

Tampering & Aftermarket Defeat Devices

Southeast Diesel Collaborative
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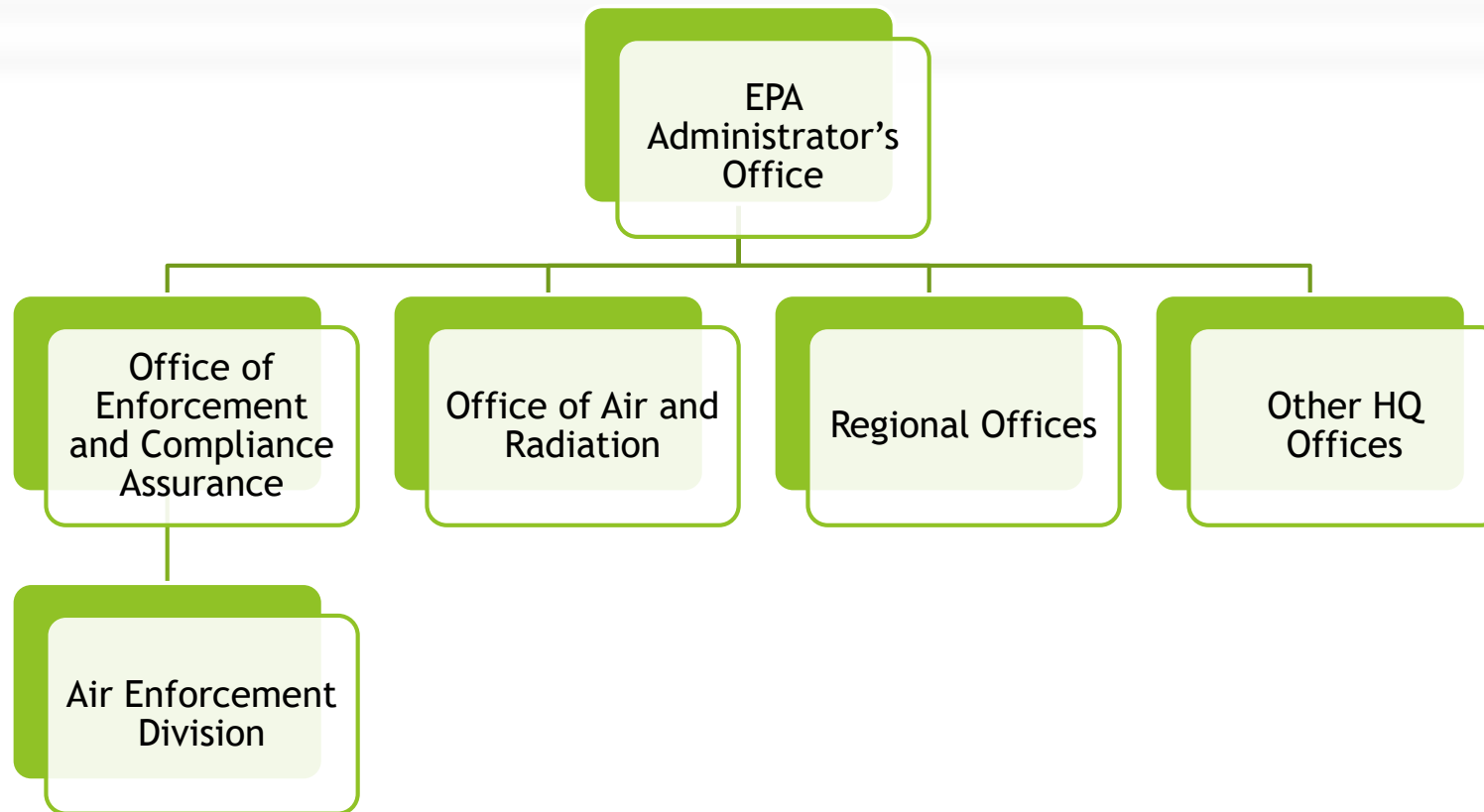
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Outline

- ❖ Overview: EPA, Public Health, and the Clean Air Act
- ❖ Defeat Device and Tampering Prohibitions
- ❖ Defeat Device and Tampering Examples
- ❖ Tampering Enforcement Policy
- ❖ Civil and Criminal Penalties
- ❖ Warranty Implications



