FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803

RICK SCOTT
GOVERNOR

JENNIFER CARROLL
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

Electronically Sent- Received Receipt Requested

FINAL PERMIT

PERMITTEE

Kingspan Insulated Panels, Inc.
725 Summerhill Drive
DeLand, FL 32724

Authorized Representative:
Mr. Marcos Garibay, Polymer Engineer

Air Permit No. 1270174-004-AC
Permit Expires: 01/31/2014
Kingspan Insulated Panels Facility
Minor Source Air Construction Permit
Project Name: Pyrolysis Oven Installation

This is the final air construction permit, which authorizes installation of pyrolysis oven. The proposed work will be conducted at the Kingspan Insulated Panels, Inc. (Standard Industrial Classification No. 3086). The facility is located in Volusia County at 725 Summerhill Drive in DeLand, Florida. The UTM coordinates are Zone 17, 471.67 km East, and 3215.32 km North.

This final permit is organized by the following sections:

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Facility-wide and Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Orange County, Florida

November 26, 2012

Caroline D. Shine
District Air Program Administrator
Central District

Date

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Permit and the Appendices) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on November 26, 2012 to the persons listed below.

Marcos Garibay, Polymer Engineer, Kingspan Insulated Materials (marcos.garibay@kingspan.com)
Sara Greivell, Environmental Scientist, Grove Scientific & Engineering Company, **(**sara@grovescientific.com)
James T. Show, P.E. (j_sshow@bellsouth.net)
Ana M. Oquendo, EPA, **(**oquendo.ana@epa.gov)

Clerk Stamp

FILED, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

November 26, 2012

(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

The existing facility consists of the following emissions units.

Facility ID No. 1270174	
ID No.	Emission Unit Description
001	Polyurethane Foam Panel Manufacturing Facility

Project Description

This project involves a pyrolysis oven installation to clean metal hangers that are used in the production process at the facility.

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- This facility is a synthetic non-Title V source for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs).

PERMIT HISTORY/AFFECTED PERMITS

New Construction Permit for a pyrolysis oven installation.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection, Central District Air Resource Management Section. The Central District's mailing address and phone number is:

   Florida Department of Environmental Protection
   Central District Office
   Air Resource Management Section
   3319 Maguire Blvd., Ste. 232
   Orlando, FL 32803-3767
   Telephone: 407-897-4100

   All documents related to applications for permits shall be submitted to the above address.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Central District Air Resource Management Section (see above mailing address and phone number)

3. Appendices: The following Appendices are attached as part of this permit:

   a. Appendix A. Citation Formats and Glossary of Common Terms;
   b. Appendix B. General Conditions; and,
   c. Appendix C. Common Conditions

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.
   [Rule 62-4.080, F.A.C.]

6. Modifications: Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.
   [Rules 62-210.200 - Definition of "Modification" and 62-210.300(1)(a), F.A.C.]

7. Annual Operating Report: On or before **April 1** of each year, the permittee shall submit a completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting

Facility" (AOR) for the preceding calendar year. The report may be submitted electronically in accordance with the instructions received with the AOR package sent by the Department, or a hardcopy may be sent to the Compliance Authority.
[Rule 62-210.370(3), F.A.C.]

8. Operation Permit Renewal Application: This permit authorizes construction or modification of the permitted emissions unit(s) and initial operation to determine compliance with Department rules. A Non-Title V air operation permit is required for continued operation of the permitted emissions unit(s). The permittee shall apply for a Non-Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation or commencing operation as modified. Commencing operation means setting into operation of any emissions unit for any purpose. To apply for a Non-Title V air operation permit, the applicant shall submit the following:

   a. the appropriate permit application form *(see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: http://www.dep.state.fl.us/air/)*;

   b. the appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.; and,

   c. copies of the most recent two months of records/logs specified in Specific Condition No(s). **A.7**.

   [Rules 62-4.030, 62-4.050, 62-4.070(3), 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]

A. EU 001 - Polyurethane Foam Panel Manufacturing

This section of the permit addresses the following emissions unit.

