance with all requirements of 35 Ill. Adm. Code 218.672(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code 218 Subpart CC from one operating requirement to another, the owner or operator shall comply with all applicable requirements of 35 Ill. Adm. Code 218.672(a).

- b. Pursuant to 35 Ill. Adm. Code 218.672(b)(3), any owner or operator of a polyester resin product manufacturing process subject to the requirements of 35 Ill. Adm. Code 218 Subpart CC shall notify the Illinois EPA:
  - i. Of a violation of the requirements of 35 Ill. Adm. Code 218 Subpart CC with respect to handling practices and solvent recovery for cleaning materials by sending a copy of all such records to the Agency within 30 days following the calendar quarter in which such violation occurred; or
  - ii. Within 30 calendar days of changing the handling practices for polyester resin materials, cleaning materials and waste materials or changing source practice with respect to a solvent recovery system for cleaning materials, describing the change.
- c. Pursuant to 35 Ill. Adm. Code 218.672(c)(3), any owner or operator of a polyester resin product manufacturing process subject to the requirements of 35 Ill. Adm. Code 218 Subpart CC that formulates polyester resin material at the source shall notify the Illinois EPA:
  - i. Of a violation of the requirements of 35 Ill. Adm. Code 218 Subpart CC with respect to formulation of polyester resin material by sending a copy of all such records to the Illinois EPA within 30 days following the calendar quarter in which such violation occurred: or
  - ii. Within 30 calendar days of changing the handling practices for formulation of polyester resin materials, describing the change.
- 17a. 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 exceedances 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  
9511 West Harrison  
Des Plaines, Illinois 60016

It should be noted that the grinding, sanding and polishing operation with dust collectors is exempt from permitting requirements pursuant to 35 Ill. Adm. Code 201.146(aa) and (jj).

It should also be noted that during the analysis of this permit application, it was determined that your facility has the potential to emit more than 10 tons per year of a single Hazardous Air Pollutant (HAP) and will be classified as a major source under the Clean Air Act Permit Program (CAAPP). To avoid the CAAPP permitting requirements, you may want to consider immediately applying for a Federally Enforceable State Operating Permit (FESOP).

A FESOP is an operating permit containing federally enforceable limits in the form of permit conditions which effectively restrict the potential emissions of a source to below major source thresholds, thereby excluding the source from the CAAPP. The necessary application forms are available on the Illinois EPA's website at <http://www.epa.state.il.us/air/caapp/permit-forms.html>.

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

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

Date Signed: \_\_\_\_\_

ECB:GB:

cc: Illinois EPA, FOS Region 1