Permittee:
Firestone Building Products Company
6831 Stuart Ave.
Jacksonville, FL 32254

FINAL Permit No.: 0310486-009-AC
Facility ID No.: 0310486
SIC No(s): 30
Project: Foam Insulation Manufacturing Facility

This permit is for the modification of the existing foam insulation board manufacturing process to replace the existing laminator with a new laminator. This facility is located at 6831 Stuart Ave., Jacksonville, Duval County, FL 32254; UTM Coordinates: Zone 17, 426.92 km East and 3354.07 km North; Latitude: 30° 19' 05" North and Longitude: 81° 45' 36" West.

This permit is issued under the provisions of Chapter 403, Florida Statutes (FS) and Florida Administrative Code (FAC) Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Environmental and Compliance Department, Environmental Quality Division (Permitting Authority) in accordance with the terms and conditions of this permit.

***Operation Permit Application Due Date: August 1, 2011**
Expiration Date: October 30, 2011

Environmental and Compliance Department
Environmental Quality Division

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Robert Steven Pace, P.E., Manager
Air Quality Branch

*****See Section II. Facility Wide Conditions, Subsection B. Specific Conditions, Specific Condition No. 9

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Section I. Facility Information

Subsection A. Facility/Project Description

This permit if for the replacing of the existing laminator with a new laminator, which will increase the maximum potential operating speed of the manufacturing line. The maximum production rate will be increased from 10,600 pounds of foam board per hour to 12,900 pounds of foam board per hour. The total annual foam board production will be limited to 457 million board feet. The current control equipment, a regenerative thermal oxidizer and dust collector will not change as a result of this project.

The facility operates a foam insulation board manufacturing process. Operations at the facility include unloading and storage of methylene di-p-phenylene isocyanate (MDI), polyol, and pentane; material blending; panel production and cutting; and product storage.

Pentane, used as a blowing agent, is stored in a 20,000-gallon tank. The tank will be maintained under pressure and vented back to the supply tanker during loading. Ventilation hoods are installed on the board laminator. Volatile Organic Compounds (VOC) emissions collected by the ventilation hoods are ducted to a regenerative thermal oxidizer. Board cutting sawdust is collected in a dust collector. VOC emissions from the board cutting saw are emitted from the dust collector.

The facility is a synthetic minor source of air pollution because the operational limit assumed by the owner will limit the potential emissions of any regulated air pollutant to less than 100 tons per year and the potential emissions of Hazardous Air Pollutants (HAP) to less than 10 tons per year for a single HAP and less than 25 tons per year for total HAPs pursuant to Chapter 62-210, FAC, and Rule 2.301, JEPB.

Subsection B. Summary of Emission Unit (EU) ID Nos. and Brief Descriptions

EU No.	EU Description	Control Device
001	Foam Insulation Board Manufacturing	Regenerative Thermal Oxidizer Model R10-V1
002	Board Cutting Operation	Flex-Kleen Model No. 84-WSTS – 169 Dust Collector

Subsection C. Relevant documents

Air construction permit application received September 1, 2009
Federally Enforceable State Operating Permit (FESOP) No. 0310486-008-AF

Section II. Facility Wide Conditions

Subsection A. General Conditions

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Permitting Authority will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific process and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits,

specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Permitting Authority.

3. As provided in subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Permitting Authority permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Permitting Authority's rules, unless specifically authorized by an order from the Permitting Authority.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Permitting Authority's rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Permitting Authority's rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Permitting Authority personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
    a. Have access to and copy any records that must be kept under conditions of the permit;
    b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
    c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Permitting Authority's rules.

    Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Permitting Authority with the following information:
    a. A description of and cause of noncompliance; and
    b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Permitting Authority for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Permitting Authority may be used by the Permitting Authority as evidence in any

enforcement case involving the permitted source arising under the Florida Statutes or Permitting Authority's rules, except where such use is prescribed by Sections 403.111 and 403.73, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Permitting Authority's rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Permitting Authority's rules.

11. This permit is transferable only upon Permitting Authority approval in accordance with Rules 62-4.120 and 62-730.300, FAC, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Permitting Authority.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:
    ( ) Determination of Best Available Control Technology (BACT)
    ( ) Determination of Prevention of Significant Deterioration (PSD)
    ( ) Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
    ( ) Compliance with New Source Performance Standards

14. The permittee shall comply with the following:
    a. Upon request, the permittee shall furnish all records and plans required under Permitting Authority's rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Permitting Authority.
    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by this permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Permitting Authority's rule.
    c. Records of monitoring information shall include:
        1. The date, exact place, and time of sampling or measurements;
        2. The person responsible for performing the sampling or measurements;
        3. The date(s) analyses were performed;
        4. The person responsible for performing the analyses;
        5. The analytical techniques or methods used;
        6. The results of such analyses.

