

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

N503737719

FACILITY: Tredroc		SRN / ID: N5037
LOCATION: 2505 Thornwood, WYOMING		DISTRICT: Grand Rapids
CITY: WYOMING		COUNTY: KENT
CONTACT: James Craun , Retread Plant Manager		ACTIVITY DATE: 11/18/2016
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility to conduct an unannounced, scheduled inspection and met with James Craun, Retread Plant Manager. We started by having a discussion in his office about the most recent inspection which was conducted in 2010, for which Mr. Craun was present. I informed him that for some reason, the prior inspection failed to identify that the facility already held a Permit to Install, No. 855-93 covering the tire retread process. The permit covers tire buffing and adhesive/solvent application. The prior inspection had indicated that operations were exempt from permitting. Mr. Craun was unaware there was a PTI, and while he was not specifically maintaining records associated with exemptions, the information was available which is attached.

FACILITY DESCRIPTION

Treadroc is a semi-truck tire retread facility. A used tire comes in to the shop and is visually inspected to see if it appears to be in the proper condition to be retread. If it is, it undergoes additional testing to verify the integrity of the tires. Next, the tires go to one of three tire buffing stations where the existing tread is ground off the tire. Water spray is used to reduce heat and smoke produced. The ground tire pieces are collected in a system then ducted into a semi-trailer parked outside. The trailer has vents with filters cut into the top for air flow. The tire scraps are used in a variety of ways, from playgrounds, to school tracks to mulch.

Next the tire goes through the repair area if necessary where any injuries are drilled out and patched as needed. Cement is applied to keep wires from oxidizing and for injury repair and patching and is brushed on. The universal cement usage is 310 gallons so far this year, and 1,618 pounds of Volatile Organic Compound (VOC) emissions.

Next, the tire goes to the extruder which extrudes a layer of rubber around the casing that remains. Following that, new tread is applied to the casing. The extruded rubber is tacky, and the tread comes with an adhesive already applied. Each tire is placed into a banded "envelope" and then on a rack which goes into one of four vulcanizing pressure chambers which are electrically heated. Occasionally the envelope that encases the tire in the pressure chamber needs to be repaired. At that time the cold vulcanizing cement which contains trichloroethylene is used. According to facility records, 48 oz (0.3 gal) have been used so far this year. This equates to less than 3.0 pounds of emissions.

The solvent is used in various locations in the facility, and accounts for 440 gallons used and 2,539 lbs of VOC so far this year.

The black tire paint is applied in an internally vented application system that is small with two spray nozzles that apply the paint to each side of the tire as it is mechanically rotated. This is a water based paint with an ethylene glycol content of <1%. For ease of calculation, I used 1%. 660 gallons have been sprayed this year and that is 6.16 lbs/VOC and HAP, since ethylene glycol is a Hazardous Air Pollutant.

PTI No. 855-93 limits VOC emissions from the adhesive application to 5.0 lb/hr and 5.5 tons per year, and includes emissions from the usage of the universal cement (adhesive). This is no longer sprayed on, but brushed on as indicate above. Emissions of VOC for this activity are currently at 0.81 tons year-to-date which indicates compliance with the permit.

The VOC emission rate from the cleanup solvent usage is limited to 1.2 tons per year. Current emissions from solvent usage is 1.26 tons. Permit engineer notes indicate the permit is based on a maximum usage of 410 gallons per year. The facility has already used 440 gallons this year, and is why they have gone over the permitted limit.

REGULATORY SUMMARY

This facility has gone over the limits established in PTI No. 855-93 for the solvent usage. However, the AQD has established permit exemptions since this permit was issued. Specifically, Rule 287(c) and Rule 290 could possibly apply to the paint and cement usage at this facility respectively.

In order to utilize these exemptions, the facility must institute proper recordkeeping formats for each, which must be compiled on a monthly basis. AQD staff calculated the facility emissions based on the usage records provided and information from the product Safety Data Sheets provided on-site. The guidance information for both Rule 287(c) and Rule 290 will be e-mailed to Mr. Craun with this report so Tredroc can begin proper tracking.

This facility will be considered in compliance due to the availability of information needed to easily calculate emissions as indicated above. However, Tredroc must institute their own recordkeeping format going forward to demonstrate future compliance. If Tredroc wishes to keep the PTI instead of using an exemption they must submit a permit modification.

It is recommended that Tredroc inform AQD in writing which compliance path they wish to pursue by January 6, 2017.

NAME April Longman

DATE 11-28-16

SUPERVISOR [Signature]