# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

## **ACTIVITY REPORT: Scheduled Inspection**

#### N791625423

FACILITY: MTI RETREADING	CO	SRN / ID: N7916	
LOCATION: 530 BALL AVE NE	GRAND RAPIDS	DISTRICT: Grand Rapids	
CITY: GRAND RAPIDS		COUNTY: KENT	
CONTACT: Jose Rojas , Operations Manager		ACTIVITY DATE: 06/05/2014	
STAFF: David Morgan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT	
SUBJECT:			
RESOLVED COMPLAINTS:			

At 1:30 P.M. on June 5, 2014, Air Quality Division staff Dave Morgan conducted an unannounced scheduled inspection of MTI Retreading located at 530 Ball in Grand Rapids. The purpose of the inspection was to determine the facility's compliance with state and federal air pollution regulations as well as Permit to Install (PTI) No.358-07. Accompanying staff on the inspection was Jose Rojas, the Operations Manager.

#### FACILITY DESCRIPTION

MTI Retreading essentially replaces the tread on worn Michelin brand truck tires. The facility consists of buffing, repairing, tread bonding, curing, and inspection. This facility is considered a synthetic minor source for hazardous air pollutants (HAPs). The company currently operates one shift, four to five days per week.

#### **COMPLIANCE EVALUATION**

#### FG-Tire Grinding/Buffing Operation:

After initial inspection, remaining worn tread rubber is removed and the casing surface is prepared to accept new tread. The tire carcass is placed on a shaft and rotated at a predetermined number of revolutions per minute. As the carcass rotates on the shaft, it is placed against a rotating rasp at a given pressure. The rasp moves against the surface of the carcass in a precise programmed pattern. The rubber removed during this process is collected by a vacuum hood system that encloses the rasp head. The vacuum system is connected to a baghouse. The collected rubber crumb is sold to a recycler. The buffing process is interlocked with the dust collector fan since the rubber must be removed from the rasp head area for proper operation of the process. The air from inside the semi-trailer is circulated back through the baghouse and then emitted to the external air. The grinding operation grinds on average 275 tires per day.

The baghouse installed under PTI No. 358-07 was recently replaced under Rule 285(e). During the inspection it was noted that the stack height was approximately 15 feet above ground which was below the permit requirement of 32 feet above ground. Mr. Rojas committed to expediting a stack extension to meet the required height. Subsequent to the site visit, information was provided which documented that the stack had been raised to the required height.

### FG-Repair/Dissolution:

Repair rubber is packed by hand into areas needing repair. Dissolution cement (heptane and rubber mixture) is applied by hand to the repair area to help the repair rubber bond to the carcass. This cement is contained in small, less than one gallon containers, and applied using a brush. After repairs, additional dissolution may be applied by hand to the carcass to refresh it prior to receiving new tread.

#### FG -Tire Building/Tire Curing:

Fresh rubber is extruded onto the tire carcass and the purchased pre-cured tread is applied is used in two areas to seal the splice where the newly applied tread comes together and in the repair area. The tread itself is attached to the carcass of the tire by a band of rubber that is warmed and placed on the carcass.

The band of rubber then adheres to the carcass and the tread and then the tire is sealed in a rubber jacket and placed in the vacuum ovens. The tire is placed in an envelope and the air is removed by vacuum. The curing chambers use a dry system and are heated by steam.

#### FGFACILITY Recordkeeping:

The company is maintaining all records in accordance with the permit. Extensive records of the tires processed and AP-42 calculated emissions are being maintained electronically. The following is a summary of company records for the period from June 2013 through May 2014.

Emission Unit	Condition	Pollutant	Limit	Actual	Compliance
FG Buffing and Repair	1.1a	PM	1.8 pph	<0.336 pph (in 8/2013)	YES
FG Buffing and Repair	1.16	PM10	1.8 pph	<0.336 pph (in 8/2013)	YES
FG Buffing and Repair	1.2	Tires	900 tires/day	<318 tires (10/15/13)	YES
FGFACILITY	3.1a	VOC	12.9 tons/12-month rolling	1.78 tons	YES
FGFACILITY	3.1b	HAPs individual	9.0 tons/12-month rolling	0.121 tons	YES
FGFACILITY	3.1c	HAPs aggregate	22.5 tons/12-month rolling	0.121 tons	YES
FGFACILITY	3.1d	1,3 butadiene	105 lb/12-month rolling	14.47 lbs	YES
FGFACILITY	3.1e	cadmium compounds	3.4 lb/12-month rolling	0.33 lbs	YES
FGFACILITY	3.1f	nickel compounds	8.22 lb/12-month rolling	0.78 lbs	YES

The company uses a technical data sheet/MSDS to determine the components of the dissolution cement and use this with AP-42 numbers to determine emissions. They are maintaining extensive electronic records documenting the number of tires processed. The company is using manufacturer's data to determine the VOC content of the material. It is noted that the company has not changed the type of dissolution cement since the last AQD inspection.

SUMMARY

MTI Retreading appears to be in compliance with all applicable requirements. Records are attached to this report.