# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C.

In the Matter of:

Spartan Diesel Technologies, LLC.

Respondent.

Docket No. CAA-HQ-2017-8362

## COMPLAINT

## **Preliminary Statement**

- This Complaint is filed in this administrative penalty assessment proceeding under section 205(c)(1) of the Clean Air Act (CAA), 42 U.S.C. § 7524(c)(1), and the U.S. Environmental Protection Agency's (EPA) "Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation/Termination or Suspension of Permits," 40 C.F.R. Part 22 (Consolidated Rules). 40 C.F.R. § 22.13(a)–(c).
- Phillip A. Brooks, Director, Air Enforcement Division, Office of Civil Enforcement, Office of
  Enforcement and Compliance Assurance (Complainant), is authorized by lawful delegation from
  the Administrator of the EPA to institute civil administrative penalty assessment proceedings
  under section 205(c)(1) of the CAA, 42 U.S.C. § 7524(c)(1).
- 3. Respondent in this matter is Spartan Diesel Technologies, LLC.
- Respondent is an active corporation organized under the laws of North-Carolina with a principal
  office, registered office, and registered mailing address at 518 South Allen Road, Flat Rock,
  North Carolina 28731-9447. Respondent's managing member is Matthew Geouge.
- 5. Respondent is a person under section 302(e) of the CAA, 42 U.S.C. § 7602(e).
- The EPA makes the Alleged Violations of Law, below, based on: testing by EPA of parts or components manufactured, offered for sale, and sold by Respondent; submissions of information

by Respondent in response to a Request for Information issued by EPA under the authority of section 208(a) of the CAA, 42 U.S.C.§ 7542(a); and other information.

#### Jurisdiction

- 7. This action is brought under section 205(c)(1) of the CAA, 42 U.S.C. § 7524(c)(1), and the Consolidated Rules.
- The EPA may administratively assess a civil penalty if the penalty sought is less than \$320,000.
   CAA § 205(c)(1), 42 U.S.C. § 7524(c)(1); 40 C.F.R. §§ 19.4 tbl. 1, 1068.125(b).
- The Administrator and the Attorney General jointly determined that this matter, although it mya
  involve a penalty amount greater than \$320,000, is appropriate for administrative penalty
  assessment. CAA § 205(c)(1), 42 U.S.C. § 7524(c)(1); 40 C.F.R. § 19.4
- An Administrative Law Judge shall serve as Presiding Officer in this proceeding until an initial decision becomes final or is appealed. 40 C.F.R. §§ 22.3(a), 22.4, 22.16(c).

## Governing Law

- This action arises under Title II of the CAA, as amended, 42 U.S.C. §§ 7521–7590, and the regulations promulgated thereunder relating to the control of emissions of air pollution from mobile sources.
- "Motor vehicle" means any self-propelled vehicle designed for transporting persons or property on a street or highway. Motor Vehicles are defined by their attributes, and not how they are used. CAA § 216(2), 42 U.S.C. § 7550(2); 40 C.F.R. § 85.1703.
- "Motor vehicle engine" means an engine that is used to power motor vehicle.
- 14. Particulate matter ("PM") is a form of air pollution composed of microscopic solids and liquids suspended in air. PM is emitted directly from motor vehicles and is also formed in the atmosphere from the emission of other pollutants, by sources including from motor vehicles.

- 15. Ozone is a highly reactive gas that is formed in the atmosphere, in part, from emissions of pollutants from motor vehicles.
- 16. Nitrogen oxides ("NO<sub>x</sub>") and non-methane hydrocarbons ("NHMCs") are reactive gasses emitted from motor vehicles that contribute to the formation of PM and ozone.
- 17. Exposure to PM and ozone is linked to a number of health effects as well as premature death.

  Children, older adults, people who are active outdoors (including outdoor workers), and people with heart or lung disease are particularly at risk for health effects related to PM or ozone exposure.
- 18. Nitrogen dioxide ("NO<sub>2</sub>") can aggravate respiratory diseases, particularly asthma, and may also contribute to asthma development in children. NO<sub>2</sub> is emitted from motor vehicles and is also formed in the atmosphere from the emission of NO<sub>x</sub>.
- 19. Carbon monoxide ("CO") is a toxic gas emitted from motor vehicles that can cause headaches, dizziness, vomiting, nausea, loss of consciousness, and death. Long-term exposure to CO has been associated with an increased risk of heart disease.
- 20. Title II of the CAA and regulations promulgated thereunder establish limits for the emissions of certain air pollutants from mobile sources, including, but not limited to NO<sub>x</sub>, NMHC, PM, and CO.
- 21. Manufacturers of new motor vehicles or motor vehicle engines must obtain a certificate of conformity ("COC") from EPA to sell, offer to sell, or introduce or deliver for introduction into commerce any new motor vehicle or motor vehicle engines in the United States. 42 U.S.C. § 7522(a)(1).
- 22. The COC application must describe, among other matters, the emissions-related elements of design of the motor vehicle or motor vehicle engine. This includes all auxiliary emission control devices ("AECDs"), which are defined as "any element of design which senses temperature,

