

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

A821751012

FACILITY: McLAREN PERFORMANCE TECHNOLOGIES		SRN / ID: A8217
LOCATION: 32233 W EIGHT MILE RD, LIVONIA		DISTRICT: Detroit
CITY: LIVONIA		COUNTY: WAYNE
CONTACT: Kristen Baumia , EHS Specialist		ACTIVITY DATE: 10/15/2019
STAFF: Todd Zynda	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: October 15, 2019 Inspection		
RESOLVED COMPLAINTS:		

REASON FOR INSPECTION: Targeted Inspection
INSPECTED BY: Todd Zynda, AQD
PERSONNEL PRESENT: Andrew Bosscher – Project Manager
FACILITY PHONE NUMBER: 248-473-3227
FACILITY WEBSITE:

FACILITY BACKGROUND

McLaren Performance Technologies (McLaren), a subsidiary of Linamar Corporation, is located at 32233 West Eight Mile Road, Livonia, Michigan and has historically provided engine diagnostic testing services to engine manufacturers, automotive suppliers, and catalyst manufacturers. Within the last several years, due to a significant decrease in demand for conventional engine testing, the facility conducts electrical testing of drive train units, transmission components, and electrical engines.

The larger main building (Building 1) currently houses most of the offices, engine test cells 1 through 13, testing equipment, and cold cleaners. Building 2, located east of Building 1, houses electrical motor dynamometers, electric rotary actuators, and cold cleaners. McLaren is one of several commercial and light industrial establishments lining the north and south sides of Eight Mile Road. Residential neighborhoods lie in the rear of these facilities. The residential neighborhood to the south of McLaren borders the facility and is within an estimated 500 feet of the engine test cell building.

McLaren is a major stationary source under 40 Code of Federal Regulations (CFR) Part 52, Prevention of Significant Deterioration (PSD), due to the facility wide potential emissions of carbon monoxide greater than 250 tons per year. The source is subject to Title V (Renewable Operating Permit [ROP]) permitting regulations; the potential to emit for carbon monoxide (CO) exceeds 100 tons per year. McLaren is subject to 40 CFR 63, Subpart CCCCC, National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities. The potential to emit hazardous air pollutants (HAP) does not exceed 10 tons per year for any individual HAP nor 25 tons per year for all HAPs combined. Therefore, the Maximum Achievable Control Technology (MACT) standard (40 CFR 63 Subpart P PPPP) regulating engine test cells/stands at major HAP sources is not applicable to this facility. Storage tanks for volatile organic compounds at this facility do not exceed 75 cubic meters (19,813 gallons) volumetric capacity therefore the Standards of Performance for New Stationary Sources (NSPS) for volatile organic liquid storage tanks (40 CFR 60 Subpart Kb) is not applicable to emission units at the source. The facility also operates a natural gas fired emergency generator subject to 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

PROCESS OVERVIEW

McLaren currently has limited operation of conventional engine test cells. McLaren has the capability to operate thirteen test cells equipped with dynamometers (previously there were 16 cells, but 3 cells have been permanently converted or removed). The test cells were originally designed for testing gasoline fired engines. The original test cell configuration utilized gasoline, the combustion fuel, which is metered to the test stands from one of three above-ground, fixed-roof, vertical storage tanks bordering the main building's eastern edge. The test cells are housed individually in small rooms outlining the laboratory/workshop areas on the northeast side of the main building. Exhaust gases vent vertically out of the roof of the building (the presence of stacks on the east roof of the main building may be observed from ground level) through stacks ranging 29 feet to 36 feet in height, one stack dedicated for each test cell.

McLaren's clients deliver engines, the engines are secured in one of the test stands, and the engines are operated for the time, loads, and characteristics requested by the client. McLaren measures and records engine performance on computer consoles located outside the door of each engine test cell.

