

P0316
MANILA

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

P031649768

FACILITY: MAHLE POWERTRAIN LLC		SRN / ID: P0316
LOCATION: 14900 GALLEON COURT, PLYMOUTH		DISTRICT: Detroit
CITY: PLYMOUTH		COUNTY: WAYNE
CONTACT: Matthew Williams , Manager and Head of Development and Test Engineeri		ACTIVITY DATE: 07/30/2019
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Target Inspection		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION : July 30, 2019
 TIME OF INSPECTION : 10:15 am
 PERSONNEL PRESENT : Matt Williams, Manager - Development and Test
 INSPECTED BY : Jill C. Zimmerman
 FACILITY PHONE NUMBER : (734) 233-6760
 FACILITY EMAIL : matthew.williams@us.mahle.com

FACILITY BACKGROUND

MAHLE Powertrain, LLC. is located in Plymouth, Michigan near the intersection of Beck Road and Five-Mile Road. The facility has been at this location since about 2012. This facility was formerly owned by Westport, with the change in ownership occurring in about 2017. The facility operates one shift per day, five days per week, unless there is a demand for additional work.

COMPLAINT/COMPLIANCE HISTORY

No complaints have been received regarding this facility. Violation Notices were issued for nonsubmittal of MAERS for the years of 2017 and 2018.

PROCESS EQUIPMENT AND CONTROLS

The facility is permitted seven test cells, fabrication and space heaters. The facility has three fuel storage tanks, which they claim are exempt from permitting. Currently the facility is using six of the seven test cells. During the inspection, the six test cells were in different stages of use, including installing an engine or running a test.

INSPECTION NARRATIVE

I arrived at the facility at 10:30 am and meet with Mr. Matt Williams, Manager - Development and Test. I explained that the purpose of my inspection was to obtain emissions records and to inquire about the reason that MAERS has not been submitted for the past two years. Mr. Williams explained that Annie Kushner is responsible for the MAERS submittal. He said that he maintains the emission records electronically and sends them to Ms. Kushner. I reviewed the records onsite, and a copy of these records is attached to this report. Mr. Williams stated that he would be contacting Ms. Kushner to determine why the MAERS has not been submitted. I explained that the compliance status would stay as noncompliance until these reports were received.

Mr. Williams explained that no changes have been made to the plant since my last inspection. The facility operates seven engine testing cells. Fuels for the test vary and include diesel, gasoline and compressed natural gas (CNG). For some tests, the engines use a catalyst as a control device. The facility records whether the catalyst is used or not.

The facility has 5 boilers. The boilers are natural gas fired. The heat input for these units

range from 145,000 BTU/hr to 1,440,000 BTU/hr for a total heat input of 2.023 MMBTU/hr. These boilers are exempt from permitting by Rule 282 (2)(b)(i).

APPLICABLE RULES/PERMIT CONDITIONS

The facility is currently operating under Permit To Install (PTI) 19-12B, which was issued on May 17, 2017.

FG-TESTCELLS (7 engine dynamometer test cells firing unleaded gasoline, gasoline/ethanol, gasoline/methanol, diesel, methanol, ethanol, kerosene, CNG, and LPG, operated both controlled and uncontrolled):

I. Emission Limits

1. Compliance – CO emissions are limited to 87.5 TPY. Based on records received during the onsite inspection and attached to this report, the highest CO emissions for a 12-month rolling time occurred during April 2018 and was 3.29 TPY.
2. Compliance – 1,3-Butadiene emissions are limited to 21.4 lb/year. Based on records received during the onsite inspection and attached to this report, the highest 1,3-butadiene emissions for a 12-month rolling time period occurred during April 2018 and was 0.8 lb/yr.
3. Compliance – 1,3-Butadiene emissions are limited to 1.53 lb/day. Based on records received during the onsite inspection and attached to this report, there were no months that the facility emitted more than 1 lb of 1,3-butadiene. Therefore, it can be assumed that the daily emission limit is being met.
4. Compliance – Acetaldehyde emissions are limited to 723 lb/year. Based on records received during the onsite inspection and attached to this report, the highest acetaldehyde emissions for a 12-month rolling time period occurred during May 2018 and was 26.47 lb/yr.
5. Compliance – Benzene emissions are limited to 26.2 lb/day. Based on records received during the onsite inspection and attached to this report, there were no months that the facility emitted more than 3 lbs of benzene. Therefore, it can be assumed that the daily emission limit is being met.
6. Compliance – Benzene emissions are limited to 347 lb/year. Based on records received during the onsite inspection and attached to this report, the highest benzene emissions for a 12-month rolling time period occurred during May 2018 and was 11.96 lb/yr.
7. Compliance – Formaldehyde emissions are limited to 195 lb/yr. Based on records received during the onsite inspection and attached to this report, the highest formaldehyde emissions for a 12-month rolling time occurred during April 2018 and was 12.76 lb/yr.