- vehicle speed, engine RPM, transmission gear, manifold vacuum, or any other parameter for the purposes of activating, modulating, delaying, or deactivating the operation of any part of the emission control system" of the motor vehicle. 40 C.F.R. §§ 86.1803-01, 86.1844-01(d)(11).
- 23. An element of design is "any control system (i.e., computer software, electronic control system, emission control system, computer logic), and/or control system calibrations, and/or the results of systems interactions, and/or hardware items on a motor vehicle or motor vehicle engine."
  40 C.F.R. § 86.1803-01.
- 24. To obtain a COC for a given motor vehicle test group or engine family, the original engine manufacturer ("OEM") must demonstrate that each motor vehicle or motor vehicle engine will not exceed established emissions standards for NO<sub>x</sub>, PM, CO, NMHC, and other pollutants.
  40 C.F.R. §§ 86.004-21, 86.1811-04, 86.1844-01.
- 25. Section 203(a)(3)(B), 42 U.S.C. § 7522(a)(3)(B), prohibits any person from manufacturing, selling, offering to sell, or installing any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with Title II of the CAA, and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.
- 26. Section 203(a)(3)(A), 42 U.S.C. § 7522(a)(3)(A), prohibits any person from removing or rendering inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under Title II of the CAA prior to its sale or delivery to the ultimate purchaser, or for any person to knowingly remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser.

27. It is also a violation for any person to cause any of the acts set forth in CAA section 203(a), 42 U.S.C. § 7522(a).

## Motor Vehicle Emissions-Related Elements of Design

- 28. EPA-certified motor vehicles and motor vehicle engines include a variety of hardware and software devices or elements of design that control emissions of air pollution.
- 29. New motor vehicles are equipped with engine control units ("ECUs"), which are computers that monitor and control vehicle operations, including the operation of emission control devices and elements of design.
- 30. A standard requirement in modern motor vehicles and motor vehicle engines is an onboard diagnostics ("OBD") system, which must detect and report malfunctions of all monitored emission-related powertrain systems or components. 40 C.F.R. § 86.1806-05(b).
- 31. Exhaust gas recirculation ("EGR") is an element of design in diesel-fueled motor vehicles that reduces NO<sub>x</sub> emissions, which are formed at the high temperatures caused during fuel combustion. By recirculating exhaust gas through the engine, EGR reduces engine temperature and NO<sub>x</sub> emissions.
- 32. Fuel mass, fuel injection pressure, and fuel injection timing are among the elements of design incorporated in diesel fueled motor vehicles that can affect the quantity of regulated pollutants that are created by the diesel engine.
- 33. Diesel particulate filters ("DPFs"), are elements of design that reduce PM pollution by collecting soot contained in engine exhaust gas. Proper operation of the DPF requires periodic regeneration of the filter to prevent accumulated PM from clogging the filter.
- 34. Diesel oxidation catalysts ("DOCs") are elements of design that reduce PM, CO, and NMHC emissions by promoting the conversion of those pollutants into less harmful gases in dieselfueled motor vehicles.

- 35. Selective catalytic reduction ("SCR"), is an element of design that reduces NO<sub>x</sub> emissions by chemically converting exhaust gas that contains NO<sub>x</sub> into nitrogen and water through the injection of diesel exhaust fluid. Diesel exhaust fluid ("DEF") must be periodically refilled, which requires sensors in the DEF tank to communicate with the OBD to ensure that SCR is properly controlling NO<sub>x</sub> emissions.
- 36. The OBD must detect and report malfunctions of EGR, oxygen sensors, DPFs, and DOC in motor vehicles so equipped by, among other means, illuminating the "check engine light." 40 C.F.R. § 86.1806-05.

