



Fuel usage records are kept and recorded weekly, with the data being entered into a spreadsheet to track fuel usage as well as emissions. These calculations are used for the annual emissions reporting requirements. These spreadsheets were reviewed during the onsite inspection and appear to contain all necessary information. Daily shift logs are used to track the fuel usage through a fuel meter and the hours that the engines operated. This information is recorded into the spreadsheet for the monthly totals.

Each gasoline or diesel fuel delivery contains a fuel sheet which lists the lead content in the gasoline and the sulfur content in the diesel fuels. A copy of the most recent fuel sheets was reviewed onsite and will be attached to the final stack test report. There are four underground storage tanks onsite which store diesel or gasoline. All of the tanks have a capacity of 5000 gallons. Currently, tank 3 is empty and cleaned out. Tank 1 contains gasoline, tank 2 contains diesel and tank 4 contains 87 octane.

Mr. Byrnes explained that the facility is no longer using the cold cell testing cell. This cell is still operational. At this time, the facility has no future plan to use this testing cell. However, because the cell is still operational, the facility will keep this testing cell in the Permit To Install.

The facility has four cold cleaner units onsite. None of these units are heated. Each of these units is maintained by Safety Kleen. During the onsite inspection, one unit was observed and was closed.

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

The facility has voided the Title V permit MI-ROP-N6962-2010. The facility obtained an opt-out permit 370-08C on June 23, 2017 before voiding the ROP. This permit also contains the conditions from PTI 370-08B, which allowed the facility to use compressed natural gas (CNG) as a fuel choice. However, there currently is not much demand for testing engines with CNG, so the facility has not yet performed emission testing on engines using CNG.

The special conditions of 370-08C were evaluated below:

FG-TESTCELLS – This flexible group contains twelve compression and spark-ignited engine dynamometer test cells and one temporary cold start module. The emission units included in this group are EU-TESTCELL-01, EU-TESTCELL-02, EU-TESTCELL-03, EU-TESTCELL-04, EU-TESTCELL-05A & B, EU-TESTCELL-06, EU-TESTCELL-07, EU-TESTCELL-08, EU-TESTCELL-09, EU-TESTCELL-10, EUTESTCELL-11 and EU-TCS.

- I. Emission Limits –
  1. NO<sub>x</sub> – Compliance – The limit for NO<sub>x</sub> is 34.5 TPY. Based on a review of records for the past 24 months, the highest reported NO<sub>x</sub> emissions were 3.4 TPY in June 2019.
  2. NO<sub>x</sub> – Undetermined – CNG has not been tested at this time due to workload. CNG has not been used at this facility during the past 24 months.
  3. CO – Compliance – The limit for CO is 74.6 TPY. Based on a review of records for the past 24 months, the highest reported CO emissions were 7.4 TPY in June 2019.
  4. VOC – Compliance – The limit for VOC is 21.7 TPY. Based on a review of records for the past 24 months, the highest reported VOC emissions were 2.11 TPY in June 2019.
  5. PM<sub>10</sub> – Compliance – The limit for PM<sub>10</sub> is 7.48 TPY. Based on a review of