15. When requested by the Permitting Authority, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Permitting Authority, such facts or information shall be corrected promptly.
    [Rule 62-4.160, FAC, and Rule 2.1301, Jacksonville Environmental Protection Board (JEPB)]

Subsection B. Specific Conditions

1. Permittee shall notify the Permitting Authority fifteen (15) days prior to EU testing.

[Rule 62-297.310(7)(a)(9), FAC, and Rule 2.1101, Jacksonville Environmental Protection Board (JEPB)]

2. Copies of the test report(s) shall be submitted to the Permitting Authority within forty-five (45) days of completion of testing.
[Rule 62-297.310(8)(b), FAC, and Rule 2.1101, JEPB]

3. Testing of emissions shall be conducted with the EU operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then EU may be tested at less than capacity; in this case subsequent EU operation is limited to 110 percent of the test load until a new test is conducted. Once the EU is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.
[Rule 62-297.310(2), FAC, and Rule 2.1101, JEPB]

4. Any revision(s) to a permit (and application) shall be submitted to and approved by the Permitting Authority prior to implementing.
[Rule 62-4.080(2), FAC, and Rule 2.1301, JEPB]

5. Control equipment shall be provided with a method of access that is safe and readily accessible.
[Rule 62-297.310(6), FAC, and Rule 2.1101, JEPB]

6. Stack sampling facilities shall comply with the requirements of Rule 62-297.310(6), FAC, and Rule 2.1101, JEPB.

7. Permittee shall submit an annual operation report to the Permitting Authority for this (these) emission unit(s) on the form(s) supplied for each calendar year on or before April 1.
[Rule 62-210.370(3), FAC, and Rule 2.301, JEPB]

8. VOC emissions (facility wide) shall not exceed 99.0 tons per year on a 12 month rolling total. Monthly VOC emissions shall be determined by using the latest VOC testing results (forming process and cutting operation) and by using the best available VOC emission factors (board storage and VOC storage tanks).
[Rule 62-210.200(203), FAC, Rule 2.301, JEPB, and applicant's request]

9. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance records and test results, to the Permitting Authority ninety (90) days prior to the expiration date of the construction permit, but no later than 180 days after completion of construction, whichever occurs first. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate.
[Rule 62-210.300(2), FAC, and Rule 2.301, JEPB.]

10. <u>Source Obligation:</u>
    a. Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to

the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Permitting Authority in the permit.

b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), FAC, shall apply to the source or modification as though construction had not yet commenced on the source or modification.

c. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), FAC., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), FAC and Rule 2.401, JEPB]

11. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by rule, inspection, or change in process the owner or operator shall submit a Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.

b. The owner or operator shall report to the Department of Community Affairs (DCA) within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the USEPA/Chemical Safety Hazard Investigation Board or the National Response Center under Section 112(r)(6).

c. The owner or operator shall submit the required annual registration fee to the DCA upon initial submission of the RMP to the CEPPORMP reporting center and on April 1 annually thereafter, in accordance with Part IV, Chapter 252, FS, and Rule 9G-21, FAC.

Any required written reports, notification, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: (850) 413-9921, FAX: (850) 488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 10162
Fairfax, VA 22038
Telephone: (703) 227-7650

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)

401 M Street, SW
Washington, D.C. 20460
Telephone: 1-800-424-8802

12. The permittee shall submit all compliance related notifications and reports required of this permit to:

Environmental and Compliance Department
Environmental Quality Division
407 North Laura Street, Third Floor
Jacksonville, FL 32202
Telephone: (904) 255-7100
Fax: (904) 588-0518

Section III. Emission Units and Conditions

Emission Unit No. 001- Foam Insulation Board Manufacturing

Emission Unit Description: Foam insulation is made by combining two raw material streams or "sides". The "A Side" consists of methylene di-p-phenylene isocyanate (MDI) only. The "B Side" consists of a mixture of polyester resin (polyol), additives, and pentane. The two sides are combined at the laydown nozzle, which begins a reaction that creates foam. The foam is enclosed in top and bottom paper backings to form continuous length panel, which is introduced into a heated pressure conveyor (laminator). The conveyor is enclosed and has one ventilation hood at the inlet end and one at the exit. The hoods carry VOC emissions to a regenerative thermal oxidizer (RTO). VOC emissions are also released from the Board Cutting Operation, the Insulation Board Storage Operation and the VOC storage tanks.

Control Device – Model R10-V1 Regenerative Thermal Oxidizer

Essential Potential to Emit (PTE) Parameters

1. The maximum foam board production rate shall not exceed 12,900 pounds per hour and 457 million board feet per year.
   [Rule 62-210.200(203), FAC, and Rule 2.301, JEPB]

2. This emissions unit is allowed to operate continuously, i.e., 8,760 hours per year.
   [Rule 62-210.200(203), FAC, and Rule 2.301, JEPB]

Emission Limitations and Standards

3. The minimum VOC destruction efficiency of the Thermal Oxidizer shall be 95%.
   [Rule 62-4.070(3), FAC, and Rule 2.1301, JEPB]

4. The RTO shall operate at all times when the manufacturing line is operating.
   [Rule 4.070(3), FAC and Rule 2.1301, JEPB}

Test Methods and Procedures

5. RTO Destruction efficiency testing for demonstration of compliance shall be performed in accordance with EPA RM 25 or 25A (as described in 40 CFR 60, Appendix A) for volatile organic compounds.
   [Rule 62-297.401(25), FAC, and Rule 2.1101, JEPB]

