

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT  
RENEWAL

PERMITTEE

Engineered Glass Products, LLC  
Attn: Ed Sulicz  
2857 South Halsted Street  
Chicago, Illinois 60608

Application No.: 73010007

I.D. No.: 031600CDN

Applicant's Designation:

Date Received: March 7, 2003

Subject: Heat Barrier Application

Date Issued: January 9, 2009

Expiration Date: January 9, 2014

Location: 2857 South Halsted Street, Chicago, Cook County, 60608, and 929 West Exchange Avenue, Chicago, Cook County, 60609

This Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a catalytic thermal oxidizer (T-1), one (1) 3,380 gallon methanol storage tank, one (1) 3,380 gallon n-propanol storage tank, transfer heat barrier application controlled by a catalytic oxidizer, one coating mixing operation (C-1) and one coating spray booth (C-2) both controlled by operations, coating solution mix tank, glass cutting and tempering line #1, 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/yr for Volatile Organic Material (VOM), 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 limit the emissions of VOM from the construction of new emission units and other modifications at the source, which occurred without first obtaining construction permit(s) between November 15, 1992 and June 15, 2005 (the period during which the Chicago area was classified as severe nonattainment for ozone), to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 203, Major Stationary Sources Construction and Modification.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.

- 2a. 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 beginning with the following seasonal allotment period, 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.
- 3a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
  - b. 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.
  - 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).
- 4. 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 excess 2000 ppm.

- 5a. 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 l (250 gal), 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).
- b. 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.
- c. Pursuant to 35 Ill. Adm. Code 218.926, every owner or operator of miscellaneous fabricated product manufacturing process emission unit (i.e., the heat barrier application controlled by the oxidizer and coating spray booth (C-2) controlled by the oxidizer) subject to 35 Ill. Adm. Code Part 218 Subpart PP: Miscellaneous Fabricated Product Manufacturing Processes shall comply with the requirements of 218.926(a), (b) or (c):.
- i. Emission capture and control techniques which achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit; or
- ii. For coating lines: The daily-weighted average VOM content shall not exceed 0.42 kg VOM/l (3.5 lbs VOM/gal) of coating as applied (minus water and any compounds which are specifically exempted from the definition of VOM) during any day. Owners and operators complying with this limitation are not required to comply with 35 Ill. Adm. Code 218.301.
- d. Pursuant to 35 Ill. Adm. Code 218.946, every owner or operator of a miscellaneous formulation manufacturing process emission unit (i.e., the mixing operation (C-1) controlled by the oxidizer) subject to 35 Ill. Adm. Code Part 218 Subpart QQ: Miscellaneous Formulation Manufacturing Processes shall comply with the requirements of 35 Ill. Adm. Code 218.946(a) below.
- Emission capture and control techniques which achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.
6. 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/hr (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.

- 7a. Pursuant to 35 Ill. Adm. Code 218.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 218.122 shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).
- b. Pursuant to 35 Ill. Adm. Code 218.920(d), no limits under 35 Ill. Adm. Code 218 Subpart PP shall apply to emission units with emissions of VOM to the atmosphere less than or equal to 0.91 Mg (1.0 ton) per calendar year if the total emissions from such emission units not complying with 35 Ill. Adm. Code 218.926 does not exceed 4.5 Mg (5.0 tons) per calendar year, provided that this provision shall not apply to an emission unit which is a leather coating line or operation at a source where the criteria of 35 Ill. Adm. Code 218.920(a) are not met.
- c. Pursuant to 35 Ill. Adm. Code 218.940(d), no limits under 35 Ill. Adm. Code 218 Subpart QQ shall apply to emission units with emissions of VOM to the atmosphere less than or equal to 2.3 Mg (2.5 tons) per calendar year if the total emissions from such emission units not complying with 35 Ill. Adm. Code 218.940 does not exceed 4.5 Mg (5.0 tons) per calendar year.
- 8a. The oxidizers (catalytic and catalytic thermal) shall be in operation at all times that the associated emission units are in operation. The oxidizers shall not be seasonally shut down as would be allowed under 35 Ill. Adm. Code 218.107.
- b. The oxidizer combustion chambers shall be preheated to the temperature at which compliance was demonstrated during the most recent performance test or to at least the manufacturer's recommended temperature of 1,400°F in the absence of a compliance test. This temperature shall be maintained during operation of the associated emission units.
- c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the oxidizers such that the oxidizers are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- d. The oxidizers shall only be operated with natural gas as the fuel. The use of any other fuel in the oxidizers 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.

9a. Emissions and operation of the heat barrier coating operation shall not exceed the following limits:

- i. The catalytic oxidizer controlling the heat barrier application shall be operated to achieve at least 94% overall control of VOM emissions.
- ii. Emissions and operation of the heat barrier coating shall not exceed the following limits:

<u>Material Used</u>	<u>Usage</u>		<u>VOM Emissions</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Glass Coating	25,417	305,000	2.00	24.00

These limits define the potential emissions from the heat barrier coating operations and are based on maximum VOM content, and the catalytic oxidizer having a capture efficiency of 95% and a control efficiency of 99%.

b. Emissions and operation of the mixing and coating operations shall not exceed the following limits:

- i. The catalytic oxidizer controlling the mixing and coating operations shall be operated to achieve at least 95% overall control of VOM emissions.
- ii. Emissions and operation of the mixing and coating operations, including clean-up solvents, shall not exceed the following limits:

<u>Volatile Organic Material Usage</u>		<u>Volatile Organic Material Emissions</u>	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
33.75	405	1.69	20.25

These limits are based on the maximum operating rate and overall reduction of VOM emissions by at least 95% (capture system and destruction of VOM by the oxidizer).

c. Emissions and operation of all natural gas combustion equipment combined shall not exceed the following limits:

