UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 02 2017

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Justin Holder, Owner
Enhanced Alternatives, LLC, d/b/a Confederate Diesel and Battlefield Automotive
311B West Chapline Street
Sharpsburg, Maryland 21782

Enhanced Alternatives, LLC, d/b/a Confederate Diesel and Battlefield Automotive
308 West Chapline Street
Sharpsburg, Maryland 21782

Sharpsburg Autolift, LLC
311 and 311B West Chapline Street
Sharpsburg, Maryland 21782

Registered Agents for Enhanced Alternatives, LLC:

CSC-Lawyers Incorporating Service Company
7 Saint Paul Street
Ste 1600
Baltimore, Maryland 21202-1407

Justin Holder
210A Maple Street
Boonsboro, Maryland 21713-1117

Registered Agent for Sharpsburg Autolift, LLC:

Justin Holder
2 Bedrock Circle
Keedysville, Maryland 21756-1303

Re: Notice of Violation of the Clean Air Act

Mr. Holder:

The United States Environmental Protection Agency has investigated and continues to investigate Enhanced Alternatives, LLC, d/b/a Confederate Diesel and Battlefield Automotive, and Sharpsburg Autolift, LLC (collectively, "Confederate Diesel/Battlefield Automotive") for compliance with the Clean Air Act ("CAA" or "the Act"), 42 U.S.C. §§ 7401–7671q, and its implementing regulations. As

summarized in this Notice of Violation, the EPA has determined that Confederate Diesel/Battlefield Automotive: (a) knowingly removed or rendered inoperative elements of design of motor vehicle engines that were installed by the original equipment manufacturer in order to comply with CAA emission standards; and (b) sold parts or components for motor vehicle engines that bypass, defeat, or render inoperative such elements of design, and knew or should have known that these parts or components were offered for sale or installed for such use or put to such use. Therefore, Confederate Diesel/Battlefield Automotive has violated Sections 203(a)(3)(A) and (B) of the Act, 42 U.S.C. §§ 7522(a)(3)(A) and (B).

Law Governing Alleged Violations

This Notice of Violation arises under Part A of Title II of the Act, 42 U.S.C. §§ 7521–7554, and the regulations promulgated thereunder. These laws were enacted to reduce air pollution from mobile sources of air pollution. In creating the Act, Congress found, in part, that "the increasing use of motor vehicles . . . has resulted in mounting dangers to the public health and welfare."[1] Congress' purpose in creating the Act, in part, was "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population," and "to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution."[2]

The EPA's allegations here concern parts or components for motor vehicles and engines subject to emission standards.[3] The Act requires the EPA to prescribe and revise, by regulation, standards applicable to the emission of any air pollutant from new motor vehicles or engines that cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare.[4] As required by the Act, the emission standards "reflect the greatest degree of emission reduction achievable through the application of [available] technology."[5] Motor vehicles and engines are subject to specific emission standards for each pollutant, based on a vehicle's or engine's class and model year.[6]

Vehicle and engine manufacturers employ many devices and elements of design to meet emission standards. *Element of design* means "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 interaction, and/or hardware items on a motor vehicle or motor vehicle engine."[7] For example, manufacturers employ retarded fuel injection timing as a primary emission control device for emissions of oxides of nitrogen ("NOx"). Manufacturers also employ certain hardware devices as emission control systems to manage and treat exhaust to reduce levels of regulated pollutants from being created or emitted into the ambient air. Such devices include diesel particulate filters ("DPFs"), exhaust gas recirculation ("EGR"), diesel oxidation catalysts ("DOC") and selective catalytic reduction ("SCR"). Modern vehicles and engines are equipped with electronic control modules ("ECMs"). ECMs

