

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION**

**ACTIVITY REPORT: Scheduled Inspection**

N696226750

<b>FACILITY:</b> Ricardo Inc.	<b>SRN / ID:</b> N6962
<b>LOCATION:</b> 40000 Ricardo Drive, VAN BUREN TWP	<b>DISTRICT:</b> Detroit
<b>CITY:</b> VAN BUREN TWP	<b>COUNTY:</b> WAYNE
<b>CONTACT:</b> Theodore Byrne , Quality Liason	<b>ACTIVITY DATE:</b> 06/19/2014
<b>STAFF:</b> Jill Zimmerman	<b>COMPLIANCE STATUS:</b> Compliance
<b>SUBJECT:</b> Target Inspection	<b>SOURCE CLASS:</b> MAJOR
<b>RESOLVED COMPLAINTS:</b>	

DATE OF INSPECTION : 06/19/2014  
 TIME OF INSPECTION : 11:00 am  
 LEVEL OF INSPECTION : II  
 NAICS CODE : 541330  
 EPA POLLUTANT CLASS : VOC, CO, NOx  
 INSPECTED BY : Jill Zimmerman  
 PERSONNEL PRESENT : Ted Byrne, Quality Environmental H&S Manager  
    Craig Assenmacher, Engineering Manager, Powertrain Development  
 FACILITY PHONE NUMBER : 734-394-3712  
 FACILITY FAX NUMBER : 734-397-6677

**FACILITY BACKGROUND**

Ricardo operates eleven engine test cells. These engines operate on gasoline, diesel or compressed natural gas. The facility operates two shifts per day, five days per week based on a need from the customers.

**COMPLAINT/COMPLIANCE HISTORY**

No complaints have been received regarding this facility. No VNs have been issued to this facility since at least the last inspection.

**OUTSTANDING VNs**

No VNs have been issued since at least the last time that this facility was inspected.

**PROCESS EQUIPMENT AND CONTROLS**

Each engine is equipped with a catalytic convertor to control emissions. Each test cell operates one of the engines to be tested on a dynamometer. The test is controlled in the control room by the technician based on the test protocol.

**INSPECTION NARRATIVE**

I arrived at the facility and met with Mr. Byrne and Mr. Assenmacher. Together, we walked through the test cell area. No new cells have been added. The most significant process change since the last inspection dealt with fuel usage. The facility applied and received a Permit To Install for the use of compressed natural gas (CNG) as an alternative fuel. This permit was approved on March 5, 2013. The facility is required to perform a stack test within 180 days of start-up operation with CNG. As of the inspection date, no test cells have operated with CNG. The facility performed a stack test for diesel and gasoline fueled engines on August 19 and 20, 2014. The facility plans to test a CNG fueled engine in the future when a job using a CNG engine is requested at Ricardo.

Fuel usage records are kept and weekly entered into a company computer program. These records, which are required as part of the ROP and PTI, are then used to calculate MAERS.

At least one cold cleaner was seen during the onsite inspection. This cold cleaner was not being used and was closed.

**APPLICABLE RULES/PERMIT CONDITIONS**

The eleven test cells are operating under MI-ROP-N6962-2010

**EU-ROLLCELL**

- I. Emission Limit(s) – NA
- II. Material Limit(s) – Compliance records show less than 4,700 gallons of fuel were used in this test cell.

- III. Process/Operational Restriction(s) – Compliance the test cell operated in compliance with Title II, Part A, Section 202 of the Clean Air Act.
- IV. Design/Equipment Parameter(s) – NA
- V. Testing/Sampling – NA
- VI. Monitoring/Recordkeeping
  - 1. Compliance – During the onsite inspection, all records were up to date.
  - 2. Compliance – All required records and emission calculations were maintained accurately onsite.
- VII. Reporting
  - 1. Compliance – No deviations have been reported since the last inspection.
  - 2. Compliance -- The semiannual report for the reporting period of July 1, 2013 – December 31, 2013 was received on March 14, 2014. The semiannual report for the reporting period of January 1, 2013 – June 30, 2013 was received on September 12, 2013.
  - 3. Compliance -- The annual report for the reporting period of January 1, 2013 – December 31, 2013 was received on March 14, 2014.
  - 4. Compliance – No new construction, installation, reconstruction, relocation or modification has occurred since the last onsite inspection.
- VIII. Stack/Vent Restriction(s) – Compliance no changes have been made to the stack since it was installed
- IX. Other Requirement(s) – NA