- i. Natural Gas Usage: 4 mmscf/month, 41 mmscf/year.
- ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(lbs/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84.0	0.17	1.72
Nitrogen Oxides (NO <sub>x</sub> )	100.0	0.20	2.05

<u>Pollutant</u>	<u>Emission Factor (lbs/mmscf)</u>	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Particulate Matter (PM)	7.6	0.02	0.16
Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.01	0.01
Volatile Organic Material (VOM)	5.5	0.01	0.11

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

- d. This permit is issued based on negligible emissions of VOM and HAP from the methanol tank and the n-propanol tank. For this purpose, emissions from each tank shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
  - i. These limits are based on the maximum throughput of the tanks and use of the TANKS Emissions Estimation Software (Version 4.09D, October 3, 2005).
  - ii. The above limitations are being established in this permit pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203. The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the VOM emissions from the affected the methanol tank and the n-propanol tank below the levels that would trigger the applicability of these rules.
- e. Emissions and operation of from the glass cutting and tempering lines #1 and #2 shall not exceed the following limits:

<u>Emission Unit</u>	<u>Hours of Operation (Hours/Year)</u>	<u>SO<sub>2</sub> Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Glass Tempering Furnaces	4,608	0.8	1.84

These limits are based on the maximum sulfur dioxide gas usage, the maximum hours of operation, and a material balance.

- 10. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the 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.
- 11a. 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 12 and 13 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 12a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.
- b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

- c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.
  - d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.
  - e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 13a. Pursuant to 35 Ill. Adm. Code 218.928(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.926, the owner or operator of a VOM emission unit subject to the requirements of this 35 Ill. Adm. Code 218 Subpart PP shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.
- b. Pursuant to 35 Ill. Adm. Code 218.948(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.946, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code 218 Subpart QQ shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.
- 14a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(ii), an owner or operator that uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor for each afterburner which has a catalyst bed, commonly known as a catalytic afterburner, the temperature rise across each catalytic afterburner bed or VOM concentration of exhaust.
- b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of  $\pm 1$  percent of the temperature measured in degrees Celsius or  $\pm 0.5^\circ$  C, whichever is greater.

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.
16. 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.
- 17a. Pursuant to 35 Ill. Adm. Code 218.129(f), the owner or operator of each storage vessel specified in 35 Ill. Adm. Code 218.119 shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of 35 Ill. Adm. Code Part 218 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.
- b. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall collect and record all of the following information each day and maintain the information at the source for a period of three years:

- i. Control device monitoring data.
  - ii. A log of the operating time for the capture system, control device, monitoring equipment and the coating operation.
  - iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- c. Pursuant to 35 Ill. Adm. Code 218.991(b)(2), any owner or operator of a coating line which is subject to the requirements of 35 Ill. Adm. Code 218 Subpart PP or TT and complying by means of the daily-weighted average VOM content limitation shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
- i. The name and identification number of each coating as applied on each coating line;
  - ii. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line; and
  - iii. The daily-weighted average VOM content of all coatings as applied on each coating line as defined in 35 Ill. Adm. Code 218.104.
- 18a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
    - A. 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;
    - B. 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
    - C. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.

- ii. Records addressing use of good operating practices for the catalytic and catalytic thermal oxidizers:
    - A. Records for periodic inspection of the catalytic and catalytic thermal oxidizers 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.
  - iii. The name and identification number of each coating and cleanup solvent as applied;
  - iv. Coating usage for the heat barrier application (gallons/month and gallons/year);
  - v. Coating usage for the coating spray booth (gallons/month and gallons/year).
  - vi. The weight of VOM and HAP per volume of each coating and cleanup solvent as applied (pounds/gallon);
  - vii. Natural gas fuel usage for the fuel combustion equipment (mmscf/month and mmscf/year);
  - viii. Throughput of material for each methanol and n-propanol storage tank (gallons/month and gallons/year);
  - ix. Operating hours for the tempering furnaces (hours/month and hours/year); and
  - x. Monthly and annual emissions of CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOM and HAPS 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) 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.
19. 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.

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. Pursuant to 35 Ill. Adm. Code 218.991(a)(3), any owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall notify the Illinois EPA in the following instances:
  - i. Any record showing a violation of the requirements of 35 Ill. Adm. Code 218 Subpart PP, QQ, RR or TT shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
  - ii. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(b)(1). Upon changing the method of compliance with 35 Ill. Adm. Code 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(b).
- b. Pursuant to 35 Ill. Adm. Code 218.991(b)(3), any owner or operator of a coating line which is subject to the requirements of 35 Ill. Adm. Code 218 Subpart PP or TT and complying by means of the daily-weighted average VOM content limitation shall notify the Illinois EPA:
  - i. Of a violation of the requirements of 35 Ill. Adm. Code 218 Subpart PP or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;
  - ii. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code 218 Subpart PP or TT from the use of complying coatings to the use capture systems and control devices, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code 218 Subpart PP or TT from the use of complying coatings to the use capture systems and control devices, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

20. 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 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

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

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

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

ECB:JPB:psj

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the heat barrier glass coating and mixing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (e.g., 100 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for any combination of such HAP) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)						Single <u>HAP</u>	Total <u>HAPs</u>
	<u>CO</u>	<u>NO<sub>x</sub></u>	<u>PM</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>			
Heat Barrier Coating					24.00			
Mixing And Coating Operations					20.25			
Natural Gas Combustion	1.72	2.05	0.16	0.01	0.11			
Methanol Tank					0.44	0.44	0.44	
n-Propanol Tank					0.44			
Glass Cutting and Tempering Lines	----	----	----	1.84	-----	----	----	
Totals	1.72	2.05	0.16	1.85	45.24	9.0	22.5	

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