In the original configuration, ten of the test cells (Cell Nos. 2, 3, 6, 8, 9, 11, 12, 14, 15, and 16) are equipped with catalytic converters for CO, nitrogen oxides (NOx), and volatile organic compound (VOC) control and are under permitted fuel restrictions. The catalytic converters are installed and monitored by McLaren and serve as pollution control devices. Catalytic converters control emissions from individual test cells and are inserted into the exhaust pipes leading out from the engine test stand; they appear as annular cylinders with a diameter larger than that of the exhaust pipe and are located between the engine and the muffler. The catalytic converter containers may be unbolted, removed from the exhaust line, replenished with active catalyst, and reinstalled. Cells used for testing engines with dual exhaust are equipped with two converters; one for each exhaust. Test cells No. 1, 4, 5, 7, and 13 contain no fuel restrictions, and emit uncontrolled to the atmosphere. Test cell 10 was issued permit to install 67-05C on February 22, 2018 which includes a catalytic converter as emissions control and also allows for the combustion of various fuels (unleaded gasoline, diesel, kerosene, compressed natural gas [CNG] and liquid petroleum gas [LPG]). Under PTI 67-05C, test cell 10 is subject to CO and 1,3 butadiene emission limits along with fuel usage restrictions.

Currently, the facility houses seven cold cleaners. Five cold cleaners are located in the main building. Two cold cleaners are located in Building 2 which houses electrical motor testing. All of the cold cleaners vent to the general in-plant environment. A paint spray booth is located in a small room in Building 1. Paint usage is low; the booth is operated to coat engine equipment as necessary. Paint is applied using a high volume low pressure (HVLP) spray gun or applied by hand. Emissions from the paint area are vented through panel filters and a vertical stack.

Building 2 houses two electrical test cells, electric rotary actuators, test vehicle storage area, and two cold cleaners. Building 3 was demolished for the construction of an expanded office area and flexible manufacturing complex (completed in 2016).

COMPLAINT/COMPLIANCE HISTORY

During the October 2017 inspection, McLaren was determined to be in compliance with MI-ROP-A8217-2012 and PTI 67-05B.

During the October 2015 inspection, McLaren was determined to be in noncompliance with the PTI 67-05B, EU-TESTCELL10, SC V.1 (failure to verify emission rate from EU-TESTCELL10 within 180 days) and SC VII.1 (failure to notify of completion of modification). On March 23, 2016 stack testing on EU-TESTCELL10 was completed.

During the February 24, 2014 inspection McLaren was determined to be in noncompliance with daily fuel usage limits and emissions for EU-TestCell10. McLaren provided documentation that the records originally provided at the time of inspection were incorrect and that data transcription error resulted in the misreported emissions and fuel usage.

An ROP deviation occurred for one day on September 27, 2011. At that time the daily fuel usage limit (250 gallons per day) was exceeded at EU-TestCell10. In response to the deviation, McLaren instituted corrective actions to assure that test technicians were aware of the limit and would be notified when approaching the maximum amount of fuel allowed per day.

During February 2010, the facility was determined to be in noncompliance with catalyst monitoring requirements for FG-TestCellsCC (inlet temperature versus catalyst bed temperatures and air to fuel [A/F] ratio requirements). The facility provided additional records that indicated a "FAIL" status for inlet versus catalyst bed temperature. The facility provided a letter that explained that a programming error was responsible for populating the catalyst inlet and bed temperature fields. Additionally, staff was not quality assuring the data. A response letter from the facility explained that a new process for testing would be implemented, that data would be reviewed weekly. The response was considered sufficient and the violation was considered resolved.

During December 2007 the facility was determined to be in noncompliance with the daily fuel usage limit for EU-TestCell10. Additionally, it was discovered that the facility is subject to Compliance Assurance Monitoring (CAM) but a CAM plan was not submitted with the ROP renewal application. A partial CAM plan was received. One

element of the plan that AQD believed was necessary is stack testing of the controlled cells. However, as the facility was not operating at normal capacity needed for testing, incorporating CAM into the ROP was placed on hold. In the meantime, the facility continued to submit quarterly reports of the operational status of the cells. The daily fuel usage limit violation was determined to be the result of data entry error.