Vehicle & Engine Enforcement



Vehicle & Engine Enforcement

- ▶ The Vehicle and Engine Enforcement Branch (VEEB) is responsible for enforcement of Part A of Title II of the Clean Air Act, 42 U.S.C. §§ 7521–7554, and the accompanying federal engine regulations.
- ▶ On-road and non-road spark ignition and combustion ignition engines (cars, trucks, recreational vehicles, generators, etc.), as well as locomotive and marine transportation
- ▶ Stopping importation of illegal equipment and parts
- ▶ VEEB staff are located at EPA Headquarters in Washington D.C., with recent increase in regional enforcement participation



Air Quality & Public Health

- ▶ Heavy-duty diesel engines emit large amounts of nitrogen oxides and particulate matter, both of which contribute to serious public health problems in the United States.
- ▶ These problems include premature mortality, aggravation of respiratory and cardiovascular disease, aggravation of existing asthma, acute respiratory symptoms, chronic bronchitis, and decreased lung function.
- ▶ Numerous studies also link diesel exhaust to increased incidence of lung cancer.



The Clean Air Act

- ▶ The Clean Air Act (CAA) was enacted by Congress in 1970, and amended in 1977 and 1990.
- ▶ CAA protects human health and the environment by reducing emissions from mobile sources of air pollution
- ▶ Title II of the CAA – Mobile Source Provisions
 - ▶ Requires EPA to promulgate “emissions standards” limiting the amount of pollution that motor vehicles may emit
 - ▶ Manufacturers who wish to sell motor vehicles in the United States must design those vehicles to comply with emission standards



NOx Standards and Emission Control Devices Used by OEMs

Heavy-Duty Vehicles (HDVs) and Heavy-Duty Diesel Engines (HDDEs)



CAA Title II Prohibitions: Defeat Devices

The following acts and the causing thereof are prohibited –

- ▶ For any person to manufacture or sell, or offer to sell, or install, a part or component for a motor vehicle, where
 - ▶ A principle effect of the part or component is to bypass, defeat, or render inoperative any emission control device, and
 - ▶ 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.

CAA § 203(a)(3)(B), 42 U.S.C. § 7522(a)(3)(B).



CAA Title II Prohibitions: Tampering

The following acts and the causing thereof are prohibited –

- ▶ For anyone to remove or render inoperative an emission control component on a certified motor vehicle or engine prior to sale or delivery to ultimate purchaser, or
- ▶ For anyone to knowingly remove or render inoperative any emission control component on a certified motor vehicle or engine after sale and delivery to the ultimate purchaser.

CAA § 203(a)(3)(A), 42 U.S.C. § 7522(a)(3)(A).



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 CAA.
 - ▶ CAA § 113(c)(2)(C), 42 U.S.C. § 7413(c)(2)(C).
- ▶ Vehicle Onboard Diagnostics (OBD) are a “monitoring device or method” required by the CAA.



Defeat Device and Tampering Examples

- ❖ Alterations to Fueling, Timing Strategy
- ❖ DPF Delete
- ❖ EGR Delete
- ❖ SCR Delete
- ❖ Alterations to OBD
- ❖ Software and Hardware



Resolved Cases

- ▶ All resolved civil enforcement cases are available at:
- ▶ <https://www.epa.gov/enforcement/clean-air-act-vehicle-and-engine-enforcement-case-resolutions>

