

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

N525728537

FACILITY: Owens Products, Inc.		SRN / ID: N5257
LOCATION: 1107 Progress St., STURGIS		DISTRICT: Kalamazoo
CITY: STURGIS		COUNTY: SAINT JOSEPH
CONTACT: Debra Farber , Purchasing Mgr - Records		ACTIVITY DATE: 02/11/2015
STAFF: Dennis Dunlap	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

This was not an announced inspection. The inspection brochure was handed out. Mr. Bob Barber is the contact person and the plant manager. This facility manufacturers vehicle running boards and other items such as aluminum animal cages and storage boxes for trucks. The running boards may be fiberglass or aluminum. No painting is done at the facility.

Action items that the facility should pursue based on the inspection include: remove methyl ethyl ketone (MEK) from HAP recordkeeping but keep it as a VOC; change the styrene emission factors based on the UEF table from "gelcoat controlled spray application" to "gelcoat non-atomized application"; add methyl methacrylate to the black gel coat recordkeeping.

For fiberglass running boards plastic is used. This uses ABS or TPO plastic. The plastic is thermo-formed using a ceramic resin mold. The plastic mold is sprayed with gel coat. This is done in a spray booth with a non-atomized gun. The filters in the booth are changed once/week. The filters appeared to be in good condition. Gray gel coat is used the most often. The gel coat comes from 55 gallon drums. Clear Cadox is the catalyst. After drying the part is sprayed with lamination resin and fiberglass using flow chop guns in another spray booth. The filters in this booth are also changed once/week. The resin is in a bulk tank. Red Cadox is the catalyst and is mixed with the resin as it is used. Usage amounts is based on the number of parts processed. The number and type of parts is tabulated each month and the usage amounts are determined. The usage amounts vary with the size of the part made. The average running board takes 2.3 lbs of gray gel coat and 8.8 lbs of resin.

Acetone is the clean-up solvent. Super Blue is not used. Acetone usage is tabulated monthly by the amount purchased. There is a 15 gallon distillation unit to reclaim acetone. This is exempt by Rule 285 (u).

There is a trim booth (EUTRIM). This was not in operation. It has a differential pressure gauge. This booth is used to sand and grind the fiberglass parts when they are removed from the molds.

There is a packaging area where parts are placed in cardboard boxes. Hot melt glue is used. There is a label printer. There is also a welding area for aluminum parts. A trash compactor is used for cardboard.

There is a Sheer Building with a punch press, sheer cutter, and a notching machine. This is used mainly for aluminum but some plastic is cut here. There are no outside emissions.

EUFLOWCHOP- This includes the lamination process. The lamination resin has 29% styrene based on the MSDS. This is the permit limit. The styrene emission factor being used from the UEF table is 62.06 pounds of styrene emitted per ton of resin applied. This is correct based on mechanical non-atomized application. Ceramic Resin has 31.7% styrene based on the MSDS. The styrene emission factor being used from the UEF table is 107.146. This is correct based on mechanical atomized application. The Red Cadox contains 2% MEK. The VOC from this is calculated each month and added to the styrene for total VOC. The 12-month rolling VOC for Dec. 2014 was 0.5759 tons. The permit limit is 5.3 tpy.

EUGELCOAT- This includes the gel coat process. This includes gray, bronze, white, black, and tooling gelcoat. The gray styrene content is 28% (limit 35%), the bronze is listed as 40% styrene in the recordkeeping sheets but the MSDS says 27%. This was mentioned to Debra Farber. The permit limit is 40%. The white gel contains 25% styrene. The permit limit is 35%. The black gel contains 40% styrene which is the permit limit. The tooling gel contains 36.91% styrene. The permit limit is 40%. The tooling gel contains acetone which is reflected on the recordkeeping sheets. The catalyst, clear Cadox, contains MEK and this reflected on the recordkeeping sheets.

The styrene emission factors for the gelcoats being used from the UEF table are incorrect. The facility is using emission factors from the "gelcoat controlled spray application" category. This is overestimating styrene emissions. The emission factors should be derived from the "gelcoat non-atomized application" category. The corrected styrene emission factors are: Gray gel- 151; Bronze gel- 142 (assuming 27% styrene content, or 259 based on 40% styrene content); YZ White gel- 124; Black gel- 259; tooling- 232.

Also on the recordkeeping sheets it was noted that for Black gel the MMA content was listed as "0%". According to the MSDS it is 4%. This was pointed out.

The Dec. 2014 12-month rolling time period amount for VOC was 0.4234 tons. The permit limit is 2.6 tpy. Acetone emissions were 0.0011 tons. The permit limit is 0.1 tpy.

EUCLEANUP- acetone is the cleanup solvent. For Dec. 2014 the 12-month rolling average was 0.8097 tons. The permit limit is 4.5 tpy.

FGFACILITY- This is for HAPs. The HAPs that are emitted by the facility include styrene and methyl methacrylate (MMA). Dipropylene glycol methyl ether (DPGME) is listed on the recordkeeping sheets but this is no longer used (was in glue). MEK is also being included as a HAP. This is no longer a HAP and should not be counted in. Based on Sept. 2014, the 12-month rolling time period amount for styrene was 0.9359 tons; for MMA it was 0.0291 tons. MEK which should not be listed as a HAP was 0.0062 tons. Total HAPs was 0.9712 tons (includes MEK). The facility is in compliance with the HAP limits in the permit.

NAME Dennis Duvley

DATE 2/17/15

SUPERVISOR MA 2/19/2015