OUTSTANDING CONSENT ORDERS

None

OUTSTANDING VIOLATION NOTICES

None

INSPECTION NARRATIVE

On October 15, 2019 the Michigan Department Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) inspector, Mr. Todd Zynda, conducted an unannounced inspection of McLaren located at 32233 West Eight Mile Road, Livonia, Michigan. During the inspection, Mr. Andrew Bosscher, Project Manager, provided information and tour of facility operations relating to air quality permits. The inspection was conducted to determine the facility's compliance with applicable State and Federal air quality regulations, ROP No. MI-ROP-A8217-2012 and Permit to Install (PTI) 67-05C. McLaren is permitted for the operation of 16 engine test cells, seven cold cleaners, and a paint area.

At approximately 1:00 PM, AQD staff arrived onsite and entered the facility, stated the purpose for the inspection, and was greeted by Mr. Bosscher. The facility operations and record keeping requirements were discussed.

The facility currently has approximately 200 employees and operates during normal business hours (7 AM to 5 PM), although dyno cells may operate during evening and weekend hours, depending on client needs.

The current operational use of each test cell was discussed. The updated inventory of test cells is listed below.

- Cell 1 – Natural gas burner testing
- Cell 2 – Converted to electric testing (spin rig) -
- Cell 3 – Converted to electric motor gear box testing
- Cell 4 – Conventional engine testing
- Cell 5 - Conventional engine testing
- Cell 6 – Converted to electrical testing
- Cell 7 – Conventional engine testing
- Cell 8 – Conventional engine testing
- Cell 9 - Conventional engine testing
- Cell 10 - Conventional engine testing.
- Cell 11 – Converted to electric testing (spin rig)
- Cell 12 – Conventional engine testing
- Cell 13 – Conventional engine testing
- Cell 14 – Converted to electronics and networking rooms. Stacks removed (will not be included in ROP renewal).
- Cell 15 – Converted to electronics and networking rooms. Stacks removed (will not be included in ROP renewal).
- Cell 16 – Physically removed, replaced with machining and fabrication (will not be included in ROP renewal)

Following discussion of the test cell operation status, the records required in the ROP and PTI 67-05C were discussed. The requested records were received on October 30, 2019 and November 5, 2019.

Following the discussion of operation status, and records review, a tour of the facility was provided.

The tour began at the expanded portion of Building 1 with observation of the transmission assembly area and dunnage washer. Any potential emissions are released to the general in-plant environment.

Following observation of the assembly area, the test cells were observed.

The engine test cells were observed. Conventional engine test cells are set up similarly in every test cell room. The engine to be tested is secured in a cradle in the middle of the room. Extending out the back of the

engine is a cylindrical driveshaft which connects to the dynamometer. The dynamometer measures engine characteristics and transmits the data to monitors outside the rooms. An exhaust pipe extends from the side of each engine and trails near the floor to the back of the room into a vertical muffler and then through the ceiling to the stack on the roof. The catalyst(s), if present, are located in shells between the engine and the muffler. An operator reads the gas meter each morning to determine the gasoline usage for the day. Backpressure, A/F ratio, and inlet to bed temperature readings are collected during testing for reporting purposes.

Several of the test cells have been converted to electrical testing. At the time of the inspection, test cells that had been converted to perform electrical testing include test cells 2, 3, 6, and 11. Test cells 2, 3, and 6 have had the gas lines removed. According to Mr. Bosscher, it would take considerable investment to have the cells do conventional engine testing again. Test cell 11 still has the gas lines. According to Mr. Bosscher it would take 1 to 1.5 months to convert test cell 11 back to conventional engine testing. Test cell 10 was observed with catalytic converters in place.

Following the engine test cells, the cold cleaners in Building 1 were observed. The cold cleaner lids were closed and instructions were posted.

