

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
**ACTIVITY REPORT: On-site Inspection**

N272167261

<b>FACILITY:</b> Trialon Corporation		<b>SRN / ID:</b> N2721
<b>LOCATION:</b> 3000 UNIVERSITY DR, AUBURN HILLS		<b>DISTRICT:</b> Warren
<b>CITY:</b> AUBURN HILLS		<b>COUNTY:</b> OAKLAND
<b>CONTACT:</b>		<b>ACTIVITY DATE:</b> 02/09/2023
<b>STAFF:</b> Iranna Konanahalli	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> CMS ROP-opt-out Source FY 2023 scheduled inspection of Trialon Corporation (N2721) ("Trialon"), fka Delphi Automotive Systems, LLC (N2721) located at 3000 University Dr., Auburn Hills, Michigan 48326.		
<b>RESOLVED COMPLAINTS:</b>		

**Trialon Corporation (N2721)**

**fka Delphi Automotive Systems, LLC (N2721)**

**3000 University Dr.**

**Auburn Hills, Michigan 48326**

**Name change: About 2020, Trialon purchased Delphi Technologies especially testing labs.**

**Contact:**

1. **John Doud** (Mail Code: NA; Phone: NA; Fax: NA; Cell: 810-691-8477; E-mail: jDoud@Trialon.com), Manager, Testing and Validation

**Active permit: PTI No. 305-08A dated September 15, 2011, for six engine dynamometer test cell labs. The permit amendment (PTI No. 305-08 → PTI No. 305-08A) reduced the test cells from 8 to 6. The amendment also increased the allowable CO limit. Operation of FG-DynoTestLabs with uncontrolled emissions under the following circumstances:**

1. Thermal shock;
2. Poisoning tests; or,
3. Backpressure requirements.

**On February 09, 2023 , I conducted a level-2 CMS ROP-opt-out Source FY 2023 scheduled inspection of Trialon Corporation (N2721) ("Trialon"), fka Delphi**

**Automotive Systems, LLC (N2721) located at 3000 University Dr., Auburn Hills, Michigan 48326. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994, PA 451; Michigan Department of Environment, Great Lakes and Energy, Air Quality Division (EGLE-AQD) administrative rules; and PTI No. 305-08A.**

**During the inspection, John Doud, Manager, Testing and Validation, assisted me.**

**Trialon is a Validation Resource Laboratory for OEMs & Tier suppliers. The services range from performing complex validation programs in one of our state-of-the-art testing facilities to sourcing qualified personnel. Since 1982, Trialon continues to lead by providing not only traditional services — including Environmental Simulation, Electrical, EMC, and Vibration — but also advanced component testing that helps its partners keep up with the demanding development requirements of increasingly complex products.**

**Upon purchasing Delhi's Auburn Hills facility, Trialon conducts performance and durability tests on emission sensors plus prototype engine development. The Vehicle Emissions Testing Laboratory offers vehicle manufacturers and automotive component suppliers state-of-the-art test chambers for engine and exhaust aftertreatment development and regulatory compliance support. Real-time modal and/or tailpipe emissions data can be collected for:**

1. U. S. Environmental Protection Agency (EPA)
2. California Air Resources Board (CARB)
3. European regulatory schedules (ECE)
4. Extra Urban Driving Cycle (EUDC)
5. Asian regulatory schedules
6. Custom-tailored testing and development.

### **PTI No. 305-08A, Emission Units (EU)**

<b>Emission Unit ID</b>	<b>Emission Unit Description (Process Equipment &amp; Control Devices)</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
<b>EU-3D-EDL 6 (formerly 3D)</b>	<b>An engine dynamometer test cell lab capable of testing engines up to 450 brake horsepower in size. The engines tested will be fueled by gasoline, E85 ethanol, or diesel fuel. A maximum of seven engines will be tested simultaneously. The lab is equipped with a single exhaust stack, SV3D-EDL.</b>	<b>October 16, 2008/ September 2011</b>	<b>FG- DynoTestLabs</b>

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
	For purposes of this permit, gasoline and E85 ethanol are considered equivalent fuels.		
EU-3F-EDL 4 (formerly 3F)	An engine dynamometer test cell lab capable of testing engines up to 300 brake horsepower in size. The engines tested will be fueled by gasoline or E85 ethanol. A maximum of one engine will be tested simultaneously. The lab is equipped with a single exhaust stack, SV3F-EDL. For purposes of this permit, gasoline and E85 ethanol are considered equivalent fuels.	October 16, 2008/ September 2011	FG- DynoTestLabs
EU-3F-EDL 4: No diesel testing.			
EU-3G-EDL 5 (formerly 3G)	An engine dynamometer test cell lab capable of testing engines up to 380 brake horsepower in size. The engines tested will be fueled by gasoline, E85 ethanol, or diesel fuel. A maximum of three engines will be tested simultaneously. The lab is equipped with a single exhaust stack, SV3G-EDL. For purposes of this permit, gasoline and E85 ethanol are considered equivalent fuels.	October 16, 2008/ September 2011	FG- DynoTestLabs
EU-3H-EDL 1 (formerly 3H)  Converted to e-Motors testing.	An engine dynamometer test cell lab capable of testing engines up to 60 brake horsepower in size. The engines tested will be fueled by gasoline, E85 ethanol, or diesel fuel. A maximum of one engine will be tested simultaneously. The lab is equipped with a single exhaust stack, SV3H-EDL. For purposes of this permit, gasoline and E85 ethanol are considered equivalent fuels.	October 16, 2008/ September 2011	FG- DynoTestLabs
EU-3J-EDL 3 (formerly 3J)	An engine dynamometer test cell lab capable of testing engines up to 600 brake horsepower in size. The engines tested will be fueled by gasoline, E85 ethanol, or diesel fuel. A maximum of one engine will be tested simultaneously. The lab is equipped with a single exhaust stack, SV3J-EDL. For purposes of this permit, gasoline	October 16, 2008/ September 2011	FG- DynoTestLabs

