

N7146  
MAWILU

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

N714641013

FACILITY: AVL POWERTRAIN ENGINEERING INC		SRN / ID: N7146
LOCATION: 47519 HALYARD DRIVE, PLYMOUTH		DISTRICT: Detroit
CITY: PLYMOUTH		COUNTY: WAYNE
CONTACT: Steve Plewa , EH&S/QUALITY COORDINATOR		ACTIVITY DATE: 08/02/2017
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Target Inspection		
RESOLVED COMPLAINTS:		

DATE OF INSPECTION : August 2, 2017  
TIME OF INSPECTION : 9:45 am  
NAICS CODE : 333618  
EPA POLLUTANT CLASS : CO, NOx  
INSPECTED BY : Jill Zimmerman  
PERSONNEL PRESENT : Larry Zink  
Steve Plewa, ISO Quality Manager – PEI  
FACILITY PHONE NUMBER : 734-446-8305  
FACILITY EMAIL : steve.plewa@avl.com

### FACILITY BACKGROUND

AVL Powertrain Engineering, Inc. is an engine testing facility location in Plymouth Michigan. This Austrian based company operates nine engine testing cells. At other facilities operated by this company, different testing equipment, including opacimeters are manufactured. This equipment is assembled at the Plymouth location. The facility operates two shifts per day, five days per week, unless a customer project requires more time. The facility has been operating at this location for at least 15 years. This facility tests engine for multiple automotive facilities as well as other engine manufacturers.

### REQUIRED PPE

During the onsite inspection, I was required to wear steel toed shoes and safety glasses.

### COMPLAINT/COMPLIANCE HISTORY

No complaints have been received regarding this facility in the past year.

### PROCESS EQUIPMENT AND CONTROLS

The facility operates an assembly area where different types of testing equipment are assembled. No pieces are produced at this location and no painting occurs.

The facility operates seven engine testing cells at this location and two additional testing cells at 46097 Commerce Center Drive in Plymouth. All nine testing cells are operating through the opt-out permit 60-01E. The additional two testing cells are used for training purposes or to show a customer how to operate the testing equipment.

### INSPECTION NARRATIVE

I arrived at the facility and met with Mr. Steve Plewa and Mr. Larry Zink. Mr. Zink recently took over the environmental responsibilities from Mr. Plewa. During our preinspection meeting, we discussed the process and changes at the facility. The seven testing cells vent through various rooftop stacks. One of the stacks has recently been removed, though this did not change the emissions at the facility.

We discussed the two testing cells located at the other location. One of these cells is completely empty. The other cell has used less than 5 gallons of fuel since the first of the year. Both cells are located in a separate portable trailer. This additional test cells were added under permit modification 60-01D, which lists additional location.

The facility is permitted to use gasoline, diesel, and CNG as fuels. However, the facility uses only gasoline and diesel because there is not much demand for CNG. During the past few months, the facility has use mostly diesel fuel.

Next we walked through the facility at the main location. Only one test cell was operating during the onsite inspection. An engine can be installed in a testing cell in about eight hours.

We walked through a test cell that was not operating. The process of testing the engines was explained in detail.

The facility has seven above ground storage tanks used to store fuel at this facility. One tank is 15,000 gallons, two are 1,000 gallons, two are 500 gallons, and two are 250 gallons. These tanks are exempt from permitting by rule 284 (g)(iii).

Finally, we reviewed the emissions and fuel usage records. A copy of the records was collected through July 31, 2017 and is attached to this report.

#### **APPLICABLE RULES/PERMIT CONDITIONS**

The nine dynamometers operate under the Opt-Out permit 60-01E, which was issued on April 5, 2010. Emission limits and material limits were evaluated for the time period between January 2016 and July 2017.

#### **FG-TESTCELLS:**

##### **I. Emissions Limits**

1. Compliance – The highest daily average of CO emissions was 108 pounds, which is less than the permit limit of 4,056 pounds per day.
2. Compliance – The highest 12 month rolling average was 5.49 TPY in July 2017. This value is below the permitted limit of 63.9 TPY.
3. Compliance – The highest reported daily emission of PM-10 was 2.2 pounds per day in April 2016.

##### **II. Material Limits**

1. Compliance – The highest daily usage of diesel fuel was 123 gallons per day in January 2016, which is less than permitted limit of 2,300 gallons per day.
2. Compliance – The highest daily usage of gasoline and ethanol fuel was 32.2 gallons per day during October 2016. This is less than the permitted limit of 1,300 gallons per calendar day.
3. Compliance – The highest daily usage of gasoline and ethanol for all test cells is 32.2 gallons per day. Since this value is lower than the permitted of 581 gallons per calendar day for test cells 8 and 9, it can be assumed that the fuel usage is even lower for these two cells.
4. Compliance – The highest combined fuel usage during a 12 month rolling time period was 32,114 gallons in May 2016 . This value is less than the permitted limit of 175,000 gallons.
5. Compliance – The highest gasoline and ethanol usage was 3,038 gallons per 12 month rolling time period in July 2017. This value is less than the permitted limit of 35,000 gallons.
6. Compliance – No LPG, propane, or methane has been used at the facility in at least the past year.

III. Process/Operational Restrictions  
NA

IV. Design/Equipment Parameters  
NA

V. Testing/Sampling

1. NA – No new fuels have been used at this location during the past year. No testing is required at this time.

VI. Monitoring/Recordkeeping

1. Compliance – The facility keeps detail records including the monthly and previous 12-month CO emissions. A copy of these records is attached to this report.
2. Compliance – Daily CO emissions are kept, prorated to a daily rate. The prorated emissions are less than 5% of the permitted limit. A copy of these records is attached to this report.
3. Compliance – Daily PM-10 emissions are kept, prorated to a daily rate. The prorated emissions are less than 10% of the permitted limit. A copy of these records is attached to this report.
4. Compliance – Monthly fuel usage records are kept at this facility and are attached to this report.
5. Compliance – The fuel usage records, prorated to a daily rate are kept for all fuels used at this facility. The prorated fuel usages rates are less than 10% of the permitted limit. A copy of these records is attached to this report.

VII. Reporting  
NA

VIII. Stack/Vent Restrictions

Stack SV-TESTCELL1A is no longer being using at this facility and has since been removed. Eleven stacks remain at the facility to vent the nine test cells. The removal of this stack does not change any of the emissions at this facility. No other changes have been made to the stacks at this facility.

IX. Other Requirements  
NA

#### FGFACILITY

I. Emission Limits  
NA

II. Material Limits

1. Compliance – Based on a review of collected records, the highest natural gas usage occurred in December 2016 and was less than 11 million cubic feet per 12-month rolling time period. This is less than the permit limit of 50 million cubic feet per 12-month rolling time period.

III. Process/Operational Restrictions  
NA

IV. Design/Equipment Parameters  
NA

## V. Testing/Sampling

NA

## VI. Monitoring/Recordkeeping

1. Compliance – The facility keeps monthly and 12-month natural gas usage records. A copy of these records is attached to this report.

## VII. Reporting

NA

## VIII. Stack/Vent Restrictions

NA

## IX. Other Requirements

NA

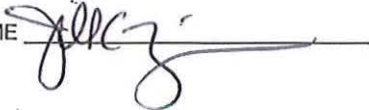
**MAERS REPORT REVIEW**

This report was received on time. All emissions appear to have been reported accurately.

**FINAL COMPLIANCE DETERMINATION**

AVL Powertrain Engineering, Inc. appears to be operating in compliance with all state and federal regulations as well as all permit conditions.

NAME



DATE

8/14/17

SUPERVISOR

JK