DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: Scheduled Inspection

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FACILITY: POLYGREEN FOAM LLC	SI

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LOCATION: 325 JAY ST, CO	LDWATER	DISTRICT: Kalamazoo
CITY: COLDWATER		COUNTY: BRANCH
CONTACT: Nick Babcock , Pl	ant Manager	ACTIVITY DATE: 05/13/2015
STAFF: Dale Turton	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT:		
RESOLVED COMPLAINTS:		

Staff conducted an unannounced inspection at the Poly Green Foam facility to determine compliance with Air Pollution Control Rules.

Staff met with Will Pattison, a company consultant and with Nick Babcock, plant manager. The facility uses recycled foam to produce underlayment mainly for playgrounds and sport fields. The production line is operating under PTI #48-09. Other equipment at the plant is operated under permit exemptions. The plant operates one shift per day. During the inspection, Staff observed the following:

Recycled foam made of mostly polyethylene and a small amount of polypropylene is received in bales, rolls and occasionally pre-ground. More than half of the material is received locally from Sekisui Voltek. The rest is received from various other sources.

Inclined conveyors take the foam to grinding machines. After grinding, the fines fall through a screen and are collected for disposal. The larger material is sent down the line and dropped into open storage bins.

The ground and sized material is transported to the production line by suction through a flexible vacuum hose. The material drops into a hopper after passing through a collection cyclone. The cyclone exhaust indoors. The hopper is located above the foam production line. Particulates from the hopper are control by filter socks that vent indoors.

A roll of thin polypropylene material similar to landscaping fabric is used as the underlayment and spooled into the line at about 10 ft/min. The hot melt adhesive is heated to about 350 °F and pumped into a holding pot, then applied to the fabric. The company is keeping records of the monthly adhesive usage as required in the permit (PTI #48-09). The permit appears to only cover the adhesive application.

A layer of ground foam pieces is then applied to the substrate. The foam is pressed onto the fabric by a series of rollers and goes into a natural gas-fired oven. The oven operates at a temperature of about 275 -280 °F. Warm 80 °F water is sprayed onto the product in a compartment after the oven to help stabilize the product and to cool down the product for handling. The steam created from the water contacting the hot blanket is exhausted to the outside via a vent stack. The oven appears to be exempt using Rule 282

The foam rolls are then trimmed, sized and shaved. The trimmings are re-ground and reused in the process. Lastly, the final product is sanded to smooth the surface. The dust is collected in filter socks which are exhausted indoors. This operation is exempt due to Rule 285(I)(vi)(B).

The facility is considered in compliance.

DATE 5/19/15 SUPERVISOR MQ 5/20/2015