



Enforcement Alert

Aftermarket Defeat Devices and Tampering are Illegal and Undermine Vehicle Emissions Controls

Purpose

This Alert is intended to remind all regulated entities that installing a defeat device or tampering with a motor vehicle or non-road equipment can be costly to their businesses and can subject them to enforcement and penalties. The U.S. Environmental Protection Agency (EPA) remains concerned that regulated entities are continuing to ignore the prohibitions against tampering in section 203(a)(3) the Clean Air Act and 40 C.F.R. §§ 1068.101(b), despite the EPA resolving over seventy cases in the last five years. EPA has identified *Stopping Aftermarket Defeat Devices for Vehicles and Engines* as a National Compliance Initiative (<https://www.epa.gov/enforcement/national-compliance-initiatives>). While EPA continues to take enforcement actions against automobile manufacturers for their emissions cheating, the focus of this National Compliance Initiative is on those who manufacture, sell, or install *aftermarket* parts known as defeat devices, which bypass or render inoperative required emissions control systems, resulting in significant increases in harmful air emissions.

The Clean Air Act requires vehicle and engine manufacturers to demonstrate that their products do not exceed applicable emission limits. The Clean Air Act also prohibits anyone from manufacturing, offering for sale, selling, or installing any part or component that bypasses or defeats emissions controls.



These requirements mean that emissions-related parts and elements of design must not be changed, including any part, device or element of design installed on or in a motor vehicle, non-road equipment, motor vehicle engine, or non-road engine by an Original Equipment Manufacturer (OEM) for the specific purpose of controlling emissions. Examples of such parts, devices, and elements of design include: the on-board diagnostic system (OBD); diagnostic trouble codes (DTCs); sensors for oxygen, oxides of nitrogen (NOx), ammonia, particulate matter (PM), urea quality, and exhaust gas temperature; diesel particulate filters (DPFs) and their sensors;

exhaust gas recirculation (EGR) systems; diesel oxidation catalysts (DOCs); selective catalytic reduction (SCR) systems; NOx adsorber catalyst (NAC) systems; engine calibrations that affect engine combustion (e.g., fuel injection or ignition timing, injection pattern, fuel injection mass for each injection event, fuel injection pressure, EGR flowrate, mass air flowrate, EGR cooler bypassing); and any other part, device, or element of design installed on certified vehicles or engines in compliance with Title II of the Clean Air Act and its regulations, including parts and specifications included in the manufacturer's tested prototype.

LAW PROHIBITS TAMPERING AND THE MANUFACTURE, SALE, AND INSTALLATION OF DEFEAT DEVICES

Section 203(a)(3)(B) of the Clean Air Act makes it a violation for any person to manufacture or sell, or offer to sell, or install, any part or component (i.e., “defeat device”) 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 Title II of the Clean Air Act, 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.

Also, section 203(a)(3)(A) of the Clean Air Act prohibits any person from knowingly removing or rendering inoperative (i.e., “tampering”) any such emissions control device or element of design.

EPA regulations establish the same prohibitions on tampering and defeat devices for nonroad vehicles, engines, and equipment. 40 C.F.R. §§ 1068.101(b).

Many states also have prohibitions on tampering and aftermarket defeat devices. These laws vary, but in some cases include prohibitions on the operation of a tampered vehicle or engine, and prohibitions on the sale or registration of tampered vehicles.



WHAT DOES IT MEAN TO HAVE A REASONABLE BASIS?

The EPA focuses its enforcement activities on the sale and use of aftermarket parts *that increase emissions*. The EPA generally takes no enforcement for manufacturing, sale, or installation of aftermarket parts against any person who has a reasonable basis for knowing that use of such part will not adversely affect emissions performance. EPA’s decades-long practice when enforcing the prohibitions on tampering and aftermarket defeat devices has been to accept that there is a reasonable basis to show there is no adverse effect on emissions in each of the following circumstances:



1. The aftermarket part is identical in design and function to the part or component it replaced.
2. The vehicle or engine, as modified, meets emissions standards when tested on the same tests as the OEM used to certify the vehicle with the EPA.
3. The California Air Resources Board (CARB) has issued an Executive Order (EO) that covers the same device or part on the same model vehicle on which the device or part was installed.