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[1] CAA § 101(a)(2), 42 U.S.C. § 7401(a)(2).
[2] CAA § 101(b)(1)–(2), 42 U.S.C. § 7401(b)(1)–(2).
[3] *See generally* 40 C.F.R. Part 86, Subpart A (setting emission standards for these categories).
[4] CAA § 202(a)(1) and (3)(B), 42 U.S.C. § 7521(a)(1) and (3)(B).
[5] CAA § 202(a)(3)(A)(i), 42 U.S.C. § 7521(a)(3)(A)(i).
[6] *See, e.g.*, heavy-duty diesel engine emission standards at 40 C.F.R. §§ 86.004-11, 86.007-11, 86.099-11 and light-duty vehicle emission standards at 40 C.F.R. § 86.1811-04. *See also* 40 C.F.R. §§ 86.090-8 (1990 and later model year light-duty vehicles); 86.094-9 (1994 and later model year light-duty trucks); 86.001-9 (2001 and later model year light-duty trucks); 86.004-9 (2004 and later model year light-duty trucks); 86.091-10 (1991 and later model year Otto-cycle heavy-duty engines and vehicles); 86.008-10 (2008 and later model year Otto-cycle heavy-duty engines and vehicles).
[7] 40 C.F.R. § 86.094-2.

continuously monitor engine and other operating parameters and control the emission control devices, such as the fueling strategy.

Manufacturers further employ onboard diagnostics, or "OBD," which comprise of systems that monitor components that can affect the emission performance of a motor vehicle, detect problems with the vehicle's emission-related systems that could cause the vehicle to fail to comply with the CAA's emission standards, alert drivers to these problems, and store electronically-generated malfunction information.[8] If a problem is detected, the OBD system illuminates a warning lamp on the vehicle instrument panel to alert the driver. Given these functions, the OBD is part of a motor vehicle's emission control system.

The Act makes it a violation "for any person to remove or render inoperative any device or element of design installed [by an original equipment manufacturer ("OEM")] on or in a motor vehicle or motor vehicle engine in compliance with regulations under this subchapter prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser."[9] It is also a violation to cause any of the foregoing acts.[10]

In addition, the Act makes it a violation "for any person to manufacture or sell, or offer to sell, or install, 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 regulations under this subchapter, 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."[11] It is also a violation to cause any of the foregoing acts.[12]

To ensure that every new motor vehicle or engine legally sold, offered for sale, imported, delivered for introduction into commerce, or introduced into commerce in the United States (collectively, "introduced into commerce") satisfies applicable emission standards, the EPA runs a certification program. Under this program, the EPA issues certificates of conformity ("COCs"), thereby qualifying motor vehicles and engines for introduction into commerce.[13] To obtain a COC, an OEM must submit a COC application to the EPA for each engine family and each model year in which it intends to manufacture or import motor vehicles or engines for introduction into commerce. The COC application must include, among other things, identification of the covered engine family, a description of the motor vehicle or engine and its emission control systems, all auxiliary emission control devices ("AECDs")[14] and the engine parameters they sense, as well as test results from a test vehicle or engine showing that it satisfies the applicable emission standards.[15]

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[8] *See* CAA § 202(m), 42 U.S.C. § 7521(m), requiring EPA to promulgate regulations to require motor vehicles after 2007 to have OBD systems. *See also* 40 C.F.R. §§ 86.005-17, 86.007-17, 86.1806-05, and 86.1806-17.
[9] CAA § 203(a)(3)(A), 42 U.S.C. § 7522(a)(3)(A).
[10] CAA § 203(a), 42 U.S.C. § 7522(a).
[11] CAA § 203(a)(3)(B), 42 U.S.C. § 7522(a)(3)(B).
[12] CAA § 203(a), 42 U.S.C. § 7522(a).
[13] 40 C.F.R. § 86.007-30.
[14] An AECD is "any element of design which senses temperature, vehicle speed, engine RPM, transmission gear, manifold vacuum, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission control system." 40 C.F.R. § 86.082-2.
[15] 40 C.F.R. §§ 86.004-21, 86.007-21, 86.094-21, 86.096-21; *see also* EPA, *Advisory Circular Number 24-3: Implementation of Requirements Prohibiting Defeat Devices for On-Highway Heavy-Duty Engines* (Jan. 19, 2001).