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
	and E85 ethanol are considered equivalent fuels.		
EU-3K-EDL 2 (formerly 3K)  Converted to e-Motors testing.	An engine dynamometer test cell lab capable of testing engines up to 300 brake horsepower in size. The engines tested will be fueled by gasoline, E85 ethanol, or diesel fuel. A maximum of three engines will be tested simultaneously. The lab is equipped with a single exhaust stack, SV3K-EDL. For purposes of this permit, gasoline and E85 ethanol are considered equivalent fuels.	October 16, 2008/ September 2011	FG-DynoTestLabs
EU-3H-EDL 1 & EU-3K-EDL 2 do NOT exist as emissions sources. They have been converted to e-Motors testing.			
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

**PTI No. 305-08A, Flexible Group (FG)**

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-DynoTestLabs	Six (6) engine dynamometer test cell labs. The largest engine tested in any of the six labs will be 600 brake horsepower in size. A maximum of sixteen engines will be tested simultaneously in the combined Test Labs. Each lab is equipped with its own single exhaust stack. For purposes of this permit, gasoline and E85 ethanol are considered equivalent fuels.	EU-3D-EDL 6 EU-3F-EDL 4 EU-3G-EDL 5 EU-3H-EDL 1 EU-3J-EDL 3 EU-3K-EDL 2
The permit amendment (PTI No. 305-08 → PTI No. 305-08A) reduced the test cells from 8 to 6.		

**PTI No. 305-08A, FG-DynoTestLabs**

**FG-DynoTestLabs: Six (6) engine dynamometer test cell labs. The largest engine tested in any of the six labs will be 600 brake horsepower in size. A maximum of sixteen engines will be tested simultaneously in the combined Test Labs. Each lab is equipped with its own single exhaust stack. For purposes of this permit, gasoline and E85 ethanol are considered equivalent fuels.**

**POLLUTION CONTROL EQUIPMENT:**

**Oxidation catalysts or combinations of diesel traps, NOx or hydrocarbon adsorbers designed to meet U.S. EPA vehicle emissions standards.**

**Not always emissions controls are used because of pressure that affects sensor durability testing. Under above mentioned three circumstances, pollution control equipment is not used.**

**PTI No. 305-08A, FG-DynoTestLabs, I.1-2**

**PTI No. 305-08A, FG-DynoTestLabs, I.1-2**

- 1. NOx < 1.05 tons per12-mo rolling period < 4.0 tpy limit**
- 2. CO < 5.8 tons per12-mo rolling period < 14.0 tpy limit**

**PTI No. 305-08A, FG-DynoTestLabs, II.1-2**

**CY 2022: Trialon used 37,708 gallons and 31,116 gallons of gasoline and diesel, respectively. (PTI No. 305-08A, FG-DynoTestLabs, II.1-2 limits: < 101,500 gallons of gasoline and/or E85 ethanol and < 56,500 gallons of diesel per 12-month rolling period)**

**PTI No. 305-08A, FG-DynoTestLabs, III.1**

**When doing performance testing, only one engine can be tested and never two. (PTI No. 305-08A, FG-DynoTestLabs, III.1: shall not test more than two engines simultaneously)**

**PTI No. 305-08A, FG-DynoTestLabs, IV.1**

**Trialon uses either oxidation catalysts or combinations of diesel traps, NOx or hydrocarbon adsorbers designed to meet U.S. EPA vehicle emissions standards. Bypass is allowed under the following engine testing conditions: thermal shock, poisoning tests, or backpressure requirements, or other non-routine development tests.**

**PTI No. 305-08A, FG-DynoTestLabs, VI.1-2**

**Trialon keeps test cells testing information, records fuel usage (gasoline, E85 ethanol, and diesel) and performs the required calculations (CO & NO<sub>x</sub>) on monthly and 12-month rolling period basis.**

## **CONCLUSION**

**Trialon is in compliance with PTI 305-08A.**

NAME *J. S. Marshall*

DATE May 1, 2023

SUPERVISOR *Joyce*