ID No.	
001	Polyurethane Foam Panel Manufacturing - The existing plant manufactures metal-laminated, polyurethane foam panels. These panels are used as an insulating material for buildings, roofs, refrigeration units, garage doors, etc. The metal received by the facility is inspected, embossed, and stored as a roll until ready to use. Two raw materials are currently used to make the foam core for the laminate. Isocyanate is used with the polyol compound. An 80/20 cyclopentane/isopentane mix acts as a blowing agent which, when sprayed, changes phase from a liquid to a gas and forms the closed-cell foam. This project involves the installation of a pyrolysis oven to clean metal hangers and metal pokers used in the foam panel production process. The hangers are coated with dried polyurethane foam and the metal pokers are coated with wet 4,4'- methyl diphnyl diisocyanate. The oven is a Pollution Control Products Co., gas-fired, Model IGG-71 with a maximum heat input rating of 3 million British thermal units per hour (MMBtu/Hr). The primary and secondary burners both operate continuously during the first stage of the cleaning process. A fine water spray controls the processing temperature until the pyrolysis stage of the cleaning process is over. Plastics and polymers that will melt are collected in a catch pan and drained from the furnace before it is allowed to pyrolyze. The remaining polymers is pyrolyzed to smoke which is controlled by the secondary combustion chamber with a minimum set point operating temperature of 1400°F and a maximum operating temperature of 1600°F.

PERFORMANCE RESTRICTIONS

A.1. Permitted Capacity: Material usage at the facility shall be limited to the following:

Material	Maximum Permitted Annual Usage
isocyanate	9,850 tons/consecutive 12 months
polyol	4,820 tons/consecutive 12 months
cyclo/isopentane	610 tons/consecutive 12 months

[Permit Application dated 10/15//2012 and Rule 62-210.200(PTE), F.A.C.]

A.2. Authorized Fuel: The oven is permitted to fire natural gas only.
[Permit Application dated 10/15//2012 and Rule 62-210.200(PTE), F.A.C.]

A.3 Restricted Operation: The hours of operation are not limited (8,760 hours per year).
[Permit Application dated 10/15//2012, Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

A.4. Emission Limits: The maximum facility-wide VOC emissions shall not exceed 40.0 tons per consecutive twelve months, total HAP emissions are limited to less than 25.0 tons per consecutive twelve months, and each individual HAP emission is limited to less than 10.0 tons per consecutive twelve months.
[Permit Application dated 10/15/2012, Rule 62-210.200, (PTE), F.A.C.]

A.5. Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity).
[Rule 62-296.320(b)1.F.A.C.]

NOTIFICATION REQUIREMENTS

A.6. Notification of Operation Commencement: The permittee shall notify the Compliance Authority in writing of the date of commencing operation of the pyrolysis oven no later than five (5) business days after that date. Commencing operation means setting into operation of any emissions unit for any purpose.
[Rule 62-4.070, F.A.C., and Rule 62-210.200, F.A.C., (Definition of Commence Operation)]

RECORDS AND REPORTS

A.7. Monthly Recordkeeping Requirement. In order to demonstrate compliance with Specific Conditions No. **A.1.** and **A.4.**, the permittee shall maintain a log at the facility for a period of at least five (5) years from the date the data is recorded. The log, at a minimum, shall contain the following:

Monthly

a. Date (month/year);
b. Consecutive twelve-month total of VOC emissions; and
c. Consecutive twelve-month total of single and combined HAP emissions

Monthly logs shall be completed by the end of the following month.

Note: A consecutive 12 month total is equal to the total for the month in question plus the totals for the eleven months previous to the month in question. A consecutive 12-month total treats each month of the year as the end of a 12-month period. A 12-month total is not a year-to-date total. Facilities that have not been operating for 12 months should retain 12 month totals using whatever number of months of data are available until such a time as a consecutive 12 month total can be maintained each month.
[Rules 62-4.070(3), F.A.C.]