II. Material Limits

1. Compliance – During the past year, the facility has only burned gasoline, diesel, LPG and CNG. These are all approved fuels as listed in the permit.
2. Compliance – Based on the records collected during the onsite inspection, the highest 12-month rolling time period fuel usage occurred in June 2019 and was 3,684.8 gallons which is less than the permitted limit of 124,000 gallons of gasoline, alcohol, and gasoline-alcohol blends both controlled and uncontrolled.
3. Compliance – Based on the records collected during the onsite inspection, the highest 12-month rolling time period fuel usage occurred in June 2019

- and was 1,510.1 gallons which is less than the permitted limit of 44,000 gallons of gasoline, alcohol, and gasoline-alcohol blends uncontrolled.
4. Compliance – Based on the records collected during the onsite inspection, the highest 12-month rolling time period fuel usage occurred in June 2019 and was 18,253.8 gallons which is less than the permitted limit of 600,000 gallons of diesel, biodiesel, synthetic diesel and kerosene both controlled and uncontrolled.
 5. Compliance – Based on the records collected during the onsite inspection, the highest 12-month rolling time period fuel usage occurred in July 2018 and was 100 gallons which is less than the permitted limit of 200,000 gallons of diesel, biodiesel, synthetic diesel, and kerosene uncontrolled.
 6. Compliance – Based on the records collected during the onsite inspection, the highest 12-month rolling time period fuel usage occurred in April 2018 and was 6,608 kg which is less than the permitted limit of 180,000 kg of compressed natural gas (CNG) both controlled and uncontrolled.
 7. Compliance – Based on the records collected during the onsite inspection, the highest 12-month rolling time period fuel usage occurred in April 2018 and was 4,015 kg which is less than the permitted limit of 30,000 kg of CNG uncontrolled.
 8. Compliance – Based on the records collected during the onsite inspection, the highest 12-month rolling time period fuel usage occurred in June 2019 and was 1,180.6 kg which is less than the permitted limit of 110,000 kg of liquefied petroleum gas (LPG) both controlled and uncontrolled.
 9. NA – Between May 2017 and June 2019 no LPG was used in an uncontrolled test cell.
- III. Process/Operational Restrictions – NA
- IV. Design/Equipment Parameters
1. Compliance – Catalytic Converters were present on the test engines during the onsite inspection.
 2. Compliance – No changes have been made to the cooling system for FG-TESTCELLS.
- V. Testing/Sampling – NA
- VI. Monitoring/Recordkeeping –
1. Compliance – Records were readily available for review during the onsite inspection.
 2. Compliance – A list of all fuels fired is maintained onsite.
 3. Compliance – Emission and fuel usage records are maintained electronically. A copy of these records is attached to this report.
 4. Compliance – The lead content of all gasoline loads is maintained on the fuel sheet.
 5. Compliance – The sulfur content of all diesel loads is maintained on the fuel sheet.
 6. NA – No changes have been made to the coolant system.
- VII. Reporting – NA – No changes have been made in land use has occurred.
- VIII. Stack/Vent Restriction – Compliance – All stacks have been installed to the required specifications. Therefore, the facility is operating in compliance with this condition.
- IX. Other Requirements – NA

FG-FACILITY

- I. Emission Limits – Compliance – The potential to emit CO emissions for the

facility has been calculated to be about 89.16 TPY, which is lower than the current permit requirement of 89.9 TPY.

- II. Material Limits – NA
- III. Process/Operational Restrictions – NA
- IV. Design/Equipment Parameters – NA
- V. Testing/Sampling – NA
- VI. Monitoring/Recordkeeping –
 - 1. Compliance – The records for FG-FACILITY were readily available during the onsite inspection.
 - 2. Compliance – During the onsite inspection, I collected the CO emission calculation for the facility. A copy of this record is attached to this report.
- VII. Reporting – NA
- VIII. Stack/Vent Restriction – NA
- IX. Other Requirements – NA

Space heaters and the fabrication activities are covered in this permit under FG-FACILITY. However, there are no permit conditions associated with these emission units.

The three storage tanks are each 1,000 gallon above ground storage tank. One tank stores diesel, one tank stores gasoline and one tank stores gasoline alcohol blends. These tanks are exempt by Rule 284(g).

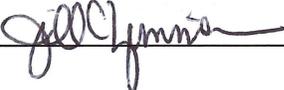
MAERS REPORT REVIEW

The facility has failed to submit MAERS for reporting year 2017 and reporting year 2018. A total of three violation notices have been sent regarding this issue. On October 2018 I spoke with Ms. Annie Kushner regarding the MAERS for 2017. She explained that she had been out on an extended medical leave and was unaware of the missed deadline. She stated that she would be submitting the report by October 31, 2018. As of August 5, 2019, this report has not been received. No information regarding the report for 2018 has been received.

During the onsite inspection, the receptionist called Ms. Kushner at the company headquarters to inform her of my visit. Mr. Williams stated during the onsite inspection that Ms. Kushner was responsible for the MAERS reports. He stated that he completes the monthly emission records and sends them to Ms. Kushner to complete the MAERS report. He stated that he would be contacting Ms. Kushner after the onsite inspection to determine why the reports have not been submitted.

FINAL COMPLIANCE DETERMINATION

MAHLE Powertrain, LLC. Is not operating in compliance currently. The facility appears to be in compliance with the current Opt-Out permit conditions. However, the facility has failed to submit the required MAERS report for the past two years.

NAME  DATE 8/8/19 SUPERVISOR JK