# Title 26 DEPARTMENT OF THE ENVIRONMENT

# **Subtitle 11 AIR QUALITY**

# **Chapter 20 Mobile Sources**

Authority: Environment Article, §§2-102, 2-103, and 2-301, Annotated Code of Maryland

.01 (text unchanged)

#### .02 Motor Vehicle Emission Control Devices.

- A. C. (repeal)
- A. Definitions.
- (1) "Air pollution control system" means any device or element of design installed on or in a motor vehicle or motor vehicle engine in order to comply with pollutant emission restrictions established for the motor vehicle or motor vehicle engine by federal or state statute or regulation.
- (2) "Gross vehicle weight rating (GVWR)" means the value specified by the manufacturer as the maximum loaded weight of a single or combination vehicle.
- (3)"Motor vehicle" means any self-propelled vehicle powered by an internal combustion engine and designed for use on public roads, such as automobiles, trucks, and buses.
  - (4) "Tamper" means to remove, alter or otherwise render inoperative an air pollution control system.
- B. Applicability. The provisions of this Regulation apply to all motor vehicles, except as listed in §C of this Regulation.
  - C. Exemptions.
- (1) This Regulation does not apply to the sale or transfer of a motor vehicle for the purpose of scrapping, dismantling, or destroying the motor vehicle if:
- (a) A certificate of salvage has been issued by the Maryland Motor Vehicle Administration that establishes a motor vehicle may not be operated on public roads; or
- (b) Sufficient documentation and proof is provided to the Department's satisfaction that a motor vehicle has been scrapped, or will be scrapped within 30 days.
  - (2) This Regulation does not prevent the service or repair of any air pollution control system.
  - (3) This Regulation does not apply to motorcycles.
  - D. Anti-Tampering Prohibitions.
- (1) A person may not tamper with any air pollution control system on a motor vehicle or on a motor vehicle engine.
- (2) A person may not operate a motor vehicle originally equipped with an air pollution control system unless that system is in place and in operating condition.
- (3) A person may not manufacture, offer for sale, sell, install or use a device that prevents any air pollution control system from functioning as designed by the original manufacturer.
- (4) A person may not offer for sale, lease, sell, auction or transfer a motor vehicle with an air pollution control system that has been tampered with, removed, or is otherwise not functional as designed by the original manufacturer. E. Compliance Inspections.
- (1) The Department or its agents have the right to conduct inspections and surveillance of new and used motor vehicles for the purposes of determining compliance with the requirements of this Regulation.
  - (2) The inspections authorized under  $\S E(1)$  of this Regulation may:
    - (a) Be conducted on any premises owned, operated, used, leased, or rented by any vehicle dealer;
    - (b) Extend to all air pollution control systems and their operation;
    - (c) Require the on-premises operation and testing of an engine or vehicle; and
- (d) Require inspection of any related records, including records of emissions-related part repairs performed under warranty.
- (3) Refusal to allow, or interference with, the inspections under this section shall be considered a violation of this Regulation.
- (4) A person who violates any provision of this Regulation is subject to the sanctions set forth in Environment Article, Title 2, Annotated Code of Maryland. Each non-compliant vehicle is a separate violation.
  - G. Record Keeping.
    - (1) A vehicle dealer or business that sells, auctions or transfers a motor vehicle must maintain records including:
      - (a) Date of sale or transfer of motor vehicle;
      - (b) Fuel type of motor vehicle;

- (c) Motor vehicle description (i.e. make, model, year, GVWR);
- (d) Vehicle Identification Number (VIN); and
- (e) Statement that all air pollution control systems are in place and in operating condition.
- (2) Records must be maintained onsite for 5 years and available to the Department upon request.

.03 — .06 (text unchanged)

5/25/2021

#### **Purpose**

The purpose of this action is to repeal existing Sections A-C and propose new Sections A-G under COMAR 26.11.20.02 pertaining to Motor Vehicle Emission Control Devices. This action clarifies and expands Maryland's regulations prohibiting (1) the removal or alteration of a motor vehicle's air pollution control systems, and (2) the operation of motor vehicles with removed, altered, or inoperative air pollution control systems. The proposed Regulation prohibits the manufacture, sale, installation, and use of any device that prevents a motor vehicle's air pollution control system from operating as originally designed. The proposed Regulation also prohibits the offering for sale, sale, lease, auction or transfer of any motor vehicle with removed, altered, or inoperative air pollution control systems. The proposed Regulation requires a vehicle dealer or business that sells, auctions or transfers a motor vehicle to maintain records confirming all air pollution control systems are in operating conditions at the time of sale. The proposed regulation also codifies the Department's rights to conduct inspections and surveillance of new and used motor vehicles for the purposes of determining compliance with the requirements of this Regulation.