6. VOC mass rate used during test, VOC mass flow rate and VOC concentrations at the inlet and outlet of the Thermal Oxidizer shall be measured simultaneously to determine the RTO destruction efficiency.
   [Rule 62-4.070(3), FAC, and Rule 2.1301, JEPB]

7. Testing for demonstration of compliance shall be conducted within 60 days after achieving permitted capacity, but no later than 180 days after initial operation of the unit following the construction of the new laminator.
   [Rule 62-4.070(3), FAC, Rule 62-297.310(7)(a)1, FAC, Rule 2.1301, JEPB and Rule 2.1101, JEPB]

Monitoring of Operations

8. The owner or operator shall install, calibrate, maintain, and operate a temperature measurement device for the thermal oxidizer's combustion chamber.
   [Rule 62-4.070(3), FAC, and Rule 2.1301, JEPB]

9. This EU shall not operate if the temperature in the thermal oxidizer combustion chamber is less than 1400 degrees Fahrenheit.
   [Rule 62-4.070(3), FAC, and Rule 2.1301, JEPB]

Recordkeeping and Reporting Requirements

10. The owner/operator shall maintain monthly records of the following:
    a. Amount of foam board produced (pounds per hour)
    b. Amount of all VOC and hazardous air pollutants (HAP) containing process substances used (gallons)
    c. VOC content of all VOC containing process substances used (pounds per gallon)
    d. HAP content of all HAP containing process substances used (pounds per gallon)
    e. VOC Emissions (tons per month)
    f. Individual HAP emissions (pounds per month)
    g. Total HAP emissions (pounds per month)

    Records shall be maintained for a minimum of five (5) years and made available to the Permitting Authority upon request.
    [Rule 62-4.070(3), FAC, and Rule 2.1301, JEPB]

11. Quarterly reports shall be submitted to the Permitting Authority describing the monthly usage of all VOC and HAP containing products; the VOC and HAP content of all products; the monthly total VOC and HAP emissions; and the amount of boards produced. The quarterly reports shall be submitted by the 30th day of the following month after the end of each quarter (January-March, April-June, July-September, and October-December). The final report, which is due by the 30th of January for the quarter October –December, shall include a synopsis of the preceding year.
    [Rule 62-4.070(3), FAC, and Rule 2.1301, JEPB]

12. An Operation and Maintenance Plan shall be part of this permit. All activities shall be performed as scheduled and recorded. Data shall be made available to the Permitting Authority upon request. Records shall be maintained on file for a minimum period of two (2) years.
    [Rule 62-4.070(3), FAC, and Rule 2.1301, JEPB]

Emission Unit No. 002 – Board Cutting Operation

Emission Unit Description - Board Cutting sawdust collection system. An exhaust pick-up is attached to the cutting area of the saw.

Control Device - Flex-Kleen Model No. 84-WSTS – 169 Dust Collector

Essential Potential to Emit (PTE) Parameters

1. This emissions unit is allowed to operate continuously, i.e., 8,760 hours per year.
   [Rule 62-210.200(203), FAC, and Rule 2.301, JEPB]

2. The nominal volumetric flow rate from this emissions unit is 11,000 cubic feet per minute.
   [Rule 62-210.200(203), FAC, and Rule 2.301, JEPB]

Emission Limitations and Standards

3. Particulate Matter (PM) emissions from the dust collector vent shall not exceed 0.03 grains per dry standard cubic feet, 2.83 pounds per hour and 12.40 tons per year.
   [Rule 62-296.712(2), FAC, and Rule 2.1001, JEPB]

4. Visible Emissions (VE) from the dust collector vent shall not exceed 5% opacity.
   [Rule 62-296.712(2), FAC, and Rule 2.1001, JEPB]

Test Methods and Procedures

5. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A), for the determination of the PM emissions rate concentration.
   [Rule 62-296.712(3), FAC, and Rule 2.1001, JEPB]

6. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity.
   [Rule 62-296.712(3), FAC, and Rule 2.1001, JEPB]

7. Testing for demonstration of compliance shall be performed on the Dust Collector in accordance with EPA RM 25 or 25A (as described in 40 CFR 60, Appendix A) for volatile organic compounds.
   [Rule 62-297.401, FAC, and Rule 2.1101, JEPB]

8. Testing for demonstration of compliance shall be conducted within 60 days after achieving permitted capacity, but no later than 180 days after initial operation of the unit, following the construction of the new laminator.
   [Rule 62-4.070(3), FAC, Rule 62-297.310(7)(a)1, FAC, Rule 2.1301, JEPB and Rule 2.1101, JEPB]

Recordkeeping and Reporting Requirements

9. The attached Operation and Maintenance Plan shall be part of this permit. All activities shall be performed as scheduled and recorded. Data shall be made available to the Permitting Authority upon request. Records shall be maintained on file for a minimum period of two (2) years.
   [Rule 62-296.700(6), FAC, and Rule 2.1001, JEPB]