Within Building 1, the fabrication and machine shop was observed. The shop includes drill presses, lathes, and CNC machines. All emissions are released to the general in-plant environment. It is in this area that test cells 14, 15, and 16 were formerly located. Cell 16 has been physically removed. Cells 14 and 15 are now used as networking (internet, server, etc.) rooms (stacks have been removed). The fabrication and machine shop also contains a natural gas fired 600 Btu/hr Bayco oven. According to Mr. Bosscher, the oven is used maybe once a month, to heat metal to "slip fit parts". The oven is not used as a burn off oven. Next to the Bayco oven is a natural gas fired "block washer" where engine blocks can be cleaned. Emissions from the "block washer" are vented to outside ambient air.

The tour continued in Building 1 where a small paint booth was observed. The paint booth was not in operation at the time of inspection. Filters were in place. A paint use log was hung outside the door for record keeping of paint quantities used.

The facility tour concluded in Building 2, where the following were observed: eight electrical test cells, six rotary actuators (electrical), test vehicle storage area, and two cold cleaners. The cold cleaners' lids were closed. Signs were posted on the wall in front of each cold cleaner reminding employees to close the lid when not in use. The electrical testing in Building 2 are not subject to air quality regulations.

APPLICABLE RULES/PERMIT CONDITIONS

Renewable Operating Permit No. MI-ROP-A8217-2012

The ROP was renewed with an effective date of April 18, 2012. The General Condition (GC) and Special Condition (SC) are listed as appropriate. For brevity, permit conditions and the language of federal and state rules have been paraphrased.

GC 11 – **IN COMPLIANCE**. Opacity limited to a six-minute average of 20 percent (%), except for one six-minute average or not more than 27% opacity. Visible emissions were zero from all stacks during the inspection.

EU-Paint Area

SC II. 1 **IN COMPLIANCE**. Spray coating usage limited to 55 gallons per 12-month rolling time period. Records provided indicate that the paint usage is significantly less than 55 gallons per 12-month rolling time period. The facility typically uses less than two gallons per month. The highest 12-month rolling paint usage occurred at the end of January 2018 at 7.98 gallons.

SC VI. 1 **IN COMPLIANCE**. Shall maintain monthly and annual coating usage records. January 2018 through September 2019 monthly records were submitted.

EU-TestCell10 as listed in MI-ROP-A8217-2012 has been updated by PTI 67-05C as evaluated below.

FG-ColdCleaners

The ROP table lists seven cold cleaners. The condition is written to cover any cold cleaner that is grandfathered

or exempt. During the inspection, seven cold cleaners were in operation. The requirements below apply to each cold cleaner individually.

SC II MATERIAL LIMITS

1. **IN COMPLIANCE.** Based on a review of safety data sheet (SDS) submitted, solvents do not contain prohibited chemicals listed in this condition above 5 percent.

SC IV DESIGN/EQUIPMENT RESTRICTIONS

1,2,3, 4, 5 **IN COMPLIANCE.** (1) Each cold cleaner must either have an air/vapor interface of 10 square feet or less or the cold cleaner must vent to the in-plant environment; (2) be equipped with a device for draining cleaned parts; (3) be equipped with a cover and cover is closed when not in use; (4) the cover mechanically assisted if the solvent's Reid vapor pressure exceeds 0.3 pounds per square inch absolute (psia) or the solvent is heated or the solvent is agitated; (5) for new cold cleaners; special conditions that apply to Reid vapor pressure greater than 0.6 psia.

Observations indicate that each cold cleaner vents to the in-plant environment and is equipped with a cover. The covers were closed at the time of the inspection. Parts are left in the tanks to drain. According to McLaren, the solvent is neither heated nor agitated during cleaning. The SDS provided indicates the vapor pressure is 2.1 mmHg (0.04 psia).

SC VI MONITORING/RECORDKEEPING

1,2,3,& 4 **IN COMPLIANCE.** (1) if solvent is heated, solvent temperature shall be monitored; (2) Recordkeeping on the make/model, size, description, date of installation, air/vapor surface area, type of solvent for each cold cleaner; (3) written procedures posted; (4) waste solvent stored in closed containers unless a safety hazard.

The records on the cold cleaners were submitted on December 26, 2007 and have not changed. See facility file. Written procedures were posted. Waste solvent was not observed during the inspection.