- records for the past 24 months, the highest reported  $PM_{10}$  emissions were 0.77 TPY in January 2019.
6.  $SO_2$  – Compliance – The limit for  $SO_2$  is 6.94 TPY. Based on a review of records for the past 24 months, the highest reported  $SO_2$  emissions were 0.71 TPY in January 2019.
  7. Formaldehyde – Undetermined – CNG is the only fuel type with a formaldehyde emission factor. CNG has not been fired at this facility during the past 24 months.
  8. Formaldehyde – Undetermined – CNG is the only fuel type with a formaldehyde emission factor. CNG has not been fired at this facility during the past 24 months.
  9. Acrolein – Undetermined – CNG is the only fuel type with a acrolein emission factor. CNG has not been fired at this facility during the past 24 months.
- II. Material Limits
1. Fuel: Compressed Natural Gas – Undetermined. During the past 24 months, the facility did not run any engines using CNG as a fuel source. The hourly usage rate was not evaluated during the onsite inspection.
  2. Compression ignited – Compliance – The facility reported using 29,769 gallons of diesel fuel during the past 12 months, based on the records collected. The highest 12-month rolling time period usage of diesel was 35,012 gallon ending in January 2019. The highest monthly amount of diesel fuel used was 5,208 gallons for September 2018. This amount is less than the permit limit of 160,000 gallons per year.
  3. Fuel: Spark-ignited – Compliance – The facility reported using 18,697 gallons of gasoline fuel during the past 12 months, based on the records collected. This was also the highest reported 12-month rolling time period reported during the past two years. The highest monthly amount of gasoline used was 4,940 gallons during February 2019. This value is less than the permit limit of 185,000 gallons per year.
- III. Process / Operational Restrictions – NA – During tests run on EU-TCS, the facility is required to operate with a properly functioning catalytic converter. This test cell is currently not being used at the facility. The facility is planning to remove this cell in the future and has no plans to use this cell.
- IV. Design / Equipment Parameters – Not evaluated. CNG is currently not being used at this location. A metering unit is located onsite to monitor the CNG, though it was not evaluated since CNG is not being used.
- V. Testing / Sampling – A stack test was performed on July 11, 2019 to verify the emission rates of CO and NOx. The results of this test are not yet available for review. At this time, the facility had not used CNG for any testing. When the facility begins using CNG, they will preformed a stack test to verify emissions. The facility last performed a stack test on August 19, 2014 and the results were acceptable.
- VI. Monitoring / Recordkeeping
1. Compliance – During the onsite inspection on July 11, 2019, all records through June 2019 were available for review.
  2. Compliance –A copy of the documentation from the fuel supplier was reviewed during the onsite inspection and will be attached to the stack testing report.
  3. Compliance – A binder is maintained at each testing cell containing all information on fuel usage, fuel type and other information needed for emission calculations. It also records the duration of all test. A spreadsheet is

- maintained with monthly and 12-month rolling time period fuel usage and emission calculations. A copy of the spreadsheet is attached to this report.
4. NA – CNG is currently not being used at this location.
  5. Compliance – The facility maintains a record from the fuel supplier that contains lead content of the gasoline. A copy of the most recent fuel load was reviewed during the onsite inspection and will be attached to the stack test report.
  6. Compliance – The facility maintains a record from the fuel supplier that contains sulfur content of the diesel. A copy of the most recent fuel load was reviewed during the onsite inspection and will be attached to the stack test report.
- VII. Reporting – Undetermined. CNG has not been used consistently at the facility. No jobs using CNG have been requested as of the time of the onsite inspection.
  - VIII. Stack / Vent Restrictions – Compliance – No changes have been made to the stacks since the stacks were installed.
  - IX. Other Requirements – NA – No change in land use has occurred for this property.

#### FGFACILITY

- I. Emission Limits – Compliance. The engine testing emitted about 7.65 tons of CO in 2018. It can be assumed that with the additional basic office heating and cooling, the CO emissions would not exceed 89.9 tpy.
- II. Material Limits – NA
- III. Process/Operational Restrictions – NA
- IV. Design/Equipment Parameters – NA
- V. Testing/Sampling – NA
- VI. Monitoring/Recordkeeping – Compliance. The facility maintains the required records including CO emissions (both monthly and 12-month rolling). A copy of these records is attached to this report.
- VII. Reporting – NA
- VIII. Stack/Vent Restrictions – NA
- IX. Other Requirements – NA

This facility is a true minor source for hazardous air pollutants (HAPs), which was determined during the permitting process for permit 370-08B. Therefore this source is not subject to MACT PPTPP.

The cold cleaner units use a naphtha-based solvent, which meets the Rule 707(2) requirements to have a Reid vapor pressure of less than 0.6 psia. These units are exempt from Rule 201 under Rule 281 (h). These units are not subject to MACT T.

The facility has two 5,000-gallon storage tanks for gasoline which are exempt from permitting by Rule 284 (g)(i) and two 5,000-gallon storage tank from compression-ignited fuels which are exempt by Rule 284(d).

The facility operates two natural gas fired emergency generators. One is 60 kW rated and is located at the North Building. It was installed in 2010 and is exercised weekly. The other one is 85 kW rated and is located at the South Building and is exercised weekly. These units are exempt from permitting by Rule 285 (g). I have attached correspondence from the company verifying this information. During the next onsite inspection, a discussion with the facility will ensure that the emissions from these units are included in all facility-wide emission calculations.

#### MAERS REPORT REVIEW

This report was received on March 13, 2019. All emissions appear to have been reported

accurately. I updated the permit field to reflect that this facility no longer has an ROP. The facility has OPT-OUT permit 370-08C. The review was completed on May 29, 2019.

**FINAL COMPLIANCE DETERMINATION**

Ricardo appears to be operating in compliance with all state and federal requirements, as well as all permit conditions.

NAME Jill Zimmerman

DATE 9/30/19

SUPERVISOR JK