Alleged Violations

Based on evidence gathered during an inspection on October 27, 2016, the EPA has determined that Confederate Diesel/Battlefield Automotive has offered for sale, sold, and/or installed from August 2012 to October 2016 products that have the effect of altering or bypassing emission control systems or elements of design on motor vehicles or engines, primarily light-duty diesel trucks and engines, manufactured by entities such as FCA US LLC and its predecessors ("FCA"); General Motors Co. ("GM"); and Ford Motor Co. ("Ford"). Confederate Diesel/Battlefield Automotive sold three main categories of these "defeat device" products: exhaust emission control replacement pipes ("replacement pipes"); EGR removal kits; and aftermarket ECM programmers (including hardware commonly referred to as "tuners" and software commonly referred to as "tunes").

During the inspection, EPA obtained Confederate Diesel/Battlefield Automotive's records in a National Automotive Parts Association ("NAPA") Tracs accounting database copied through forensic imaging of computers located at Confederate Diesel /Battlefield Automotive's facility. This accounting database contains records of sales and installation of aftermarket ECM programmers, exhaust replacement pipes, and EGR removal kits. EPA's findings regarding Confederate Diesel/Battlefield Automotive sales and/or installation transactions involving defeat devices between August 2012 to October 2016 are identified in the table below:

Defeat Device Product	**Effect on Motor Vehicle and Engine Emission Control Systems and Elements of Design**	**Approximate Quantity of Defeat Device Products Sold**	**Approximate Quantity of Defeat Device Installations and/or Emission Control Device Removals Performed**
Aftermarket ECM Programmers	Change, affect, modify, bypass, render inoperative, or allow for the deletion of DOC, DPF, EGR, and/or SCR systems, or OBD codes, sensors, signals, or records related to these systems; and/or alter ECM fuel or ignition timing maps.	128	39
Replacement Pipes	Remove and bypass DOC, DPF, and/or SCR systems.	54	22
EGR Removal Kits	EGR system removal and/or bypass.	105	61
	TOTAL	**287**	**122**

Confederate Diesel/Battlefield Automotive knew or should have known that these products were offered for sale, sold, or installed to bypass, defeat, or render inoperative elements of the design that control emissions of regulated air pollutants, based upon the functions of the products, Confederate Diesel/Battlefield Automotive's advertisements regarding the products, and EPA's findings during the inspection of Confederate Diesel/Battlefield Automotive's facility as discussed below.

Confederate Diesel/Battlefield Automotive sold and/or installed aftermarket ECM programmers that rendered inoperative the OEM-certified ECM programming and replaced it with programming that altered fuel injection and other elements of design that can lead to significant emission increases compared to the OEM certified programming. In addition, the aftermarket ECM programmers sold and/or installed by Confederate Diesel/Battlefield Automotive defeat the OEM-certified ECM programming by overriding the OBD notifications required by regulation under the CAA, and allow for the removal of emission control systems or elements of design illuminating a malfunction indicator lamp, prompting a diagnostic trouble code, or causing an engine power reduction due to a missing or malfunctioning element of design.

For example, Confederate Diesel/Battlefield Automotive had an advertisement on its website www.confederatediesel.com for the product "H&S Mini maxx Offroad tuner CODE: CFDmini:

> *Description*
>
> - *This product is a H&S mini maxx for 6.4l and 6.7l powerstorkes (sic), 2007-present 6.7 cummins, and lml Duramax. Optional Custom tuning by Confederate Diesel.*
> - *This box can add up to 300 Hp on some vehicles, up to 2-3 MPG gain.*
> - *Can Delete DPF and EGR*
> - *This tuner is for offroad use only and will only be sold to customers that have a signed agreement with the EPA that there (sic) truck if (sic) for offroad use only (we will take the word of any of our trusted customers on this, no physical proof needed)*
> - *2013 models will need an upgraded tuner additional cost is 500 dollars*
>
> *We have many other products that can also be a benefit to this tuner*
>
> *6.7L turbo upgrades-http://www.confederatediesel.com/confederate-diesel-2011-2013-6.7-powerstroke-turbo-upgrade-kit-single-turbo.html*
>
> ...[16]

This webpage explicitly states that the product allows for the deletion of the DPF and EGR systems, which are both elements of design that control emissions of regulated air pollutants. Further, Confederate Diesel's website indicates with regard to its "Custom Tuning" services:

> *Custom operating systems and calibration can easily exceed the manufacturer's powertrain design strength and damage is more likely to occur. These calibrations are for off road racing use only and disabling emissions components may violate federal law.*[17]

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[16] Webpage captured from http://www.confederatediesel.com/h-and-s-mini-maxx-offroad-cust (visited Oct. 7, 2016). Since EPA's inspection, webpage has been removed from the Confederate Diesel website.

