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

N267426536

FACILITY: Continental Automotive Systems		**SRN / ID:** N2674
LOCATION: 2400 EXECUTIVE HILLS DR, AUBURN HILLS		**DISTRICT:** Southeast Michigan
CITY: AUBURN HILLS		**COUNTY:** OAKLAND
CONTACT: Kathy Spinks , Senior EHS Administrator		**ACTIVITY DATE:** 08/19/2014
STAFF: Rebecca Loftus	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT:		
RESOLVED COMPLAINTS:		

On August 19, 2014, I, Rebecca Loftus, from the Department of Environmental Quality's (DEQ), Air Quality Division (AQD), conducted an inspection of Continental Automotive Systems, SRN: N2674, located at 2400 Executive Hills Drive, Auburn Hills, Michigan. The purpose of this inspection was to determine the facility's compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, Michigan's Air Pollution Control Rules, Permit to Install (PTI) No.147-11.

Continental Automotive Systems is a worldwide automotive supplier. The Automotive Group, comprised of three divisions Chassis & Safety, Powertrain, and Interior, develops and produces products and systems for the automotive community. Upon my arrival at the facility I met with Ms. Kathy Spinks, Senior EHS Administrator and explained the purpose of my inspection. Ms. Spinks explained that this location, known as Continental Automotive South, is a R&D facility which conducts laboratory testing and simulated testing of different automotive components including fuels and fuel pumps.

PTI No. 147-11

Continental Automotive South has two buildings and one fuel storage shed. The main building is broken down into multiple rooms/labs each configured for different types of testing. These labs include the following: office space, machining, hand welding, assembly, small paint hood (paint gun with attached cups), thermotron chambers (Temperature-Humidity control), electro-magnetic chambers, fuel prototype, software simulation, vibration testing. The majority of these labs do not require ventilation, however the paint hood and vibration room have exhaust systems. The painting operation uses had held spray cans and appears to be exempt from obtaining a PTI pursuant to Rule 287(b). The Flex Fuels group also uses mineral spirits (see MSDS in file) and small amounts of fuels in a ventilated area.

The second building, located behind the first, is an explosion-proof fuel lab. With this building, Continental Automotive Systems conducts testing of fuels and fuel pumps in the Performance Lab and Durability Lab. The Performance lab has seven fume hoods and ventilation for fuels/calibration vapors. The Durability Lab consists of six durability tanks which can be filled with 25-30 gallons of fuel at a time and ventilation for the room itself. The fuel storage shed also has ventilation.

On September 26, 2011, Continental Automotive Systems applied for PTI No. 147-11. This PTI includes emission units for the Flex Fuel Modules, the Performance Lab, and the Durability Lab. These three processes make up the flexible Group FG-MODTEST; which has the following emission/material limits: 4 Tons per year VOC and 6,500 gallons per year of Gasoline. PTI No. 147-11 also requires Continental Automotive Systems to record the amount of gasoline, diesel, and calibration fluid used and waste generated each calendar month, and calculate VOC emissions on a 12-month rolling basis.

Record Keeping

During the inspection, Ms. Spinks, Brian Jobak, from the Fuels Lab, and I discussed the record keeping format. The Fuels Lab is tracking the orders and waste pick up for diesel, gasoline, and calibration fluid (see attached records). Ms. Spinks and Mr. Jobak stated it is difficult for Continental Automotive Systems to calculate emissions on a monthly basis because they calculate evaporation lost (fugitive emissions) based on mass balance, and the fuel used in one month may not be picked up as waste until a few months later when enough waste has been collected for pick-up.

The evaporation loss, calculated as inventory minus waste, was provided for 2013, however the in stock inventory was unknown. During our discussion Mr. Jobak and I calculated the following: the total amount ordered for the year, plus the inventory, at a 10% evaporation loss would equate to 2,646 lbs VOC emissions for the year. This is below the 4 Ton limit established in the permit.

For next year, in January, the Fuels Lab will determine the amount of fuels and waste currently on-site in their

inventory. They will continue to track the monthly orders and waste shipments. The evaporation lost for the year will be calculated as follows:

Evaporation Loss (VOC emissions) =
Orders for the year + stock from the previous year (established in January) – Waste Fuel Pick Ups – Inventory stock at end of year (this inventory becomes next years "current stock")

The Flex Fuel Lab uses very small quantities (small pipettes) of multiple fuel blends under a laboratory fume hood. They currently have a list of each fuel and their amounts in the lab. Based on their records, for a 3 month period the calculate usage was very small and emissions were less than 5 lbs. The record keeping is quite cumbersome for the lab so I will work with Ms. Spinks to establish a list of fuels and a monthly check list for the quantity of fuels used. This check list will be used to satisfy the record keeping requirements in their permit.

