

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

B771139158

FACILITY: SHERWIN-WILLIAMS COMPANY		SRN / ID: B7711
LOCATION: 636 East 40th Street, HOLLAND		DISTRICT: Kalamazoo
CITY: HOLLAND		COUNTY: ALLEGAN
CONTACT: Steve Eckert, EHS Manager		ACTIVITY DATE: 03/28/2017
STAFF: Dale Turton	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT:		
RESOLVED COMPLAINTS:		

An unannounced inspection was conducted at the facility. Steve Eckert, EHS Manager, was available to lead the tour of the plant and produce records.

There are currently 4 production lines, a mixing area, and the tank farm at the plant. They currently operate aerosol can filling lines numbered 1, 6, 9, and 10. The plant is permitted under ROP #B7711-2016. There have not been any significant changes in the plant since the last inspection in 2015. Bulk liquid filling line 4 is listed in the permit, but there is not a line 4 currently in operation at the plant.

Source-Wide

This table limits the HAPS to less than 9/22 tons. Records are being properly kept and show that they are in compliance. The calendar year 2016 emissions of total HAPs were 10.6 tons per year, with 1.9 tons being methanol, 5.2 tons being toluene, and 3.1 tons being hexane. All of the methanol emissions come from the storage tank operations. Much of the other HAPs are emitted from a combination of both mixing and filling operations.

EU-TANKS-STORAGE

The company has 28 outdoor solvent storage tanks. These tanks are outfitted with conservation vents. The pressure of the vents is set by the manufacturer and is not altered by the company. The permit requires a setting of 0.25 psi plus or minus from atmospheric. All of the conservation vents are scheduled to be replaced this year.

They are keeping records of liquid loaded into the tanks and the monthly inventory of the tanks, and the emission calculations. The latest 12 month rolling average throughput was 4.26 million gallons, less than the permitted 9.3 million gallons. The permit limits each tank to 275 turns per year. There were two tanks with 61 turns per year and the rest were all less than 25.

Aerosol Can filling Lines

There are 4 lines in the plant that all have similar configurations. Each line has station(s) to fill liquid, a place to crimp & seal the valve assembly, propellant gas injection, cleaning (if needed), testing, and labeling. Each line has a photo-eye can counter installed. The plant fills various products including water based products and solvent based products. These may be cleaners, coatings, or other products. All of the cans, regardless of product, are pressurized with a propellant, usually some variation of propane or isobutane. Each line is also a subset of the larger flexible group (FG-MIX-FIL-CHARGE) for all the lines combined. Each line is also included in FG40-CFRPART59 and FG-PART63SUBPARTCCCCCC.

EU-LINE-01-AERO

This emission group defines the emission factor, limits the annual VOC, and limits the amount of cans that are allowed to be filled on the line. The records show that the cans processed in calendar year 2016 was about 25.0 million, which is less than the limit of 30 million. There are now two liquid filling stations on this line, but only one can be used at a time. There have not been any changes since last inspection. The gashouse for this line was last tested in 2008.

EU-LINE-06-AERO

There are no material throughput or emission limits specific to this line, and there is no stand-alone table in the permit for the line. The records show that the cans processed in calendar year 2016 was about 33.8 million. There is not a can cleaning station on this line. The line is unchanged from last inspection.

EU-LINE-09-AERO

This emission group defines the emission factor, limits the annual VOC, and limits the amount of cans that are allowed to be filled on the line. The records show that the cans processed in calendar year 2016 was about 28.9 million, which is less than the limit of 33.5 million. There have not been any changes since last inspection. The gashouse for this line was last tested in 2008.

EU-LINE-10-AERO

This emission group defines the emission factor, limits the annual VOC, and limits the amount of cans that are allowed to be filled on the line. The records show that the cans processed in calendar year 2016 was about 25.0 million, which is less than the limit of 60 million. The line is unchanged from last inspection. The gashouse for this line was last tested in 2008.

FG-MIX-FILL-CHRG

This flexible group includes hourly and annual VOC, methanol, & DME emission limits. It also limits the hourly and annual VOC emissions from aerosol change-outs. The total plant-wide material (gallons filled) for the 4 aerosol lines and Line 4 liquid, and all the mixing tanks is also limited.

Line 4, if it were in existence, would be for liquid fill only would not have the capability for adding propellant.

The company is keeping proper records to show the gallons throughput, the propellant usage, emissions calculations, number of change-outs, and the change-outs emissions.

They filled about 12.2 million gallons of material in 2016, less than the allowed 40.17 million.

The cans filled on each line are automatically counted. Each line has an emission factor for the amount of propellant (VOC) emitted per can. The total emission from all lines (filling processes) was 88.5 tons for 2016 vs. the permit limit of 160.6 tons. The emissions due to propellant change-outs were 8.3 tons vs. a permit limit of 28.4 tons. There were another 10 tons of emissions due to storage tank fugitive and filling losses.

The Dimethyl Ether emissions are being tracked as required. They emitted only 61 lbs in 2016, vs. a permit limit of 48.5 tpy.

The Methanol emissions are being tracked as required. They emitted 0 tons from propellant or filling in 2016 vs. a permit limit of 9 tpy.

There have been no recent changes to the stacks.

FG-RULE-290

The Marsh printers are located on each line to print the cardboard cartons. The ink jet (video jet) printers are located on each line to print identifying (coding) information on the bottom of each can. They are keeping the proper records showing that they are in compliance with the emission limits in order to be exempt. Total printing emissions are about 0.43 tpy.

They also operate manual acetone cleaning stations on Lines 1, 9 and 10. If a can gets paint or other product on the outside of the can, it will be directed off line for cleaning before putting it back onto the line. These are essentially a metal sinks (<10 ft² surface area) partially filled with solvent in which cans can be immersed. This sinks are hooded and ventilated outdoors. The sinks are either covered or are empty when not in use. These units are exempt from the need for a permit since the emissions are less than 1000 lbs per month from each. The acetone emissions are not reported in MAERS since it is not considered a VOC.

FG40-CFRPART59

This follows the federal rules for consumer goods. The required, and-up-to date records are kept at the Cleveland headquarters office, so staff was not able to review them at the plant.

FG-PART63SUBPARTCCCCCC

This is the NESHAPS for the "Paint and Allied Products Manufacturing for Area Sources". The compliance date for this regulation was December 3, 2012.

An Annual Certification & Compliance Report was written on 1/28/2017. The company is complying by only adding pigments and other materials that contain compounds of cadmium, chromium, lead, or nickel to the mix only in paste, slurry, or liquid form. They do not use any materials containing methylene chloride or benzene.

Boilers & Furnaces

There are two gas-fired boilers located in a room toward the rear of the building. Each has a nameplate rating of 4.18 Million Btu/hr. These units are exempt from the ROP but are listed in the Staff Report.

There are 7 gas-fired furnaces listed in MAERS that are located on the roof. These units are exempt from the ROP but are listed in the Staff Report. These units range from very small up to the largest rated at 6.5 million btu/hr.

NAME Dale Tutten

DATE 3/31/2017

SUPERVISOR MD4/3/2017