[17] See http://www.confederatediesel.com/custom-tuning.html (visited February 2, 2017).

This statement clearly indicates that Confederate Diesel/Battlefield Automotive is aware that the use of custom software programming that removes or alters the motor vehicle emissions control is not compliant with the CAA.

The replacement pipes and EGR removal kits sold/and or installed by Confederate Diesel/Battlefield Automotive physically replace emission control devices such as DPFs, DOCs, SCRs, and EGR systems. For example, Confederate Diesel/Battlefield had an advertisement on its website www.confederatediesel.com for the product "0.9.5-2011 Dodge 6.7L Cummins Diesel Complete EGR Delete Kit; Code: 092011CTGEGRDELETE." The advertisement's statements described the product's EGR delete capabilities as follows:

> *Benefits:*
>
> - *This EGR Delete kit is designed to remove the EGR Actuator and the EGR Cooler from your 6. L Cummins Pickup.*
> - *This will both eliminate excessive soot from being recirculated into the intake and excessive heat being passed through the EGR cooler.*
>
> *Includes:*
>
> - *(1) EGR Blocker Plate Kit*
> - *(1) 09 .5+ EGR Cooler Delete Kit*[18]

Another webpage from Confederate Diesel/Battlefield Automotive regarding the offer of sale of an exhaust replacement pipe manufactured by aFe, the ATLAS exhaust system 49-02005NM CODE: afe49-2005NM, explains in some detail the function of DPF for emission control and goes on to describe the function of a replacement pipe and aftermarket ECM programmer to facilitate removal of the DPF as follows:

> *What is the DPF?*
>
> *DPF is an acronym for Diesel Particulate Filter. A DPF works in conjunction with the oxidation catalyst and EGR valve to remove a majority of the NOx, particulate matter (think black, cough-inducing soot) and unburned hydrocarbons from burned diesel fuel. Soot is a natural byproduct from the combustion of diesel fuel. Inside the DPF is a porous honeycomb structure that catches the soot as it passes through. After the soot builds up over time, the onboard computer controls fuel injection to allow unburned fuel to enter the filter at measured intervals where it flares off and generates increased temperatures that incinerate the accumulated soot. The result: Soot is chopped by over 90-percent.*
>
> *What do I need?*
>
> *Step 1: EXHAUST – Select a Complete DPF Delete Exhaust System or DPF Delete Race Pipe*
>
> *Step 2: ELECTRONICS – You must select an electronic performance unit for the exhaust to work properly with your vehicle.*

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[18] Webpage captured from http://www.confederatediesel.com/09.5-2011-dodge-6.7l-cummins-d (visited Oct. 7, 2016). Since EPA's inspection, this webpage has been deleted.

Warning: You MUST use DPF delete capable electronics when removing the DPF off of the vehicle. In addition, running DPF delete tunes without the DPF will result in engine codes and filter blockage.

Besides sales data showing sales or installation of emission control defeat devices and webpages advertising defeat devices, EPA's inspection found several vehicles at the Confederate Diesel/Battlefield Automotive facility that had emission control devices removed (DOC, DPF, and/or EGR parts), defeat devices installed (tuners, EGR block off plates, and/or exhaust replacement pipes), and OBD systems with calibration identification and verification numbers that do not match the certified values indicating modifications to the software installed in the ECM. Confederate Diesel/Battlefield Automotive's NAPA Tracs sales database contains invoices for sales of tuners, tunes, a "race pipe," and/or "exhaust" for several of the inspected vehicles found with tampered or deleted emission controls. Notably, during the inspection one vehicle was found on a lift (a Chevrolet 2500 pickup truck with current registration and license plate), and EPA had observed that several of the electronic connectors leading to control devices and sensors on this truck's exhaust system were disconnected and hanging loose. On the floor beside the truck was an open box containing a MBRP replacement exhaust pipe without any emission controls. The label on the box indicated the contents were suitable for a Chevrolet 2500 pickup truck. In sum, the inspection found Confederate Diesel/Battlefield Automotive clearly has knowingly engaged in the sale and installation of defeat devices and removal of vehicle emission controls.

