217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

PERMITTEE

Hunter Panels, LLC
Attn: Vincent Loiacono
9201 Belmont Avenue
Franklin Park, Illinois 60131

Application No.: 99070002 I.D. No.: 031096ANG
Applicant's Designation: Date Received: November 23, 2011
Subject: Insulated Foam Panels Manufacturing Plant
Date Issued: April 16, 2012 Expiration Date: May 7, 2014
Location: 9201 Belmont Avenue, Franklin Park, Cook County, 60131

This Permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of one (1) foam insulation board manufacturing line controlled by a regenerative thermal oxidizer (RTO) and one (1) 30,000 gallon pentane pressure storage tank pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This federally enforceable state operating permit is issued:

i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for Volatile Organic Materials (VOM)). 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 emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year to less than 15 tons. This limitation is established at the request of the source to exempt it from the requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 Ill. Adm. Code 205.205, except reporting requirements of 35 Ill. Adm. Code 205.300.

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 212.309(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.

f. 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.

g. 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.

h. 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).

3a. 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).

b. 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;

c. 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
All other cleaning operations not subject to a specific limitation in 35 Ill. Adm. Code 218.187(b)(1)(a) through (b)(1)(D)	0.050	0.42

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.

d. 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 apply only to photochemically reactive material.

e. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent

methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water; or,

4. This permit is issued based on the pentane storage tank not being subject to the New Source Performance Standards (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(d)(2), 40 CFR 60 Subpart Kb does not apply to pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.

5. 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.

6a. 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. This permit is issued based upon foam insulation boards manufacturing process not being subject to control requirements of 35 Ill. Adm. Code Part 218, Subpart TT: Other Emission Units. Pursuant 35 Ill. Adm. Code 218.980(f), the control requirements in 35 Ill. Adm. Code 218 Subpart TT shall not apply to production of polystyrene foam insulation board including storage and extrusion of scrap where blowing agent is added to the polystyrene resin at the source, but not including blending and preliminary expansion of resin prior to molding where blowing agent is incorporated into the polystyrene resin by the producer of the resin.

7a. 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).

b. 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.

8a. The foam insulation board manufacturing line shall be operated with pentane* as the blowing agent. The use of any blowing agent containing photochemically reactive VOM or HAP material will require a construction permit from the Illinois EPA.

* Pursuant to 35 Ill. Adm. Code 211.4690 pentane is not photochemically reactive material.

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.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the regenerative thermal oxidizer (RTO) such that the regenerative thermal oxidizer (RTO) is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. The a regenerative thermal oxidizer’s (RTO) combustion chamber shall be preheated to at least the manufacturer’s recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation.

9a. Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not exceed 15 tons. This limitation is established at the request of the source to exempt it from the requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 Ill. Adm. Code 205.205.

b. In the event that the source’s VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from 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.

10a. Operation and emission of VOM from insulated foam boards manufacturing line, board and board scrap storage operations shall not exceed the following limits:

Pentane Usage (Tons/Month)	Pentane Usage (Tons/Year)	Emission Factor (weight %)	VOM Emissions (Tons/Month)	VOM Emissions (Tons/Year)
280	2,835	1.65(controlled) 8.1 (uncontrolled)	4.6	46.8

* Total uncontrolled emissions shall be calculated as 8.1% of pentane feed rate

These limits are based on the maximum board production rate, emission factor derived from the stack test performed at another plant owned by the Permittee for the worst case product.

b. This permit is issued based on negligible emissions of volatile organic materials from the pentane storage tank and warehouse board storage. For this purpose, emissions from each emission unit shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

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).

11. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program (CAAPP) Permit.

12a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

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

13. 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.

14a. 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)(4), for afterburners and carbon adsorbers, the methods and procedures of 35 Ill. Adm. Code 218.105(d) through (f) shall be used for testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218.187(b)(3), as follows:

i. To select the sampling sites, Method 1 or 1A, as appropriate, 40 CFR 60, Appendix A;

ii. To determine the volumetric flow rate of the exhaust stream, Method 2, 2A, 2C, or 2D, as appropriate, 40 CFR 60, Appendix A;

iii. To determine the VOM concentration of the exhaust stream entering and exiting the emissions control system, Method 25 or 25A, as appropriate, 40 CFR 60, Appendix A. For thermal and catalytic afterburners, Method 25 must be used except under the following circumstances, in which case Method 25A must be used:

A. The allowable outlet concentration of VOM from the emissions control system is less than 50 ppmv, as carbon;

B. The VOM concentration at the inlet of the emissions control system and the required level of control result in exhaust concentrations of VOM of 50 ppmv, or less, as carbon; and