Matter Name	Type of Company	Type of Violations	Violations
Abbyland Trucking	Installer	Tuners	202
Adrenaline Truck Performance	Dealer	Tuners/Pipes	15,912
Antrim Diesel Services, Inc.	Installer	Tampered	5
Boost Diesel Repair	Installer	Tampered	30
Caspers	Manufacturer	O2 simulators	44,000
Edge	Manufacturer	Tuners	9,000
Eisenhart Diesel, LLC	Installer	Tampered	3
Evan's Tuning	Dealer	Tuners/Pipes	108
Freerksen Trucking	Installer	Tampered	22
H&S Performance	Manufacturer	Tuners/Pipes	114,436
Harley Davidson	Manufacturer	Tuners	340,000
KT Performance	Dealer	Tuners/Pipes	2,833
Liberator Performance, Inc.	Installer	Tampered	3
Maryland Performance Diesel	Manufacturer	Tuners/Pipes	3,697
ModBargains	Dealer	Pipes	16
OE Construction	Installer	Tampered	6
Patterson's Diesel, Inc.	Installer	Tampered	2
Precision Automotive	Installer	Tampered	1
Rexer/Rockwater/Sweitzer	Installer	Tampered	30
Ryan's Diesel Service	Installer	Tampered	23
Spartan	Manufacturer	Tuners	5,000
Trick Trucks	Installer	Tampered	113
TSI Diesel and Performance	Installer	Tampered	6
Two Brothers Racing	Manufacturer	Pipes	13,000
Yoshimura	Manufacturer	Pipes	46,502

Civil Cases re Tampering Heavy-Duty Diesel Fleets

Abbyland Trucking

- ▶ Service truck repair center and refrigeration transport company in Wisconsin sold and installed defeat devices
- ▶ ECM tuning products that bypass, defeat, or render inoperative EGRs, DPFs, and other emission control devices
- ▶ 202 heavy-duty diesel trucks

Freerksen Trucking

- ▶ Minnesota trucking company removed emission controls and otherwise modified its trucking fleet
- ▶ ECM tuning products that bypass, defeat, or render inoperative emission controls, including DPFs, EGRs, and/or SCRs
- ▶ 22 heavy-duty diesel trucks

Criminal Charges re Tampering Heavy-Duty Diesel Fleets

OE Construction

- ▶ An employee of OE Construction purchased delete kits that allowed him to alter the vehicles' emission control systems
- ▶ Pled guilty to being an accessory after the fact to violating the Clean Air Act
- ▶ Six company vehicles

Rockwater

- ▶ Five men with various relationships to a hauling service for the fracking industry in Pennsylvania (Rockwater)
- ▶ Charged with conspiring to violate the CAA by modifying the emissions systems
- ▶ Falsified records to conceal defeat devices and state inspections
- ▶ ~30 heavy-duty diesel trucks

Memo 1A - Tampering Enforcement Policy

- ▶ Interim Tampering Enforcement Policy Memorandum 1A (6/25/74)
- ▶ Memo 1A allows the sale and use of aftermarket parts when an individual or company has a “reasonable basis” to believe their actions do not increase emissions
- ▶ EPA issues no approvals under Memo 1A



Memo 1A Requirements

In order to prevent and protect yourself from violations of the prohibitions on tampering and defeat devices, you should have in your records:

- ▶ Emission test results from tests conducted in accordance with EPA's federal test procedure (FTP) showing that similar vehicles meet the standards for the vehicles' useful lives
- ▶ Generally, the testing required for a CARB EO is the same as the testing required under Memo 1A because the test procedures are usually the same

Vehicle must perform the same on- and off-cycle



Warranty Implications

- ▶ Consumers and service technicians should investigate warranty implications in advance.
- ▶ Tampering can void manufacturer warranties and insurance agreements if the tampering can be shown to have caused the failure.



So this guy comes in with a truck that's already tampered . . .

- ▶ When determining whether service performed on an element of an emission control system was illegal tampering, the EPA typically compares the element after the service to the element's fully-functioning certified configuration, rather than to the element's configuration prior to the service.
- ▶ Where a person is asked to perform service on an element of an emission control system that has already been tampered, the EPA will generally take no enforcement action if the person restores the element to its certified configuration or declines to perform the service.

Fact Sheet: Exhaust System Repair Guidelines, available at <https://www.epa.gov/enforcement/us-epa-fact-sheet-exhaust-system-repair-guidelines-march-13-1991>

I didn't tamper the truck, but can I sell it?

- ▶ Federal law prohibits tampering, and selling defeat devices, but does not say it is illegal to sell a tampered vehicle
- ▶ However, many states have law that prohibit dealers from selling (or offering to sell) vehicles that are tampered.
- ▶ Know your state law.

Report Violations

- ▶ tampering@epa.gov
- ▶ Report violations online:
<https://www.epa.gov/enforcement/report-environmental-violations>
- ▶ Contact me at (202) 564-4904, tozzi.lauren@epa.gov

