

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

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

<u>Application No.:</u> 99070002	<u>I.D. No.:</u> 031096ANG
<u>Applicant's Designation:</u>	<u>Date Received:</u> May 23, 2006
<u>Subject:</u> Insulated Foam Panels Manufacturing Plant	
<u>Date Issued:</u> May 7, 2009	<u>Expiration Date:</u> May 7, 2014
<u>Location:</u> 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 regenerative adsorber with catalytic afterburner controlling desorption cycle 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 permits issued 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 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 212.301, 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 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 212.321(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 218.122(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 apply only to photochemically reactive material.
- c. Pursuant to 35 Ill. Adm. Code 218.302, emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:
- i. 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,
 - ii. A vapor recovery system which adsorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere; 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. 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. The control system adsorber/catalytic afterburner shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.
- c. 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.

- d. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the regenerative adsorber with catalytic afterburner such that the regenerative adsorber with catalytic afterburner is kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- 8a. 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		Emission Factor	VOM Emissions	
(Tons/Month)	(Tons/Year)	(wt. %)	(Tons/Month)	(Tons/Year)
280	2,835	1.65	4.6	46.8

These limits are based on the maximum board production rate, emission factor derived from the stack test performed at the plant 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).
- 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.
- 10. 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.
- 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 Condition 12 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
12. 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.
 13. The catalytic afterburner shall be equipped with monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications. The monitoring equipment must continuously monitor and record the temperature rise across catalytic afterburner bed. These records shall also be analyzed daily for monitoring of zeolite adsorber performance. Any absence or inadequate temperature rise across catalyst bed during normal operations shall be investigated.
 14. 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.

15. 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.
- 16a. 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 adsorber with catalytic afterburner:
 - 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 adsorber with catalytic afterburner 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 (tons/month, tons/year);
 - iii. Pentane usage (tons/month, tons/year); and
 - iv. Monthly and annual VOM and HAP emissions, 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) 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.
17. 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.
- 18a. 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:

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Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
9511 West Harrison
Des Plaines, Illinois 60016

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

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

Date Signed: _____

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. This is usage of less than 2,835 tons of blowing agent, pentane, per year. The resulting maximum emission is below the level (e.g., 100 tons per year of 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.

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

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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).

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