## FG-TESTCELLS

- I. Emission Limit(s)
  - 1. NOx – Compliance during 2013 the facility emitted less than 3.5 tons.
  - 2. CO – Compliance during 2013 the facility emitted less than 8 tons.
  - 3. PM10 – Compliance during 2013 the facility emitted less than 1 ton.
  - 4. SO2 – Compliance during 2013 the facility emitted less than 1 ton.
  - 5. VOC – Compliance during 2013 the facility emitted less than 2 tons.
- II. Material Limit(s)
  - 1. Compliance – Less than 2,000 gallons of diesel were used during 2013.
  - 2. Compliance – Less than 25,000 gallons of spark-ignited fuel was used during 2013.
- III. Process/Operational Restriction(s) – Compliance the test cell operated in compliance with Title II, Part A, Section 202 of the Clean Air Act.
- IV. Design/Equipment Parameter(s) – NA
- V. Testing/Sampling – Compliance a stack test performed on August 19, 2014 and August 20, 2014.
- VI. Monitoring/Recordkeeping
  - 1. Compliance – all records were up to date during the onsite inspection
  - 2. Compliance – all records were available for review during the onsite inspection and appear to have been maintained accurately.
- VII. Reporting
  - 1. Compliance – no deviations have been reported since the last onsite inspection.
  - 2. Compliance -- The semiannual report for the reporting period of July 1, 2013 – December 31, 2013 was received on March 14, 2014. The semiannual report for the reporting period of January 1, 2013 – June 30, 2013 was received on September 12, 2013.
  - 3. Compliance -- The annual report for the reporting period of January 1, 2013 – December 31, 2013 was received on March 14, 2014.
  - 4. Compliance – No new construction, installation, reconstruction, relocation or modification has occurred since the last onsite inspection.
- VIII. Stack/Vent Restriction(s) – Compliance no changes have been made to the stacks since they were installed.
- IX. Other Requirement(s) – Compliance no changes in land usage has occurred since the last onsite inspection.

## FGCOLDCLEANERS

- I. Emission Limit(s) – NA
- II. Material Limit(s) – Only acceptable chemicals are used in the coldcleaners.
- III. Process/Operational Restriction(s) – Unknown I did not observe any parts being cleaned during the onsite inspection.
- IV. Design/Equipment Parameter(s)
  - 1. Compliance – The cold cleaner is used to clean metal parts and releases all emissions to the general plant air.
  - 2. NA – The cold cleaner was closed and not being used during the onsite inspection.
  - 3. Compliance – The cold cleaner was closed during the onsite inspection.
  - 4. Compliance – The cold cleaner was closed during the onsite inspection.
  - 5. Compliance – The cold cleaner is not heated and operates at room temperature.
- V. Testing/Sampling – NA

- VI. Monitoring/Recordkeeping
  - 1. NA – The cold cleaner is not heated.
  - 2. Compliance – Proper records are maintained regarding the cold cleaners.
  - 3. Compliance – Written operating procedures are maintained at the facility.
  - 4. NA
- VII. Recordkeeping
  - 1. Compliance – no deviations have been reported since the last onsite inspection.
  - 2. Compliance -- The semiannual report for the reporting period of July 1, 2013 – December 31, 2013 was received on March 14, 2014. The semiannual report for the reporting period of January 1, 2013 – June 30, 2013 was received on September 12, 2013.
  - 3. Compliance -- The annual report for the reporting period of January 1, 2013 – December 31, 2013 was received on March 14, 2014.
- VIII. Stack/Vent Restriction(s) – NA
- IX. Other Requirement(s) – NA

**MAERS REPORT REVIEW**

MAERS was received on March 11, 2014 and was reviewed by me on March 31, 2014. No errors were found and all of the emissions appear to have been reported accurately.

**FINAL COMPLIANCE DETERMINATION**

Ricardo appears to be operating in compliance with all state and federal requirements, as well as all ROP and PTI conditions. MAERS was submitted on time and appears to have been reported accurately.

NAME Jill Zimmerman DATE 9/5/14 SUPERVISOR W.M.