Furthermore, Confederate Diesel/Battlefield Automotive knew or should have known that these defeat device products were offered for sale or installed on "motor vehicles" or "motor vehicle engines." Many defeat device products sold or offered for sale by Confederate Diesel/Battlefield Automotive were designed and marketed for use on specific makes and models of FCA, GM, or Ford motor vehicle or engine.[19] FCA, GM, or Ford sought and obtained COCs from the EPA for these motor vehicles or engines. This certification unequivocally demonstrates that these vehicles and engines are "motor vehicles" and "motor vehicle engines."

Although Confederate Diesel/Battlefield Automotive may have required purchasers of some defeat device products to state that they product is only for "off road" or "race" use, this does not change EPA's determination that Confederate Diesel/Battlefield Automotive committed the violations described above.

As a legal matter, the CAA provides a "competition only" exemption for "nonroad vehicles" and "nonroad engines" that are used solely for competition. CAA § 216(10)-(11); 42 U.S.C. § 7550(10)-(11). The EPA has implemented regulations describing how to exempt from CAA requirements nonroad vehicles and engines used solely for competition. 40 C.F.R. § 1068.235. These regulations explicitly do not apply to motor vehicles and motor vehicle engines such as those for which Confederate Diesel/Battlefield Automotive sold or installed the defeat devices listed above. 40 C.F.R. § 85.1701(a)(1).

As a factual matter, the evidence obtained during the inspection and our investigation demonstrate that the products identified by this Notice of Violation are not used solely for off-road use or competition. For example, products such as the "H&S Mini maxx off-road tuner" were designed and marketed to improve fuel economy, which is a selling point for those seeking to save costs associated with "transporting persons or property on a street or highway," but not for competition purposes. Further,

[19] Cummins engines were used in Dodge brand motor vehicles manufactured by FCA.

Confederate Diesel/Battlefield Automotive's website provides videos and photos of motor vehicles utilizing its defeat device products operating on public roads or highways. For example, the webpage for the product "Confederate Diesel 2011-2014 6.7 Powerstroke Turbo Upgrade Kit Single Turbo, at http://www.confederatediesel.com/confederate-diesel-2011-2013-6.7-powerstroke-turbo-upgrade-kit-single-turbo.html, contains photos of the engine compartment of a 6.7 liter Ford Powerstroke with the turbo kit product and the EGR missing, and a link to a YouTube video presented by Confederate Diesel/Battlefield Automotive showing a Ford Powerstroke identified has having the turbo kit product and "Confederate Diesel's Custom Tunes" installed, driving down public streets and highways and emitting significant amounts of opaque smoke from its exhaust, which demonstrates how Confederate Diesel/Battlefield Automotive's products defeat the OEM's emission control systems.

Enforcement

The EPA may bring an enforcement action for these violations under its administrative authority or by referring this matter to the United States Department of Justice with a recommendation that a civil complaint be filed in federal district court.[21] Persons violating Sections 203(a)(3)(A) or (B) of the Act, 42 U.S.C. §§ 7522(a)(3)(A) or (B), are subject to an injunction under Section 204 of the Act, 42 U.S.C. § 7523, and a civil penalty of up to $3,750 for each violation that occurred prior to November 2, 2015, and up to $4,527 for each violation that occurred on or after November 2, 2015.[22]

The EPA is available to discuss this matter with you in further detail upon your request. Please contact Mark J. Palermo, the EPA attorney assigned to this matter, within 14 days of receipt of this Notice of Violation. Mr. Palermo can be reached at (202) 564-8894 or Palermo.Mark@epa.gov.

Sincerely,

Phillip A. Brooks
Director
Air Enforcement Division
Office of Civil Enforcement

[21] CAA §§ 204, 205, 42 U.S.C. §§ 7523, 7524.
[22] CAA § 205(a), 42 U.S.C. § 7524(a); 40 C.F.R. § 19.4.