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

N698943913

FACILITY: AVL POWERTRAIN ENGINEERING		SRN / ID: N6989		
LOCATION: 1801 E ELLSWORTH RD, ANN ARBOR		DISTRICT: Jackson		
CITY: ANN ARBOR		COUNTY: WASHTENAW		
CONTACT: Larry Zink , EHS and Facilities Manager		ACTIVITY DATE: 04/02/2018		
STAFF: Zachary Durham	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR		
SUBJECT: Scheduled inspection of MI-ROP-N6989-2014.				
RESOLVED COMPLAINTS:				

#### Contact

Larry Zink
EHS & Facilities Manager
734-927-3570
Larry zink@avl.com

#### **Purpose**

This was a scheduled inspection of the facility located at 1801 E. Ellsworth Road, Ann Arbor, MI and equipment identified in the Title V Renewable Operating Permit (ROP) MI-ROP-N6989-2014. I arrived on 4/2/2018 at 2:00pm and met with Larry Zink.

## Background

This facility houses twenty (20) different engine test cells, identified starting from #8 through #27. The numbering reflects seven (7) other test cells located at their Plymouth, MI location. This facility tests a host of vehicle components, from single cylinder test engines through large diesel semi truck engines and all other powertrain-related equipment.

AVL has the capability to use gasoline, diesel, and natural gas in their test cells, though they have not used natural gas in some years. They are minor for all criteria pollutants except for Carbon Monoxide (CO), which is listed in the ROP as having an emission limit that requires a Title V ROP permit. Historically, emissions have been well below permitted limits.

The throughput of fuel requires this facility to comply with provisions contained in 40 CFR Part 63, Subpart CCCCCC for Nation Emission Standards for Hazardous Air Pollutants (NESHAP) at Gasoline Dispensing Facilities (GDF). This facility is an area source of HAP. The State of Michigan does not have delegation of this regulation.

Audit of the MAERS for reporting year 2017 was completed as a part of this inspection (see attached).

I last inspected this facility in December 2015.

## Compliance Evaluation

## **FGTESTCELLS**

This flexible group (FG) is the section of the ROP that contains conditions for all 20 test cells. Attached is a spreadsheet of 12-month rolling emissions and fuel use. Fuel use records for diesel, gasoline, and natural gas are used to calculate facility emissions. Aggregate gasoline and diesel use is limited to 392,692 gallons per 12-month rolling time period. Gasoline is further limited to total yearly use of 150,000 gallons and 34,500 gallons of uncontrolled gasoline use. 12-month rolling totals for diesel and gasoline are at 21,952 gallons and 3,915 gallons, respectively, through March 2018. Natural gas has not been used in the last 12 months in engine test

Emission limits on NOx, CO, Lead, and 1,3-butadiene are included in this section. Through March 2018 the

reported emissions for each are as follows on a 12-month rolling time period:

- NOx emissions of 2.39 tons (limit = 91.2 tpy)
- CO emissions of 8.23 tons (limit = 127.5 tpy)
- Lead emissions of 0.000172 tons (limit = 0.6 tpy)
- 1,3-butadiene of 0.00427 tons (limit = 0.063 tpy)

These emission levels are significantly below permitted levels.

### **FGCOLDCLEANERS**

The facility still maintains two cold cleaners in which they use mineral spirits. No halogenated solvents are used in this equipment. A total of 42 gallons was reported during 2017.

#### **FGGDFMACT**

This is the FG that describes the requirements under NESHAP CCCCCC for GDF area sources. There are three tanks identified as emission units under this part, two of which are sectioned tanks. These three existing tanks were installed on 4/14/2002 and are listed as follows: EUTANK1 – 19,000 gallon capacity, EUTANK2/3 – 7,500 and 11,500 gallon capacity, and EUTANK4/5 – 11,500 and 7,500 gallon capacity. The tanks are equipped with a Veeder Root system for tracking tank levels. Monthly fuel use has not exceeded 10,000 gallons, and thus below the threshold set in 40 CFR 63.11116(b) and Special Condition VI.1 of this FG. A receipt from 2/7/18 is attached for a delivery of 4,545 gallons of ultra low sulfur diesel.

## **Compliance Determination**

After on-site inspection and review of nece	ssary record keeping, I ha	ave determined AVL	to be incompliance with
State of Michigan and federal air quality rul	les and regulations and N	II-ROP-N6989-2014.	/ .
NAME tack Duham	DATE 4/9/18	SUPERVISOR	*