C. Due to the high efficiency of the emissions control system, the anticipated VOM concentration at the emissions control system exhaust is 50 ppmv or less, as carbon, regardless of inlet concentration. If the source elects to use Method 25A under this option, the exhaust VOM concentration must be 50 ppmv or less, as carbon, and the required destruction efficiency must be met for the source to have demonstrated compliance. If the Method 25A test results show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, a retest is required. The retest shall be conducted using either Method 25 or Method 25A. If the retest is conducted using Method 25A and the test results again show that the required destruction efficiency apparently has been met, but the exhaust concentration is above 50 ppmv, as carbon, the source must retest using Method 25;

iv. During testing, the cleaning equipment shall be operated at representative operating conditions and flow rates;

15a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2), an owner or operator:

i. 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 does not have a catalyst bed, the combustion chamber temperature of each afterburner.

ii. 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 ± 1 percent of the temperature measured in degrees Celsius or ± 0.5°C, whichever is greater.

b. Pursuant to 35 Ill. Adm. Code 218.187(f)(1), if an afterburner is used to demonstrate compliance, the owner or operator of a source subject to 35 Ill. Adm. Code 218.187(b)(3) shall:

i. Install, calibrate, operate, and maintain temperature monitoring devices with an accuracy of 3°C or 5°F on the emissions control system in accordance with 35 Ill. Adm. Code 218.105(d)(2) and in accordance with the manufacturer's specifications. Monitoring shall be performed at all times when the emissions control system is operating; and

ii. Install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring devices, such as a strip chart, recorder or computer, with at least the same accuracy as the temperature monitor;

16. 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.

17. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

18a. 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 218.187(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 subsection (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)(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.

19a. 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 regenerative thermal oxidizer (RTO):

A. Control devices monitoring data;

B. A log of operating time for the control devices, monitoring devices, and the associated production line;

C. A maintenance log for the control and monitoring devices detailing all routine and non-routine maintenance performed, including dates and duration of any outages.

D. Records for periodic inspection of the regenerative thermal oxidizer with date, individual performing the inspection, and nature of inspection; and

E. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. Board production rate with and without control devices (tons/month, tons/year);

iii. Pentane usage with and without control devices (tons/month, tons/year); and

iv. Monthly and annual VOM and HAP emissions, with and without control devices, with supporting calculations (tons/month, 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 the Illinois EPA or USEPA request for records during the course of a source inspection.

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 218.187(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 218.187pursuant 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.

22a. 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. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by October 31 of each year, reporting actual

emissions of VOM during the seasonal allotment period, in accordance with 35 Ill. Adm. Code 205.205(b) and 35 Ill. Adm. Code 205.300.

c. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance and Enforcement Section (#40)
P.O. Box 19276
Springfield, IL 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 - Regional Office
9511 West Harrison
Des Plaines, Illinois 60016

It should be noted that this permit has been revised to reflect replacement of emission control system on foam insulation board manufacturing line with regenerative thermal oxidizer.

If you have any questions on this, please call Valeriy Brodsky at 217/785-1705.

Edwin C. Bakowski, P.E. Date Signed: _____
Manager, Permit Section
Division of Air Pollution Control

ECB:VJB:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the foam insulation boards manufacturing plant in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emission is below the level (e.g., 100 tons/year for VOM), 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 used and control measures are more effective than required in this permit.

Emission Units	VOM Emissions (Tons/Year)
Insulation board manufacturing line	46.80
Pentane Storage Tank	0.44
Board Storage Operation	0.44
Total	47.70

Attachment B - Emissions Reduction Market System (ERMS)

1. Description of ERMS

The ERMS is a “cap and trade” market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the Clean Air Act.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold “allotment trading units” (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' FESOP or CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account’s balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources’ transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 Ill. Adm. Code 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 Ill. Adm. Code 205.500 and 35 Ill. Adm. Code 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the “Alternative Compliance Market Account” (ACMA) (35 Ill. Adm. Code 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 Ill. Adm. Code 205.630).

2. Applicability

Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not exceed 15 tons, not including VOM emissions from insignificant emission units and activities. This limitation is established at the request of the source to exempt it from the requirements of 35 Ill. Adm. Code Part

205, Emissions Reduction Market System (ERMS), pursuant to 35 Ill. Adm. Code 205.205.

3. Recordkeeping and Reporting

a. The Permittee shall maintain the following records to determine compliance with the above limitation:

i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in this permit, 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, which may be specified in this permit; and

iii. Total VOM emissions from the source, in tons, during each seasonal allotment period.

b. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by October 31 of each year, reporting actual emissions of VOM during the seasonal allotment period, in accordance with 35 Ill. Adm. Code 205.205(b) and 35 Ill. Adm. Code 205.300.

c. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and shall immediately comply with 35 Ill. Adm. Code Part 205, including holding allotment trading units (ATUs) for its VOM emissions during the first seasonal allotment period it exceeds 15 tons and each seasonal allotment period, thereafter, pursuant to 35 Ill. Adm. Code 205.150(c).