

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

N393064653

FACILITY: Arcosa Shoring		SRN / ID: N3930
LOCATION: 8530 Highway M-60 E., UNION CITY		DISTRICT: Kalamazoo
CITY: UNION CITY		COUNTY: CALHOUN
CONTACT: Chad Crocker , Environmental Manager		ACTIVITY DATE: 08/04/2022
STAFF: Rachel Benaway	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: On-site inspection to verify compliance with all state and federal air use regulations.		
RESOLVED COMPLAINTS:		

AQD staff (Rachel Benaway) conducted an unannounced air quality inspection of the facility formerly known as Trinity Shoring Products, Inc. (N3930) on 8/4/2022. The facility changed their name to Arcosa Shoring in 2019. The purpose of the inspection was to verify Arcosa is in compliance with their Permit to Install (PTI) #127-06 and all state and federal air use regulations. Arcosa Shoring, an underground shoring products and trenching materials manufacturer, is a minor source of volatile organic compounds (VOCs). Nathan Fawcett (Safety Manager) and Chad Crocker (Environmental Manager) are responsible for the submission of requested records. Austin Williams is the Director of Operations for the facility and was present for the on-site inspection. Personal protection equipment required for plant entry includes safety shoes, safety glasses, hard hat, and ear plugs.

There were no visible emissions observed outside of the facility. Although at the time of this inspection the facility was experiencing a power outage and was not operating, an interview and walk-through was still conducted. The facility employs approximately 80 employees operating 1 shift per day, 5 days a week. The facility was in compliance at the time of their last inspection on 1/28/2009 and reported that no existing equipment has been relocated, modified, or reconstructed and no new equipment has been installed since that date.

#	Equipment at Facility
	Research & Development Building- saws, cutters, grinders, welding equipment
	Building 1- saws, mechanical and hydraulic presses, punch, welding equipment (Rule 287(l)(vi)(B) exempt)
3	Paint Booths w/ dry filters located in "Plant 1"
1	Booth for power washing booth (Rule 282(b) exempt)

There are no boilers, cold cleaners, or emergency generators at the facility. The following is a list of special conditions listed in the PTI for each emission unit and flexible group of which staff was able to make a compliance determination.

FG-COATING

Description: One or more coating lines and all associated purge and clean-up operations, where each coating line is a single series in a coating process and is comprised of one or more coating applicators, any associated flash-off areas, drying areas, and ovens where one or more surface coatings are applied and subsequently dried or cured.

PTI #127-06

SC	Condition	COMPLIANT?
I.1	VOC 2,000lb/month	Yes
I.2	VOC 10 tpy- 12MRT	Yes
III.1	Capture all purge/cleanup solvents and waste coatings	Yes
	Store materials in closed containers and dispose of materials in acceptable manner	Yes
IV.1	Equip and maintain w/ high volume-low pressure spray applicators	Yes
IV.2	Shall not operate unless particulate control is installed, maintained, operated	Yes
V.1	Method 24 testing may be required upon request	N/A

After metal parts are processed (punching, forming, welding), they are hung on a transport line and coated manually with primer or enamel in front of dry filter areas. There are three coating bays (lines) although only two are routinely used. Each filter area has an outer brown filter to catch larger particulates and protect the inner filter media. The inner filter media is installed properly and in good operating condition (SC IV.2). Filters are routinely checked and maintained.

The "dry room" is where the waste containers, parts racks, and waste material is kept. All containers observed were closed and properly stored (SC III.1). A third-party company removes and disposes of the waste material.

Monitoring/Recordkeeping:

SC	Condition	COMPLIANT?
VI.3	Keep monthly records:	

- a. Purchase orders and invoices for coatings, reducers, purge/clean-up solvents Yes
- b. VOC content (lb/gallon) of each coating, reducer, purge/clean-up solvents Yes
- c. Gallons of each coating, reducer, purge/clean-up used and reclaimed *
- d. VOC mass emission calculations determining monthly emission rate for each coating line, in tons per calendar month, using method in Appendix B *
- e. VOC mass emission calculations determining annual emission rate for each coating line in tons per 12-month rolling time using method in Appendix B *
- VI.4 Maintain current listing of manufacturer of the chemical composition of each coating, including the weight percent of each component. The data may consist of Material Safety Data Sheets. Yes

*While there is no breakdown of what each line is emitting, the submitted records clearly demonstrate that the entire facility is able to comply with the 2,000 lb/month and the 10 tpy VOC emission limits that actually pertain to just one coating line.

The facility submitted purchase orders from S.P. Kish Industries for the coatings used at the facility from August 2020 through July 2022 (SC VI.3(a)). Material safety data sheets were submitted for each individual coating used (SC VI.4). A report was submitted detailing the VOC content (SC VI.3(b)), amount used (SC VI.3(c)), and VOC emissions of each coating per month from August 2020 to July 2022. The facility is not tracking the VOC emissions per coating line as specified in SC VI.3(d) and (e) but is instead totaling all VOCs emitted together per month.

In September of 2021, the facility emitted the most VOCs within the 2-year period of submitted records at 1,202.06 lbs of VOCs. The second highest VOC emission occurred in January of 2021 at 763.34 lbs and the third was 502.14 lbs in April of 2021. Over the past 2 years, the facility emitted an average of approximately 428 lbs of VOC per month.

FG-COATING appears to be in compliance at this time.

FG-SOURCE

Description: All coating lines and all associated purge and clean-up operations at the stationary source. This includes any coating line covered by this or any other general permit or any permit to install issued pursuant to Rule 201, and any coating line exempt from the requirement to obtain a permit to install pursuant to Rule 287 and/or Rule 290.

PTI #127-06

SC	Condition	COMPLIANT?
I.1	VOC 30 tpy- 12MRT	Yes

Monitoring/Recordkeeping:

SC	Condition	COMPLIANT?
VI.1	VOC mass emission calculations on a monthly basis for FG-SOURCE determining annual emission rate in tons per 12-month rolling time, for all coating lines and associated purge and clean-up operations at the source	Yes

The facility submitted records demonstrating the 12-month rolling time emissions of VOC source-wide. The highest 12-month rolling time VOC emission occurred in March of 2022 at 2.965 tons of VOC. This is well below the FG-SOURCE permit limit of 30 tpy of VOC.

FG-SOURCE appears to be in compliance at this time.

The facility appears to be in compliance with all state and federal air use regulations at this time.

NAME Rachel Benaway DATE 9/21/22 SUPERVISOR R/L 9/21/22