This means that aftermarket part manufacturers, sellers, and installers can avoid enforcement action by having proof before manufacturing, selling, and installing parts or components that they will not increase emissions. As noted above, emissions test results using the same tests used to certify the applicable vehicle or engine can be used to demonstrate compliance, or an Executive Order from CARB demonstrating no increase in emissions for the intended use of the part.

VIOLATING THE LAW IS COSTLY

Violation of the tampering and defeat device prohibitions of the Clean Air Act may result in civil penalties. As of January 13, 2020, a person may be liable for a maximum civil penalty of \$4,819 per defeat device manufactured, sold, or installed, or per vehicle tampered. A dealer or vehicle manufacturer who tampers with a vehicle may be subject to significantly higher civil penalties. Clean Air Act section 205(a); 40 C.F.R. §19.4. This per defeat device penalty can add up to a very large penalty when many such products have been sold, as, for example, in a recent case against Performance Diesel, Inc. (see text box).

Tampering, including installation of a defeat device, can void manufacturer warranties. Also, tampered vehicles and engines may not be covered by insurance policies, and states may prohibit the registration of tampered vehicles and engines.

PERFORMANCE DIESEL, INC. STOPS SELLING DIESEL ENGINE DEFEAT DEVICES AND PAYS PENALTY

In 2019, Performance Diesel, Inc. (PDI) agreed to resolve alleged violations of the Clean Air Act associated with the sale of at least 5,549 aftermarket products that defeat the emissions control systems of heavy-duty diesel engines in violation of the Clean Air Act.

PDI manufactured, sold, and installed electronic tuning software, known as “tunes,” that reprogrammed a motor vehicle’s electronic control module to alter engine performance and enable the removal of filters, catalysts, and other critical emissions controls. PDI’s aftermarket products were designed for use with numerous models of certified heavy-duty diesel engines.

Under the terms of this settlement, PDI must:

- stop the manufacture and sale of all products that violate the Clean Air Act;
- demonstrate that their products do not increase emissions by performing emissions testing that satisfies CARB’s requirements for obtaining an EO prior to manufacture, sale, offering for sale, and installation of products; and
- pay a civil penalty of \$1,100,000 (based on PDI’s demonstrated inability to pay the higher penalty warranted by the alleged violations).

For more information on the case, please visit:

<https://www.epa.gov/enforcement/performance-diesel-inc-clean-air-act-settlement-information-sheet>.

DEFEAT DEVICES HARM AIR QUALITY AND PUBLIC HEALTH

EPA testing demonstrates that vehicles equipped with defeat devices can produce significantly more air pollution than compliant vehicles. Removing emissions controls from vehicles presents a threat to public health. Increased emissions including particulate matter, hydrocarbons, and oxides of nitrogen have been linked to:

- Premature death in people with heart or lung disease
- Nonfatal heart attacks
- Irregular heartbeat
- Aggravated asthma
- Decreased lung function
- Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing

CLAIMS OF COMPETITION-USE ONLY

The EPA has found that many companies that make and sell aftermarket defeat devices claim “competition only” use but cannot provide any information to show that their products are used solely in competition motorsports. The Clean Air Act does not contemplate removing emissions controls from an EPA-certified motor vehicle in order to convert it into a competition vehicle. As a matter of enforcement discretion, the EPA’s longstanding practice has been not to take enforcement action against vehicle owners for removing or defeating the emission controls of their EPA-certified motor vehicles, so long as they can show the vehicles are used solely for competition events and no longer driven on public roads.

Recent EPA investigations have revealed evidence showing that hundreds of thousands of diesel pickup trucks have had their emissions controls completely removed, and most or all the aftermarket defeat devices used to tamper these trucks were sold under the claim of “competition only.” The sheer volume of aftermarket defeat devices belies the assertion that they are only for competition motorsports.

