


**INSPECTION REPORT FORM
AIR POLLUTION EMISSION SOURCES**

REVIEWED
By Caroline Shine at 11:09 am, Dec 18, 2012

Received 12/18/12

FACILITY: Kingspan Insulated Panels Facility		DISTRICT: Central District	COUNTY: Volusia
ADDRESS: 725 Summerhill Drive Deland, FL 32724		CONTACT: Marcos Garibay, Polymer Engineer 386-626-6789 ext. 2212 mgaribay@kingspanpanels.com	
AIRS# 1270174	PERMIT #: 1270174-003-AF 1270174-004-AC	EXPIRATION DATE: July 30, 2015 January 31, 2014	
SOURCE DESCRIPTION: Polyurethane Foam Manufacturer			
INSPECTION DATE: December 13, 2012	AUDIT TYPE: INS2	COMPLIANCE STATUS: In Compliance	
<p>INSPECTION COMMENTS/RECOMMENDATIONS:</p> <p>Wanda Parker-Garvin with FDEP visited the subject facility to perform a compliance inspection. She made contact with Mr. Marcos Garibay of Kingspan Insulated Panels. Mr. Garibay accompanied Ms. Parker-Garvin on a walk-through of the facility. The facility manufactures metal-laminated, polyurethane foam panels. The panels are used as an insulating material for buildings, roofs, refrigeration units, garage doors, etc. The metal that is received by the facility is inspected, embossed, and stored as a roll until ready to use. Two raw materials are used to make the foam core for the laminate. Isocyanate is used with the polyol compound and an 80/20 cyclopentane/isopentane mix acts as a blowing agent which, when sprayed, changes from a liquid to a gas and forms the closed-cell foam.</p> <p>Production of the foam panels begins by pre-heating two metal sheets which are conveyed along three existing production lines. Each continuous line has a burner that is used to heat the metal sheets. Natural gas is used to fuel the burners. As the metal is heated, the polyol, isocyanate and cyclo/isopentane are mixed together in a mixing head, and sprayed in an even layer between the warmed metal sheets. The mixing and the heat from the metal sheets force a reaction in which a solid, lightweight foam is created. Routers are used for cutting and sawing is performed in enclosed areas. Air from each area is vented to a baghouse and the exhaust air is discharged inside the facility.</p> <p>Ms. Parker-Garvin asked to review the facility records. Mr. Garibay provided the Saw Dust Collector Inspector Log, Pentane Delivery Tracking Log and stated the facility did not have emergency generators. Mr. Garibay emailed the Emissions Inventory to Ms. Parker-Garvin on December 15, 2012.</p> <p><u>Facility-wide Conditions</u> No objectionable odors were detected on or off facility property. No areas were observed where reasonable precautions were not used to prevent unconfined particulate emissions.</p> <p><u>Emissions Units and Conditions (December 2011 - November 2012)</u> The facility emitted 12.19 tons VOCs, 30.48% of the permit limit of 40.0 tons VOCs per 12-month period. The facility emitted 4.39 tons HAPs, 17.56% of the permit limit of 25.0 tons HAPs per 12-month period. The facility emitted 3.31 tons of HAPs, 33.1% of the permit limit is 10.0 tons of an individual HAPs per 12-month period. The facility used 778.6 mmBTU of natural gas in the burners and ovens.</p> <p>Based on the inspection and documentation provided, Ms. Parker-Garvin found the facility to be in-compliance.</p>			
INSPECTOR(S) NAME(S): Wanda Parker-Garvin			
SIGNATURE(S): 		DATE: December 17, 2012	