



- c. 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.
- d. 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).
- 3. Pursuant to 35 Ill. Adm. Code 215.301, 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 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K shall apply only to photochemically reactive material.
- 4. 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 nuisance.
- 5a. VOM and R-22 emissions from insulated boards manufacturing process shall not exceed 10.0 tons/month, 88.0 tons/year and 3.5 tons/month, 35.0 tons/year, respectively.
  - i. Emissions from the insulated boards manufacturing process should be calculated using the following equation:

$$E_i = \sum [L_i \times (C_i + F_i + R_i)]$$

Where:

$E_i$  = VOM Emissions (lb);

$L_i$  = Foam Board i-Type Production ( $10^3$  board-feet);

$C_i$  = VOM Blowing Agent Emission Factor For i-Type Board (lb/ $10^3$  board-feet);

$F_i$  = Fire Retardant Emission Factor For i-Type Board (lb/ $10^3$  board-feet); and

$R_i$  = R-22 Blowing Agent Emission Factor For i-Type Board (lb/ $10^3$  board-feet)

- ii. The following values of  $C_i$ ,  $F_i$  and  $R_i$  (lb/10<sup>3</sup> board-feet) for the following types of products shall be used as determined by the most recent stack test (January 2004):

<u>Product Family</u>	<u>Board Thickness</u>	<u>C<sub>i</sub></u>	<u>F<sub>i</sub></u>	<u>R<sub>i</sub></u>
Thermax/Tuff-R	≤1"	0.62	0.21	--
Thermax/Tuff-R	1" - 3"	0.56	0.16	--
Thermax/Tuff-R	> 3"	0.40	0.16	--
Sturdy-R/Quik-R	≤0.75"	1.3	--	1.1
Sturdy-R/Quik-R	> 0.75"	1.1	--	0.85

- iii. These limits are based on the blowing agent usage, composition and operational conditions consistent with those during the stack test. If a new blowing agent composition (containing new components or differing more than 10% by weight of major component from currently used) is introduced or any other changes occurs in the production process the Permittee shall perform a stack test and revise operating permit to implement a new emission factor.

- b. This permit is issued based on negligible emissions of particulate matter from the board trimming/cutting operations. For this purpose emission shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- c. Emissions and operation of the laminating machine shall not exceed the following limits:

<u>VOM Usage</u>		<u>VOM Emissions</u>	
<u>(Ton/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Tons/Yr)</u>
0.3	2.4	0.3	2.4

These limits are based on the maximum laminating adhesive usage, the maximum VOM content of adhesive (2 % by weight), and 8,760 hours per year of operation.

- d. Compliance with annual limits 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).
- 6. 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 of Section 112(g) of the Clean Air Act.
- 7a. 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 8 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 8a 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.
9. 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.
  10. 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.

- 11a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. Production rate of each type of insulation board ( $10^3$  board-feet/month,  $10^3$  board-feet/year);
  - ii. Blowing agent usage (tons/month, tons/year) of each type in each type of product;
  - iii. Blowing agent composition (wt. % of each component);
  - iv. Laminating adhesive usage (tons/month, tons/year);
  - v. The VOM and HAP content of laminating adhesive (wt.%); and
  - vi. Monthly and annual VOM, HAP and R-22 emissions from the source with supporting calculations (tons/month, 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.
12. 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.
13. 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.
14. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

It should be noted that this permit has been revised to include operation of the equipment described in Construction Permit 08040043.

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

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

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

ECB:VJB:jws

cc: Illinois EPA, FOS Region 3  
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the Insulated Foam Panels Manufacturing Plant 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 the plant. The resulting maximum emissions are below the levels (e.g., 100 tons/year of volatile organic materials and R-22 (HCFC-22), Class II substance regulated under Clean Air Act) 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 material is handled, and control measures are more effective than required in this permit.

<u>Process</u>	<u>Emissions (ton/yr)</u>		
	VOM	R-22	PM
Board Manufacturing (including board cutting)	88.0	35.0	--
Laminating Machine	2.4		
Board Cutting			0.44
Total	90.4	35.0	0.44

VJB:jws