

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

N182426017

FACILITY: MASCO BATH FKA AMERICAN SHOWER & BATH		SRN / ID: N1824
LOCATION: 693 SOUTH COURT STREET, LAPEER		DISTRICT: Lansing
CITY: LAPEER		COUNTY: LAPEER
CONTACT: Jeff Beach, Manager, Health Safety & Environmental		ACTIVITY DATE: 07/09/2014
STAFF: Brian Culham	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT:		
RESOLVED COMPLAINTS:		

Jeff Beach, Manager, Health Safety & Environmental; jeff.beach@deltafaucet.com

Masco Bath was recently acquired by Delta Faucets. The plant manufactures plastic bathroom components for bathtubs and showers. High Impact Polystyrene (HIP) beads are extruded into sheets that are vacuum formed into desired shapes.

Masco Bath is considered a minor source for all criteria pollutants and for hazardous air pollutants (HAPs). The production processes currently at the plant are exempt from the requirement to obtain a PTI.

On July 9, 2014, I conducted an unannounced scheduled inspection of Masco Bath. The reason for the inspection was to follow up on past complaints and to continue to work on resolution of reoccurring odor complaints received in the area. This was my first time inspecting this facility.

Past complaints for this facility included allegations of a clear to dark grey sticky fallout and odor. Samples were collected of the fallout material. Laboratory analysis of the fallout sample indicated that the material was an unknown polymer.

No.	Emission Unit Description	Regulation, Rule, Subpart	Operational Status
1	Plastic extrusion processes	Rule 286(a)	Compliance
2	Plastic thermal/vacuumforming processes	Rule 286(d)	Compliance
3	Cutting, trimming, routing, sanding, grinding, drilling, and carving of plastic.	Rule 285(l)(vi)(B)	Compliance
4	Spray on hot melt adhesive process	Rule 287(i)	Compliance
5	Hot melt glue process	Rule 287(i)	Compliance
6	Two plastic shredding/recycling machines.	Rule 285(l)(vi)(B)	Compliance

I arrived at Masco Bath, at 10:30 AM. I experienced no odors upon arrival, nor did I identify any opacity from any point associated with the plant. I met with Mr. Jeff Beach, Manager Health Safety & Environmental. He was recently hired and is still becoming familiar with operations. I explained to him that I needed to become familiar with Masco Bath operations because of ongoing odor complaints in the area and past allegations identifying Masco Bath.

Jeff Beach escorted me through the plant during my inspection. Some odors of hot plastics were evident in the production areas.

1. Plastic Extrusion Processes

Barrel or screw extruders compress High Impact Polystyrene beads causing an increase in their temperature. At over 200 ° F, HIP starts to flow and can be rolled into a continuous plastic sheet. In some applications a clear acrylic may be added over the sheet to increase luster. When cooled, the plastic "ribbon" is cut into sheets of the desired dimensions.

HIP becomes liquid at 464°F and decomposes at 575°F. It is my understanding that process temperatures at Masco Bath can reach 400°F., but the plastics are still maintained as a soft solid.

A visible condensing vapor was identified rising from the line in operation. The vapor appeared to be steam and rose inside the plant to a hood and exhaust system. Mat filters were installed in the hood. The filters appeared to be relatively clean and free of residue. Plant staff stated that the filters are changed periodically, but do not collect much.

The extrusion process and associated bead handling and storage are exempt from the need to obtain a Rule 201 Permit to Install by Rule 286(a).

2. Plastic Thermal/Vacuum Forming Processes

Extruded plastic sheets of the desired dimensions are inserted into forms or molds. The sheets are heated and pressed. In some cases a vacuum is applied to make the sheets conform to the shape. The processes exhaust into the general, in-plant environment.

The thermal forming processes are exempt from the need to obtain a Rule 201 Permit to Install by Rule 286(d).

3. Cutting, Trimming, Routing, Sanding, Grinding, Drilling, and Carving of Plastic.

Sheets are cut to desired dimensions. Plastic is trimmed from parts in a variety of locations. Some routing may be required to simulate a tile and grout appearance. These process are scattered about the plant and either exhaust in plant or through particulate control devices that exhaust in plant. The process are exempt from the need to obtain a Rule 201 Permit to Install by Rule 285(l)(vi)(B).

4. Spray on Hot Melt Adhesive process

There is a web spray booth, for spraying a hot melt adhesive onto sheets of plastic and foam, which are then pressed together. The process exhausts to the general, in-plant environment. Because the glue is hot melt adhesive, the process is exempt from the need to obtain a Rule 201 Permit to Install by Rule 287(i).

5. Hot Melt Adhesive

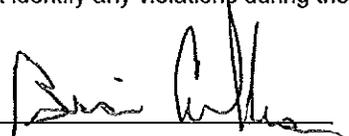
A number of hot melt glue processes were identified throughout the plant. Primarily they are used for packaging. Each one heats a small vat which contains "pillows", of melting glue. These processes exhaust into the general, in-plant environment. The adhesives are exempt from the need to obtain a Rule 201 Permit to Install by Rule 287(i).

6. Plastic Shredding

I identified two rotary cutters used to shred scrap plastic. The plastic is reused in the extrusion process. It appeared that the shredded scrap is delivered to the storage area through an enclosed vacuum system. It is my understanding that vacuum balance is to and from the in-plant environment. The process is exempt from the need to obtain a Rule 201 Permit to Install by Rule 285(l)(vi)(B).

I left at 12:00. There were no odors identified outside the building that would be associated with Masco Bath.

I did not identify any violations during the inspection.

NAME 

DATE 7-22-2014

SUPERVISOR 