

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

N779559379

FACILITY: ZF Axle Drives Marysville		SRN / ID: N7795
LOCATION: 2900 Busha Highway, MARYSVILLE		DISTRICT: Warren
CITY: MARYSVILLE		COUNTY: SAINT CLAIR
CONTACT: Brian Miller , Environmental Specialist		ACTIVITY DATE: 08/17/2021
STAFF: Robert Elmouchi	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

On August 17, 2021, I conducted a targeted virtual inspection of ZF Axle Drives Marysville, LLC (SRN: P1048). This facility is located at 2900 Busha Highway, Marysville, MI. The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; and Permit to Install No. 147-07D.

ZF Axle Drives Marysville (ZF) primarily produces axle drive components for major automotive manufacturers in the North America region.

RECORDKEEPING

On August 17, 2021, I received records from Mr. Brian Miller, ZF Environmental Specialist, via email.

EU-AMMONIA

Per VI.1, the permittee shall keep, in a satisfactory manner, records of the date of annual review and approval of the emergency response plan with the local fire department.

Per my request, ZF provided a copy of the St. Clair County L.E.P.C. Risk Analysis Subgroup Meeting Minutes. I reviewed the minutes of the ZF Marysville Axle Drives LLC Site Plan Review by the St. Clair County L.E.P.C. Risk Analysis Subgroup. The review was conducted on May 11, 2021. The minutes stated, "Moved by Doug Westbrook and supported by Greg McConnell to approve the plan. No opposing signs." This record appears to demonstrate compliance with this special condition.

Per emails with Brian Miller, on August 27, 2020, and the virtual inspection conducted on August 17, 2021, I confirmed that ZF does have a remotely operated shut-off valve, which is compliant with special condition IV.1.

EU-AMMONIA IV.3.

Permit to Install No. 147-07D was issued per the company's response to the violation notice dated September 16, 2020. The violation notice cited PTI 147-07C, EU-AMMONIA IV.3. for failing to install water traps of 55 gallons minimum size on the ammonia storage tank vent, and the vent lines of five ammonia regulators. During the permit review process, it was determined that the template text used to draft this special condition was initially written for agricultural processes, not heat treating. Per the permit engineer's applicability determination, EU-AMMONIA IV.3 was deleted and IV.2 was modified to correlate with the facility's actual process and activities.

FG-HEATTREAT

I reviewed the permit required records. The highest 12-month rolling VOC emission from July 2020 through June 2021 was 1.6 tons per year, which complies with the 1.9 tons per year permit limit.

Per VI. 3, the permittee provided records of:

- a. Quench oil purchased or usage rate to replenish lost quench oil.
- b. Amount of spent oil sent off-site for recycling.
- c. Amount of spent oil or sludge sent off-site for disposal.
- d. Amount of oil spilled.
- e. Emission calculations determining the monthly emission rates in tons per calendar month.
- f. Emission calculations determining the annual emission rate in tons per 12-month rolling time-period as determined at the end of each calendar month.

As noted above, the 12-month rolling VOC emissions appear to comply with the 1.9 tpy permit limit.

The ammonia usage records indicate that from July 2020 through July 2021, the greatest 12-month rolling emission was 3.6 tons per year, which complies with the 12-month rolling permit limit of 20.2 tons per year.

FGFACILITY

Per records provided, from July 2020 through June 2021 the greatest 12-month NOx emission total was 51.49 tons, which is in compliance with the permit of 90.0 tons per year.

Per records provided, from July 2020 through June 2021 the greatest 12-month rolling natural gas use was 266.89 MMcf, which appears to be in compliance with the permitted limit of 908 MMcf.

SITE INSPECTION

During the virtual on-site inspection, I observed the overall plant interior, the heat-treating furnaces, and the bulk compressed gas storage.

In addition to a 1,000-gallon ammonia tank, the permittee also has the following compressed gas storage tanks:

Argon, boiling point = -185.8 degrees C, tank size = 528 gallons

CO₂, boiling point = -78.46 degrees C, tank size = 750 lbs.

Helium, boiling point = -268.9 degrees C, tank size = 2707 gallons

Nitrogen, boiling point = -195.8 degrees C, tank size = 792 gallons

Per R 336.1284(2)(j), the pressurized storage of acetylene, hydrogen, oxygen, nitrogen, helium, and other substances, excluding chlorine and anhydrous ammonia in a quantity of more than 500 gallons, that have a boiling point of 0 degrees Celsius or lower is exempt from the permitting requirements of R 336.1201(1). Therefore, these tanks appear to be exempt from air permitting requirements.

CONCLUSION

It appears that ZF Axle Drives Marysville is in compliance with all evaluated conditions.

NAME Robert Elmarachi

DATE 8/18/2021

SUPERVISOR Joyce ZF