The facility cold cleaners appear to be exempt from PTI requirements under R336.1281(2)(h) or R336.1285(2)(r) (iv).

FG-TestCells

FG-TestCells (test cells No. 1, 4, 5, 7, and 13) contain no fuel restrictions, and emit uncontrolled to the atmosphere. These cells are exempt per Rule 285(g) and were installed before the promulgation of Rule 278. Within the initial ROP application 199600113, the test cells at the facility are only listed as using gasoline. The facility is limited to using the "grandfathered" exempt test cells to gasoline. During the inspection it was observed that the EUTESTCELL1 was testing a natural gas type burner. Because this is a change in the fuel usage, a Rule 278(a) analysis should be conducted demonstrating that an exemption is still applicable for test cell 1 when using natural gas.

SC VIII IN COMPLIANCE. STACK/VENT RESTRICTIONS. Stacks appear to be in compliance based on visual observation from ground level and reported values.

FG-TestCellsCC

SC I EMISSION LIMITS

1&3 **UNABLE TO DETERMINE.** CO and VOC emissions from FG-TestCellsCC shall not exceed 0.59 pounds CO per gallon of gasoline combusted (SC 1) nor 0.008 pounds VOC per gallon of gasoline combusted (SC 3). The monitoring method for the pounds per gallon limit is a stack test through General Condition No. 13, a condition indicating the Department may require a stack test through R 336.2001 and R 336.12003. The AQD has previously requested stack testing (during 2007), but this requirement has been placed on hold as the facility is not operating under normal representative conditions. SC V.1 states that CO and 1,3-butadiene testing is required no later than 1 year prior to permit renewal. However, this condition identifies EU-TestCell10 and is likely in error as FG-TestCellsCC do not have a 1,3-butadiene emission limit.

2&4 **IN COMPLIANCE.** CO and VOC emissions from FG-TestCellsCC shall not exceed 133.4 tons per year (SC 2) nor 1.8 tons per year (SC 4), respectively; the tons per year limit is to be evaluated on a 12-month rolling time period. Based on emission records submitted, the highest 12-month rolling emissions for CO and VOCs were 2.0 tons and 0.03 tons respectively, and occurred at the end of July, August, and September 2019.

SC II MATERIAL LIMITS

1&2 IN COMPLIANCE. Fuel usage shall not exceed 2,000 gallons per day (SC 1) nor 450,000 gallons per 12-month rolling time period (SC 2). The highest 12-month rolling fuel usage for January 2018 through September 2019 was 6,914 gallons (September 2019). Maximum average daily fuel usage for all controlled cells for January 2018 through September 2019 was 128 gallons and occurred during April 2019. While the daily value is an average, the AQD accepts the record provided as the number of days of testing is documented (22 days) and the amount of fuel is documented (2818 gallons).

SC IV DESIGN/EQUIPMENT

1. IN COMPLIANCE. Shall not operate any test cell unless each test cell has a catalytic converter installed, maintained, and operating in a satisfactory manner. Catalytic converters are maintained and operating properly.

SC VI MONITORING/RECORDKEEPING

1. IN COMPLIANCE. Shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the inlet temperature and catalyst bed temperature for each catalytic converter during an engine test. Records provided indicate that inlet temperature and catalyst bed temperature are recorded during each engine test.

2. IN COMPLIANCE. Shall use catalytic converters to assure compliance with the carbon monoxide limit. An excursion for non-compliance shall be 2 consecutive 1-hour block average catalyst bed temperature readings less than 230°C. A spot check of the catalyst records provided indicate that the catalyst bed temperature has been greater than 230°C (446°F) on a one hour block average.

3, 4, & 5. IN COMPLIANCE. Shall keep daily, monthly and previous 12-month rolling records for CO, VOC, and 12-month fuel usage. Daily fuel usage records are available. Monthly and 12-month rolling CO, VOC, and fuel usage were submitted.

6. IN COMPLIANCE. Shall keep, in a satisfactory manner, continuous records of the inlet temperature and catalyst bed temperature. Records were provided for the inlet and catalyst bed temperature when in operation.