## **COUNT ONE**

Violation of Sections 203(a)(3)(A) and (B): Spartan Phalanx Flash Console for Ford Diesel, F250 through F550, model years 2008 - 2012

- 37. The United States re-alleges paragraphs 1 through 36 above as if fully set forth herein.
- Since January 2011, Respondent manufactured, sold, offered to sell, or installed (or caused the foregoing with respect to) Spartan Phalanx Flash Consoles (Subject Components).
- 39. Each Spartan Phalanx Flash Console was designed and marketed for use with, or to become part of, a specific make, model and year (or range of years) of Ford trucks powered by heavy duty diesel engines (HDDEs). Namely, the Subject Components were designed for model year 2008 through 2012 Ford Diesel model F250, F350, F450 and F550 trucks.
- 40. The model year 2008 through 2012 Ford Diesel model F250, F350, F450 and F550 trucks are each a "motor vehicle" with a "motor vehicle engine."
- 41. Ford obtained a COC from the EPA for each such HDDE demonstrating that these HDDEs are motor vehicle engines.
- 42. Each Ford model and model year specified above have installed on or in them the following emissions-related elements of design which Ford installed in compliance with Title II of the Act,

- and in conformance with the relevant EPA-issued COC: EGR, SCR, OBD, and specific calibrations for fueling.
- Since January 2011, Respondent manufactured, sold, offered to sell, or installed (or caused the foregoing with respect to) at least 5,000 Subject Components.
- 44. Each Subject Component erases or overrides certain specifications of the software of the ECU and transmission control module (TCM), as installed by Ford, and replaces it with different software specifications designed by Respondent.
- 45. Each Subject Component disables, defeats, or renders inoperative devices or elements of design installed on or in Ford's motor vehicles or motor vehicle engines in compliance with Title II of the CAA, including but not limited to elements of design related to the following:
  - (a) Ford-specified torque management parameters;
  - (b) Engine fueling parameters;
  - (c) Engine fuel injection timing;
  - (d) Turbocharger boost controls and other parameters;
  - (e) Transmission shift scheduling;
  - (f) Transmission shift pressures;
  - (g) Transmission torque converter lockup parameters;
  - (h) EGR;
  - OBD monitoring function for the EGR, thereby also allowing the physical removal the EGR from the vehicle;
  - (j) DPF regeneration functionality; and
  - (k) OBD monitoring function for the DPF, thereby also allowing the physical removal of the DPF.

- 46. Respondent offered the purchasers of the Subject Components a software file to restore the vehicle to Ford's original programming in the event Respondent's software had to be removed so that the vehicle would be qualified to receive warranty services from Ford.
- 47. Spartan advertised its products were to be used for "towing, power, fuel economy, drag racing, sled pulling, dyno competition" using relative increases in "power levels" of "40HP [40 horsepower], 75HP, 120HP, 150HP, 175HP."
- 48. Testing of a Ford truck with a Subject Component installed in accordance with Respondent's instructions caused regulated pollutant NO<sub>x</sub> to increase over 30,000 percent, caused regulated pollutant NHMCs to increase over 100,000 percent, and caused regulated pollutant PM to increase over 3,700 percent.
- 49. A principal effect of each Subject Component is to disable, defeat, or render inoperative devices or elements of design installed on or in motor vehicles or motor vehicle engines in compliance with Title II of the CAA.
- 50. Respondent knew or should have known that each Subject Component was manufactured, offered for sale, sold, or installed to bypass, defeat, or render inoperative devices or elements of design installed on or in motor vehicles or motor vehicle engines in compliance with Title II of the CAA.
- The manufacture, offering for sale, sale, or installation of (or causing thereof with respect to) each Subject Component constitutes one or more separate violations of section 203(a)(3)(A) or (B) of the CAA, 42 U.S.C. § 7522(a)(3)(B).
- Pursuant to sections 204(a) and 205(a) of the CAA, 42 U.S.C. §§ 7523(a) and 7524(a),
  Respondent is liable for civil penalties of up to \$3,750 for each violation of section 203(a)(3)(A)
  or (B) occurring on or after January 13, 2009, through November 2, 2015. 40 C.F.R. § 19.4;

Civil Monetary Penalty Inflation Adjustment Rule, 82 Fed. Reg. 3633-01, 3636 (January 12, 2017).

## **RELIEF SOUGHT: CIVIL PENALTY**

- 53. Complainant seeks an administrative penalty against Respondent for the approximately 5,000 violations alleged in Count 1 of the Alleged Violations of Law.
- 54. Complainant makes no specific penalty demand in this Complaint, as authorized by 40 C.F.R. § 22.14(a)(4)(ii).
- Respondent is subject to a civil penalty of not more than \$3,750 for each violation of section 203(a)(3)(A) or (B) occurring on or after January 13, 2009, through November 2, 2015, in violation of section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(1). CAA § 205(a), 42 U.S.C. § 7524(a); 40 C.F.R. § 19.4.
- 56. Complainant reserves its right to seek the maximum civil penalty authorized by the CAA for each violation.
- 57. In determining the amount of the civil penalty in this matter, the CAA requires that the EPA take into account certain penalty factors, namely "the gravity of the violation, the economic benefit or savings (if any) resulting from the violation, the size of [Respondent's] business, [Respondent's] history of compliance with this subchapter, action taken to remedy the violation, the effect of the penalty on [Respondent's] ability to continue in business, and such other matters as justice may require." CAA § 205(c)(2), 42 U.S.C. § 7524(c)(2).
- 58. Where applicable, Complainant proposes to account for the CAA's penalty factors by using the EPA's Clean Air Act Mobile Source Civil Penalty Policy Vehicle and Engine Certification Requirements (2009) (Penalty Policy), available at <a href="http://www2.epa.gov/sites/production/files/documents/vehicleengine-penalty-policy\_0.pdf">http://www2.epa.gov/sites/production/files/documents/vehicleengine-penalty-policy\_0.pdf</a> (last visited September 11, 2017). This Penalty Policy calculates civil penalties based on the number of