Boilers
This facility has two Superior Boilers (Serial #2391 and #2392). Both were built in 1989, have not been modified, and have heat input ratings of 7,071,000 Btu/hour. At this time the boilers are not subject to the New Source Performance Standards (NSPS) for Small Industrial/Commercial/Institutional Steam Generating Units, 40 CFR Part 60 Subpart Dc, and are exempt from obtaining a PTI pursuant to Rule 282(b)(i). Note these boilers were previously permitted under PTI No. 828-90; this permit was voided on July 3, 2012.

Emergency Generator
Continental Automotive Systems has one emergency generator for their IT room. The generator is a 300 Kw Michigan CAT, model 3406B, with a manufactured date of March 1988, and an install date of July 1990. The generator is diesel fueled and has a total of 1336 hours.

This emergency generator appears to be exempt from obtaining a PTI pursuant to Rule 285(g) and is not currently subject to the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60 Subpart IIII.

The emergency generator is subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines at area sources, 40 CFR Part 63 Subpart ZZZZ (see attached Summary of Requirements Document).

Conclusions
Based on the yearly calculations and gasoline usage, Continental Automotive Systems appears to be in compliance with the limits of PTI No. 147-11. At this time Continental Automotive Systems appears to be in compliance with Michigan's Air Pollution Control Rules and the Clean Air Act.

For follow-up: Send Ms. Spinks information on Michigan's C3 Program.

NAME Rebecca [illegible] DATE 9/24/14 SUPERVISOR CJE

RICE NESHAP Summary of Requirements[1]

For Emergency Spark Ignition Engines

Existing Stationary Engine ≤500 HP Located at Area Sources of HAP, constructed before June 12, 2006

NOTE: Only the tables relevant to this source category are bolded. To refer to the regulatory text, please go to Subpart ZZZZ.

Your **compliance date** is October 19, 2013.

Emission Limitations, Management Practices and Other Requirements: 63.6603(a), Table 2d

§ 63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in **Table 2d** to this subpart and the operating limitations in Table 2b to this subpart which apply to you. (Note: No operating limitations apply to engines addressed in this document.)

Operating Limitations: No Requirements

Fuel Requirements: No Requirements

Performance Tests: No Requirements

Monitoring, Installation, Collection, Operation and Maintenance Requirements: 63.6625(e), (f), (h), (j)

§ 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

[1] Disclaimer: The content provided in this software tool is intended solely as assistance for potential reporters to aid in assessing requirements for compliance under the reciprocating internal combustion engines (RICE) National Emissions Standards for Hazardous Air Pollutants, 40 CFR Part 63 Subpart ZZZZ. Any variation between the rule and the information provided in this tool is unintentional, and, in the case of such variations, the requirements of the rule govern. Use of this tool does not constitute an assessment by the EPA of the applicability of the rule to any particular facility. In any particular case, the EPA will make its assessment by applying the law and regulations to the specific facts of the case.

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and **2d** to this subpart apply.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of **Table 2d** to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

Initial Compliance: No Requirements

Continuous Compliance: 63.6605, 63.6640

§ 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance

procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and **Table 2d** to this subpart that apply to you according to- methods specified in **Table 6** to this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 (see section on General Provisions below) to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. 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 RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP– 002–3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, 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.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or nonemergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

Notification Requirements: No Requirements

Recordkeeping Requirements: 63.6655, except 63.6655(c)

§ 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in **Table 2d** to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

Reporting Requirements: Footnote 2 of Table 2d; For engines greater than 100 HP AND operated less than 15 hours/year for emergency demand response: 63.6650(h)

§ 63.6650 What reports must I submit and when?

Footnote 2 of Table 2d: If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management

practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

For engines greater than 100 HP AND operated or contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operate for the purpose specified in § 63.6640(f)(4)(ii):

§ 63.6650(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 63.13.

General Provisions (40 CFR part 63) -see Table 8: Yes, except per 63.6645(a)(5), the following do not apply: 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), and 63.9(b)-(e), (g) and (h).