# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection 0004004046

FACILITY: WESTPORT LD, INC.		SRN / ID: P0316
LOCATION: 14900 GALLEON COURT, PLYMOUTH TWP		DISTRICT: Detroit
CITY: PLYMOUTH TWP		COUNTY: WAYNE
CONTACT: Lee Gibson,		ACTIVITY DATE: 08/18/2015
STAFF: Jill Zimmerman	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Target Inspection		
RESOLVED COMPLAINTS:		100

DATE OF INSPECTION

: August 18, 2015

TIME OF INSPECTION

: 10:00 am

: 11

LEVEL OF INSPECTION

NAICS CODE

: 541380

EPA POLLUTANT CLASS

: VOC, PM

INSPECTED BY

: Jill C. Zimmerman

PERSONNEL PRESENT

: Lee Gibson, Supervisor, Engine Testing

FACILITY PHONE NUMBER

: (734) 233-6760

FACILITY FAX NUMBER

: (734) 796-2233

#### **FACILITY BACKGROUND**

Westport Innovation, Inc. is located in Plymouth, Michigan near the intersection of Beck Road and Five-Mile Road. The facility has been at this location for about three years, through the facility has only been operating for about the past year. 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. No violations have been issued since the last inspection.

#### PROCESS EQUIPMENT AND CONTROLS

The facility is permitted for three fuel storage tanks, seven test cells, one chassis test cell, fabrication and space heaters. During the past year only three test cells had been used. There are two test cells that have not had all of the equipment installed to be functional, though there are plans to install equipment in the future. During the inspection, no test cells were operating. One cell had recently completed testing, one cell had a new engine being installed to begin a test, and a third cell had an engine to be tested, though no testing was occurring.

#### INSPECTION NARRATIVE

I arrived at the facility at 10:00 am and meet with Mr. Lee Gibson, Supervisor Test Engines. Together we discussed the emission calculations for the facility, the required records, and MAERS. The facility reported more than 400 tons of NOx emissions during 2014. After discussing this, I believe that there was an error in the emission calculations. Mr. Gibson is going to recalculate these emissions to correct any errors. Mr. Gibson has developed a new spreadsheet for tracking records and calculating emissions. Mr. Gibson will use this spreadsheet to recalculate the emissions for 2014 to correct any errors. I explained to Mr. Gibson that he could group the test cells together for reporting purposes, and submit his spreadsheet calculations with the emission instead of using the MAERS emission factors. I also explained he could report emissions by test cell instead of by engine job. I reviewed the daily record required for each testing operator to complete as well as the monthly summary spreadsheet. Mr. Gibson will send me a copy of one day in the daily log as well as monthly and annual emissions for 2014 and 2015 through July.

Mr. Gibson said that during 2014, three engines were tested. Fuel consumption is about one third gasoline, one third diesel, and one third compressed natural gas (CNG). These are the only fuels that are permitted for use. During the onsite inspection, no engine tests were occurring, though a new engine was being installed into testcell 7 for a future test. Some equipment is being installed in testcell 6 so that this may be an active test cell in the future. The facility is capable to run tests in testcells 1 through 4 and 7 as well as the chassis test cell.

## APPLICABLE RULES/PERMIT CONDITIONS

The facility is currently operating under Permit To Install (PTI) 19-12A, which was issued on April 4, 2012. The facility is capable of testing engines in five of the seven cells as well as the chassis cell.

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

- I. Emission Limits Noncompliance During the onsite inspection, I requested the records necessary to show compliance with the emission limits. On August 27, 2015 I sent an email to Mr. Gibson, requesting the records for a second time. Mr. Gibson responded via email on August 31, 2015 stating that he would have the records to me during that week. As of September 16, 2015 no records have been received. In MAERS for 2014 it was reported that the more than 400 TPY of NOx was emitted in 2014, which exceeds the opt-out limit in this permit.
- II. Material Limits Compliance During the past year, the facility has only burned gasoline, diesel, and CNG. These are all approved fuels as listed in the permit.
- III. Process/Operational Restrictions NA
- IV. Design/Equipment Parameters Compliance Catalytic Converters were present on the test engines during the onsite inspection. Mr. Gibson said that when controlled tests are run, which are most of the tests, a catalytic converter is used.
- V. Testing/Sampling Compliance A stack test was performed in fall 2014. The results of this test showed that the facility was operating in compliance with the testing conditions
- VI. Monitoring/Recordkeeping -
  - Noncompliance during the onsite inspection, I reviewed the records spreadsheet that Mr. Gibson completes monthly. I also reviewed the daily records that the test cell operators complete each time the test cell operates. A requested copy of these records have not been received as of September 16 2015.
  - Noncompliance The days of operation are recorded on the daily log collected by the operators. Emission calculations are kept in the monthly log. A requested copy of these records have not been received as of September 16, 2015.
  - 3. Noncompliance The operators keep a daily record which includes hours of operation, and fuel consumption. The monthly emissions for each pollutant

- are collected in a spreadsheet maintained by Mr. Gibson. This requested spreadsheet was not been received as of September 16, 2015.
- 4. Noncompliance Requested records showing the lead content of the fuels have not been received as of September 16, 2015.
- 5. Noncompliance Requested records showing the lead content of the fuels have not been received as of September 16, 2015.
- VII. Reporting The facility has not yet completed installation of the permitted equipment, therefore this condition is not applicable at this time.
- VIII. Stack/Vent Restriction Compliance All stacks have been installed to the required speculations. Therefore the facility is operating in compliance with this condition.
- IX. Other Requirements NA

# **FG-FACILITY**

- I. Emission Limits Noncompliance CO emissions for the facility have been calculated to be about 92 TPY, which is higher 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. During the onsite inspection, the facility was capable of testing engines in five of the test cells as well as the chassis testing cell. During an onsite meeting in June, we discussed what records were being kept onsite, and I reviewed the current records.
  - Noncompliance During the onsite inspection, I requested the records necessary to show compliance with the emission limits. On August 27, 2015 I sent an email to Mr. Gibson, requesting the records for a second time. Mr. Gibson responded via email on August 31, 2015 stating that he would have the records to me during that week. As of September 16, 2015 no records have been received.
- VII. Reporting NA
- VIII. Stack/Vent Restriction NA
- IX. Other Requirements NA

## MAERS REPORT REVIEW

On April 9, 2015, the MAERS for 2014 was received electronically. The emissions reported appear to be higher than the actual emissions for the facility. I spoke with Mr. Gibson about these emissions and he recalculated the emissions. I explained to Mr. Gibson that he did not have to report each engine tested separately. I also explained that he could group the test cells together into one reporting group. The emissions reported in MAERS for 2014 exceed the opt-out permit limits listed in permit 19-12A.

#### FINAL COMPLIANCE DETERMINATION

Westport Innovations, Inc. does not appear to be operating in compliance with all permit conditions. Records were requested during the onsite inspection on August 18, 2015 and again via email on August 27, 2015. As of September 16, 2015, no records have been

received. A Violation Notice was issued on September 16 2015 to address all areas of noncompliance.

NAME Jammena

DATE 91/8/15

SUPERVISOR