SC VIII STACK/VENT RESTRICTIONS

1-9 IN COMPLIANCE. Stacks were determined to be in compliance.

Permit to Install No. 67-05C – EUTESTCELL10

Permit to Install No. 67-05C was issued on February 22, 2018 for the modification of gasoline throughput based on stack testing conducted on March 23, 2016) at EU-TestCell10.

SC I. EMISSION LIMITS

1. IN COMPLIANCE. CO – 709.2 pounds per day (lb/day). Daily fuel usage is estimated based on monthly usage divided by the number of days operated. The AQD accepts this method based on the low monthly fuel usage. The highest daily fuel usage for 2018 through September 2019 occurred during August 2018 at 82 gallons. Based on the emission factor (EF) determined from CO stack testing on March 23, 2016 (EF = 1.45 lbs. CO/gal [see MACES report CA_A821736673]), the daily emissions for August 2018 was 119.38 lbs CO/day.

2. IN COMPLIANCE. CO – 16 tons per year on a 12-month rolling time period determined at the end of each calendar month. The highest CO 12-month rolling emissions since January 2018 was 1.5 tons/year (September 2019).

3. IN COMPLIANCE. 1,3-butadiene –8.28 lbs/year on a 12-month rolling time period determined at the end of each calendar month. The highest 1,3-butadiene 12-month rolling emissions since January 2018 was 0.8 lbs/year (September 2019).

SC II MATERIAL LIMITS

1. IN COMPLIANCE. Shall only burn unleaded gasoline, diesel, kerosene, CNG, and LPG. According to the records provided, EUTESTCELL10 has only burned gasoline and LPG.

2. IN COMPLIANCE. Fuel usage shall not exceed 489 gallons per calendar day. As described in SC I.11, the highest daily fuel usage for 2018 through September 2019 occurred during August 2018 at 82 gallons.

3. IN COMPLIANCE. Fuel usage shall not exceed 22,069 gallons per 12-month rolling time period as determined

at the end of each calendar month. The highest 12-month rolling fuel usage since January 2018 was 2,069.8 gallons (September 2019).

SC V TESTING

1. **IN COMPLIANCE.** Verification of CO emission rates. Testing to be completed no later than 1 year prior to the ROP renewal. The ROP has been in renewal phase since October 14, 2016, prior to the issuance of PTI 67-05C.

SC VI MONITORING

1 & 2a through f. **IN COMPLIANCE.** Shall maintain record of days of operation, total combined gallons, CNG and LPG use calculations, monthly and 12-month rolling emission records for CO, and monthly and 12-month rolling emission records for 1,3-butadiene. The facility is maintaining the required records.

3a & b. **IN COMPLIANCE.** Shall maintain daily fuel used calculations based upon the total combined gallons used divided by the number of days operated. Fuel use records are maintained.

SC VII REPORTING

1. **IN COMPLIANCE.** Shall notify the AQD within 30 days after completion of modification. The AQD has been notified.

SC VIII STACK RESTRICTIONS

IN COMPLIANCE. STACK/VENT RESTRICTIONS. The stack for EU-TestCell10 appears to be in compliance based on visual observation from ground level and reported value.

R 336.1301 (PTI 67-05C - General Condition 11)

This rule covers the density of emissions and is applicable to all sources.

R 336.1301(1)(a) – **IN COMPLIANCE.** Visible emissions limited to a six-minute average of 20% opacity, except for one six-minute average per hour of not more than 27%. Opacity was zero at the time of inspection.

PERMIT TO INSTALL EXEMPT EQUIPMENT

Machining Equipment/CNC Machine

The machining equipment and CNC machine appear to be exempt from PTI requirements under the following Rule.

R336.1285(2)(l)(vi)(B): "Equipment for carving, cutting, routing, turning, drilling, machining, etc. which has emissions that are released only into the general in-plant environment."

The small assembling line and electrical testing does not appear to generate any air emissions and would not require an AQD permit. Any potential emissions are released to the general in-plant environment.

Bayco oven - 600 Btu/hr

The Bayco oven appears to be exempt from PTI requirements under the following Rule.