PUNCH IT PERFORMANCE AND TUNING AGREES TO STOP SELLING ILLEGAL DEVICES THAT DEFEAT EMISSIONS CONTROL SYSTEMS AND PAYS PENALTY

In 2020, the United States reached a settlement with Punch It Performance and Tuning, Michael Paul Schimmack, and affiliated companies and individuals. This settlement resolved the United States’ allegations that the defendants manufactured and sold products for pickup trucks that altered engine performance and enable the removal of filters, catalysts, and other critical emissions controls. In addition, certain defendants allegedly transferred assets in an effort to avoid payment of penalties in the case.

Under the settlement, the defendants must stop the manufacture and sale of all products that violate the Clean Air Act. They must also surrender the computer code and other intellectual property used in the illegal products, and they must stop providing technical and warranty support for the defeat devices already sold.

Finally, the defendants must pay a civil penalty of \$850,000. After the EPA notified the defendants in 2016 of its intent to take enforcement action, the corporate defendants transferred real estate and monetary assets to one or more of the individual defendants in their personal capacities. The United States alleged these were fraudulent transfers under the Federal Debt Collection Procedures Act. Accordingly, the individual defendants paid some of the civil penalty by selling personal assets.

For more information on the case, please visit: <https://www.epa.gov/enforcement/punch-it-performance-clean-air-act-settlement>

CRIMINAL PROHIBITIONS

It is a crime to knowingly falsify, tamper with, render inaccurate, or fail to install any "monitoring device or method" required under the Clean Air Act, including a vehicle’s on-board diagnostic system. Clean Air Act section 113(c)(2)(C). The EPA has criminally prosecuted such conduct (see text box below).

REPORT PROBLEMS

If you suspect someone is manufacturing, selling, or installing illegal defeat devices or is tampering with emissions controls, tell the EPA by emailing: tampering@epa.gov

BENEFITS OF THE EPA'S SELF-DISCLOSURE POLICIES

Regulated entities of any size who voluntarily discover, promptly disclose, expeditiously correct, and take steps to prevent recurrence of potential violations may be eligible for a reduction or elimination of any civil penalties that otherwise might apply. Most violations can be disclosed and processed via the EPA's automated online "eDisclosure" system (see <https://www.epa.gov/compliance/epas-edisclosure>). To learn more about the EPA's violation disclosure policies, including conditions for eligibility, please review the EPA's Audit Policy at <https://www.epa.gov/compliance/epas-audit-policy>. Many states also offer incentives for self-policing. Please check with the appropriate state agency for more information.

FOR MORE INFORMATION

Mobile source air enforcement policy and publications can be found at <https://www.epa.gov/enforcement/air-enforcement-policy-guidance-and-publications#Mobile>. This includes a 2020 policy called "EPA Tampering Policy: The EPA Enforcement Policy on Vehicle and Engine Tampering and Aftermarket Defeat Devices under the Clean Air Act," which describes what constitutes a "reasonable basis" for knowing that a part or component does not adversely affect emissions.

DISCLAIMER

This Enforcement Alert addresses select provisions of EPA legal requirements using plain language. Nothing in this Enforcement Alert is meant to replace or revise any EPA regulatory provisions, policies, parts of the Code of Federal Regulations, the Federal Register, or the Clean Air Act.

SIX CHARGED WITH CONSPIRING TO DEFRAUD THE UNITED STATES AND VIOLATE THE CLEAN AIR ACT

Six individuals with various relationships to Rockwater Northeast LLC (Rockwater), a hauling service for the oil and gas industry in Pennsylvania, were charged with conspiring to violate the Clean Air Act. The men conspired to modify the emissions systems on approximately thirty Rockwater heavy-duty diesel trucks by using aftermarket defeat devices. The purchase of the defeat devices was concealed in Rockwater's books and records by mislabeling them as exhaust systems. The conspirators were also accused of taking the modified commercial motor vehicles to state approved inspection stations to pass federally regulated commercial motor vehicle inspections falsely.

Sentencing proceedings for the defendants began in February of 2020 and, as of this writing, one defendant has been sentenced to six months imprisonment. Rockwater agreed to pay a \$2 million dollar penalty and Select Energy Solutions, Inc., a Texas-based successor in interest to Rockwater, agreed to pay a \$2.3 million dollar penalty.

For more information on the case, please visit: <https://www.justice.gov/usao-mdpa/pr/water-management-companies-enter-resolutions-pay-43-mimillion-monetary-penalties-clean>