

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

B886035965

FACILITY: Tesa Tape Inc.		SRN / ID: B8860
LOCATION: 324 S Union ST., SPARTA		DISTRICT: Grand Rapids
CITY: SPARTA		COUNTY: KENT
CONTACT: Al Tramper , Plant Engineer		ACTIVITY DATE: 08/11/2016
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: The purpose of this inspection was to determine compliance with PTI No. 12-05A and all other applicable Air Quality Rules and Regulations.		
RESOLVED COMPLAINTS:		

On Thursday August 11, 2016 AQD Staff Kaitlyn DeVries (KD) conducted an announced, scheduled inspection of Tesa Tape, Inc., located at 324 S. Union Street, Sparta Michigan. The purpose of this inspection was to determine compliance with Permit to Install No. 12-05A and all other applicable air quality rules and regulations.

This inspection was an announced visit due to the scheduling of the required semi-annual Natural Draft Opening (NDO) testing. KD arrived on site at approximately 9:30 am. Observations were made prior to entry for any opacity or odors. None were noted. KD met with Mr. Alan Tramper, Plant Engineer, and Dr. Kai Filbrandt, Plant Manager, who accompanied KD on the tour of the facility. The visit began with the NDO testing. Please reference the NDO Testing activity report for complete details of testing. The Environmental Rights and Responsibilities pamphlet was presented to Mr. Tramper, and it was briefly discussed.

Facility Description

Tesa Tape, Inc. (Tesa) is a pressure sensitive tape manufacturer that produces the tape for a variety of industries. The facility extrudes and primes, coats and applies a release agent to different types of plastic and fabric media prior to cutting it into various sizes for packaging. The facility also mixes and applies their own primers and adhesives for the various types of tape.

Regulatory Analysis

Tesa currently holds one (1) Opt out- permit, PTI No. 12-05A. The permit was issued in May 2016 to add in a new waterborne coating line that utilizes a natural gas fired drying oven. Construction has commenced on Tesa's grounds, but per Mr. Filbrandt, the line will not be fully operational until early 2017. Since this line is not yet in operation, it will not be further evaluated.

Tesa is also subject to 40 CFR Part 60 Subpart RR, the Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations.

Compliance Evaluation

EUCOATER2591

This emission unit covers the coating manufacturing, including the mixing room, and film coating line with coating stations for the primer, release coating and adhesive. The coating line is equipped with a non-fugitive enclosure and a thermal oxidizer to control Volatile Organic Compound (VOC) emissions. The granulator portion is controlled by a pulse-jet baghouse for particulate control.

The area where the granulation process is kept appeared to be tidy, and was properly operating at the time of the inspection. The granulation process is used to grind larger slabs of natural or synthetic rubber down into smaller pieces to be utilized for making the adhesive. Particulate Matter (PM) from this process is limited to 0.1 lbs. per 1000 lbs. of exhaust gasses based on test protocol.

VOC's are limited to 25.0 tons per year (tpy); as of July 2016 VOC emissions were 6.01 tpy. The highest monthly VOC emissions in the last year were in June 2016 at 0.80 tons. The coating line is also required to meet an emission limit of 0.20 kg VOC/kg of coating solids applied as calculated on a weighted average basis for one calendar month. This is based on test protocol. As of July 2016, this weighted average was 0.01 kg VOC/kg of coating solid.

Tesa has a rigorous preventative maintenance plan for the line, including the Regenerative Thermal Oxidizer (RTO). Inspection reports for the RTO are attached. The RTO has a low temperature set-point of 1500°F, even though the minimum permitted limit is 1375°F with a retention time of 0.5 seconds and a 97% destruction efficiency. At the time of the inspection, the RTO was operating at a temperature of 1630°F for the upper bed and 1637°F for the lower bed. The temperature data is visible on the control screen, as well as recorded on a digital data logging system. The RTO is equipped with a lock-out system that will automatically shut down the entire line if the temperature drops below 1400°F. The RTO was most recently calibrated at the last inspection, done in May, 2016. Additionally, the condensing units also appeared to be properly operating at the time of the inspection.

Tesa has regularly been completing their required NDO tests, with the most recent test being done the day of the inspection. All testing data indicates a negative pressure, with the air flow directed into the exhaust system to the RTO. The most recent stack testing was done in 2005, when the RTO was installed.

Per a review of the required recordkeeping, Tesa appears to be properly tracking all materials used, including the VOC content, gallons used and reclaimed, weight percent of each component, and VOC emissions. Tesa mixes their own adhesives and primers on site, thus manufacturing them on site. They have requested and AQD approved the use of manufacturer's formulation data. Tesa is properly tracking the VOC content of the products made (records are attached).

Finally, while the stack dimensions were not explicitly measured, there appeared to be no apparent changes.

FG-FACILITY

This flexible group covers all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment. Facility-wide Hazardous Air Pollutants (HAP's) are individually limited to 9.0 tpy and aggregately to 22.5 tpy. As of July 2016, the aggregate HAP emissions were 2.27 tpy. Toluene, the largest emitted HAP, had a 12-month rolling emission rate of 2.17 tpy. As previously mentioned, Tesa mixes the adhesives and primers on site, thus the specifications are per the manufacturer's formulation. Tesa is adequately tracking all formulations including the gallons of each HAP containing material used, reclaimed, HAP content, and emissions calculations.

Exempt equipment

Tesa utilizes Rule 201 permitting exemption Rule 286 (a) for their polypropylene extrusion process. The cutting of the tape is also exempt from Rule 201 permitting under Rule 285(l)(vi).

Tesa has two (2) 1.2 MMBTU natural gas only boilers. These boilers are exempt from rule 201 permitting under Rule 282(a). Tesa has annual tune-ups for these boilers as well; examples of the inspections for the two boilers are attached.

Finally, Tesa does not have any cold-cleaners or emergency boilers.

40 CFR Part 60 Subpart RR - the Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations.

Michigan is a delegated state to enforce this NSPS. Tesa appears to be meeting most of the requirements for this Federal regulation, however, the requirements of 60.447 (b) and (c) and the requirements for semi-annual notification are not being met. Based on a review of the file, this requirement has not been fulfilled since 2005. KD spoke with Mr. Tramper and Tesa's consultant and they will now be submitting this report. Mr. Tramper assured KD that there had been no exceedances, based on their recordkeeping and the fact that the RTO and subsequent entire coating line will automatically shut down if the temperature drops below 1400°F, which is above their permitted minimum.

Compliance Determination

Based on the observations made during the inspection and a subsequent review of the records, it appears as if Tesa Tape, Inc. is in violation of PTI No. 12-05A EUCOATER2591 Special Condition XI.1 for the failure to comply with 40 CFR Part 60 Subpart RR for Pressure Sensitive Tape and Label Coating Operations.

NAME Kathleen D. Davis DATE 8/24/16 SUPERVISOR [Signature]