R 336.1282(2)(b): "Fuel-burning equipment which is used for ...indirect heating which burns...natural gas.. and the equipment has a rated heat input capacity of not more than 50,000,000 Btu per hour."

Dunnage Washer

The dunnage washer appears to be exempt from PTI requirements under the following Rule.

R 336.1281(2)(e): "Equipment used for washing or drying materials, where the material itself cannot become an air contaminant, if no volatile organic compounds that have a vapor pressure greater than 0.1 mmHg at standard conditions are used in the process and no oil or solid fuel is burned.

According to information provided during the previous inspection the vapor pressure is 0.09 mmHg.

Block Washer

The block washer appears to be exempt from PTI requirements under the following Rule.

R 336.1285(2)(l)(iii): "Equipment for surface preparation of metals by use of aqueous solutions, except for acid

solutions.”

According to the SDS provided during the previous inspection for material used in the block washer, the pH concentrate is 10.475.

Compliance Assurance Monitoring (40 CFR Part 64)

Per 40 CFR Part 64.5(b) the facility has submitted a CAM plan with the ROP renewal for ROP No. MI-ROP-A8217-2012. The ROP has incorporated the CAM requirements as appropriate.

40 CFR 63, Subpart CCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Subpart CCCCC was not evaluated during the inspection. This regulation will be incorporated in the ROP upon renewal. The AQD has not accepted delegation to implement and enforce this regulation.

40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

According to information provided the engine was manufactured on June 19, 2015 and began start up on April 16, 2017. The specification sheet indicates a maximum power of 60 KW (96 horse power).

60.4233(d) and 60.4233(e), 40 CFR Part 60, Subpart JJJJ, Table 1 - Owner/operator must comply with emission standards specified in this subpart. **IN COMPLIANCE**. The facility provided a USEPA Certificate of Conformity for the engine during the previous inspection.

40 CFR 60.4243(a)(2)(ii) – **IN COMPLIANCE** -To the extent practicable, must maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. The facility appears to meet this requirement.

40 CFR 60.4243(d) – **IN COMPLIANCE** - The emergency engine may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of the emergency engine in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operating, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.

The hour meter was observed during the inspection and read 2982.3 minutes (49.7 hours). Records of generator use were provided via email on November 15, 2019. Records for 2019 indicate a total engine usage of 36.30 hours.

40 CFR 60.4237(b) – **IN COMPLIANCE** - Shall not operate the generator unless it is equipped with a functional non-resettable hour meter. The engine is equipped with a non-resettable hour meter.

40 CFR 60.4245(a) – **IN COMPLIANCE** - The permittee must keep records as outlined below. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.

- a. Maintenance conducted on the engine.
- b. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
- c. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to § 60.4243(a)(2), documentation that the engine meets the emission

standards.

The emergency engine appears to meet the above requirements. The Certificate of Conformity and emissions data was provide during the previous inspection. Maintenance records were provided via email on November 15, 2019.

The emergency generator appears to be exempt under R336.1285(2)(g) – Internal combustion engines that have less than 10,000,000 Btu/hr maximum heat input. According to information provided during the previous inspection, the engine has a natural gas consumption rate of 923 ft³/hr at 100% load. This equates to a heat input capacity of 969,150 Btu/hr (923 ft³/hr x 1050 Btu/ft³).

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

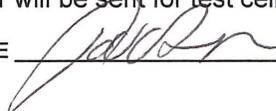
Not applicable.

MAERS REPORT REVIEW:

The facility is required to report to the Michigan Air Emission Reporting System (MAERS). Facility submitted MAERS for reporting year 2018 in a timely manner. No issues were identified with the 2018 MAERS reporting (See MACES report CA_A821748320 for the 2018 MAERS review report).

FINAL COMPLIANCE DETERMINATION:

At this time, this facility appears to be in compliance with MI-ROP-A8217-2012 and PTI 67-05C. A Rule 278(a) letter will be sent for test cell 1 using natural gas.

NAME  DATE 12/30/19 SUPERVISOR JK