## Notice of Opportunity to Request a Hearing

To contest any material fact or conclusions of law alleged in this Complaint, Respondent must file a written answer (Answer) within thirty (30) days of service of this Complaint (plus three (3) days if served by mail). The Answer should comply with the requirements of 40 C.F.R. § 22.15. The Answer should clearly and directly admit, deny, or explain each of the factual allegations contained in this Complaint of which such Respondent has any knowledge. Where a Respondent has no knowledge of a particular factual allegation, the Answer should so state. The Answer should contain: (1) the circumstances or arguments which are alleged to constitute the grounds of any defense; (2) the facts which such Respondent disputes; (3) the basis for opposing any proposed relief; and (4) a statement of whether a hearing is requested. All material facts not denied in the Answer will be considered to be admitted.

If a Respondent fails to file a written Answer within thirty (30) days of receipt of this Complaint (plus three (3) days if served by mail), such failure shall constitute an admission by such Respondent of all facts newly alleged in the Complaint and a waiver by such Respondent of the right to a hearing.

Failure to Answer may result in the filing of a Motion for Default Order and the possible issuance of a Default Order imposing penalties against such Respondent without further proceedings.

Any hearing requested and granted will be conducted in accordance with the Consolidated Rules.

Each Respondent's Answer should be sent to the following addresses:

If filing by UPS, FedEx, DHL or other courier, or personal delivery, address to:

U.S. Environmental Protection Agency Office of Administrative Law Judges Ronald Reagan Building, Room M1200 1300 Pennsylvania Ave., N.W. Washington, DC 20460

If filing by the United States Postal Service, address to:

U.S. Environmental Protection Agency Office of Administrative Law Judges Mail Code 1900R 1200 Pennsylvania Ave., N.W. Washington, DC 20460:

In addition, a copy of each Respondent's Answer must be served on David E. Alexander, the attorney assigned to represent EPA in this matter, at the following addresses:

If using UPS, FedEx, DHL or other courier, or personal delivery, address to:

David E. Alexander

U.S. EPA, Air Enforcement Division 1200 Pennsylvania Ave., N.W. William J. Clinton Federal Building, Room South1111B Washington, DC 20004

If using the United States Postal Service, address to:

David E. Alexander U.S. EPA, Air Enforcement Division 1200 Pennsylvania Ave., N.W. Mail Code 2242A Washington, DC 20460

10/5/2017

Date

Respectfully Submitted,

Phillip A. Brooks, Director Air Enforcement Division

Office of Civil Enforcement

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10/2/2017

David E. Alexander, Attorney Advisor

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Room 1111A, Mail Code 2242A Washington, DC 20460 (202) 564-2109 alexander.david@epa.gov

#### CERTIFICATE OF SERVICE

I certify that the original and two copies of the foregoing Complaint in the Matter of Spartan Diesel Technologies, LLC, Docket No. CAA-HQ-2017-8362, were filed and served on the Presiding Officer this day by hand delivery to the Headquarters Hearing Clerk in the EPA Office of Administrative Law Judges at the address listed below:

U.S. Environmental Protection Agency Office of the Headquarters Hearing Clerk 1300 Pennsylvania Ave., NW, MC-1900R Ronald Reagan Building, Room M1200 Washington, DC 20004

I further certify that one copy of the foregoing Complaint, together with a copy of the Consolidated Rules of Practice, 40 C.F.R. Part 22, was sent this day via United Parcel Service (UPS) to the Respondent's officer or agent for service of process at the addresses listed below:

Spartan Diesel Technologies, LLC Attention: Matthew Geouge, Owner/Manager 578 Upward Rd. Suite 7 Flat Rock, NC 28731

Spartan Diesel Technologies, LLC Registered Address 518 South Allen Road Flat Rock, NC 28731-9447 Attn: Matthew Geouge

Spartan Diesel Technologies, LLC Matthew Geouge, Member 328 Trenholm Road Hendersonville NC 28739

-t. 19,2017

David E. Alexander, Attorney Advisor

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