Motor vehicles contribute to nearly half of the air pollution in the United States. Tampering with the emission controls of a motor vehicle can allow a vehicle to emit hundreds to thousands of times more pollution than when properly controlled. By specifically targeting those vehicles which excessively and wantonly contribute pollution to our air, the Department believes significant emission reductions can be realized with efficient use of enforcement resources.

#### Submission to EPA as Revision to Maryland's State Implementation Plan (SIP)

The proposed regulations pertaining to motor vehicle emission control devices will be submitted to the U.S. Environmental Protection Agency (EPA) for approval as part of Maryland's SIP.

# **Background**

Tampering with a vehicle's emissions control system is illegal under existing state regulations, COMAR 26.11.20.02, and the federal Clean Air Act (CAA), 42 U.S.C. § 7522. The CAA also prohibits manufacturing, selling, offering for sale and installing aftermarket devices which effectively defeat those controls. Tampering causes excess emissions of nitrogen oxides (NOx), particulate matter (PM), and other pollutants to the air we breathe.

Both existing Maryland and Federal law prohibit the removal, alteration or otherwise tampering with a vehicle's pollution control equipment. Maryland regulations also currently prohibit the operation of a motor vehicle that has had its air pollution control equipment tampered or removed.

Tampering can take two basic forms:

- Removing hardware, filters and catalysts in the stock emission control system. This
  hardware can be located in the engine (e.g. Exhaust Gas Recirculation (EGR)) or in the
  exhaust system (e.g. Diesel Particulate Filter (DPF) or Selective Catalytic Reduction
  (SCR)).
- Replacing or altering the software or calibrations that control engine operation, sometimes referred to as "tuning." Tuning may increase engine emissions, allow a vehicle or engine to operate without emissions controls, or prevent the onboard diagnostic system from recognizing that the vehicle or engine is functioning differently than originally designed and certified.

Violation of Maryland's anti-tampering laws may result in a civil penalty of up to \$25,000 per day per violation (Environment Article, Annotated Code of Maryland, §§ 2-610 and 2-610.1). In addition, a person who knowingly tampers with a vehicle may be found guilty of a misdemeanor, and subject to a fine not exceeding \$25,000, imprisonment of up to 1 year, or both for a first offense (Environment Article, Annotated Code of Maryland, § 2-609.1).

#### **Federal Prohibitions**

The CAA contains two relevant requirements – one related to tampering and the other to defeat devices. The following acts (and causing them to occur) are prohibited:

- 1. For anyone to remove or render inoperative any device or element of design that had previously been installed on a motor vehicle or engine in order to comply with CAA regulations. See CAA § 203(a)(3)(A), 42 U.S.C. § 7522(a)(3)(A).
- 2. For any person to manufacture or sell, or offer to sell, or install, a part or component for a motor vehicle, where:
  - A principal effect of the part or component is to bypass, defeat, or render inoperative
    any device or element of design that had previously been installed on a motor vehicle or
    engine in order to comply with CAA regulations, 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.

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

The CAA states that it is a crime to knowingly falsify, tamper with, render inaccurate, or fail to install any monitoring device or method required under the CAA. See CAA § 113(c)(2)(C), 42 U.S.C. § 7413(c)(2)(C). Vehicle Onboard Diagnostics (OBD) systems are a "monitoring device or method" required under the CAA.

#### **Federal Enforcement**

On November 23, 2020, EPA updated its *Enforcement Policy on Vehicle and Engine Tampering* and Aftermarket Defeat Devices<sup>1</sup>. Recent EPA enforcement activity is highlighted in the April 30, 2020 press release EPA Highlights Enforcement Actions Against Those Who Violate The Defeat Device and Tampering Prohibitions under the Clean Air Act<sup>2</sup>.

Violations are widespread and financial penalties are significant. Those who sell or install devices to defeat emission controls can be fined over \$4,800 per defeat device, and dealers can be fined over \$48,000 per tampered vehicle. Over the past five years, EPA has closed over 60 civil tampering cases, and the Department of Justice has filed criminal charges in others.

#### **Sources Affected**

The proposed Regulation applies to:

- A person who services any emissions-related aspect of any vehicle, engine, or piece of equipment;
- A person who manufactures, distributes, or installs emissions-related parts;
- A person who offers for sale, leases, auctions, sells or transfers a motor vehicle; and
- A person who operates a motor vehicle.

## Requirements

The proposed Regulation maintains Maryland's current prohibitions on the installation or use of defeat devices, and will expand Maryland's regulations to prohibit (1) the manufacture and sale of defeat devices, and (2) the sale, auction or transfer of vehicles that have had the air pollution control equipment tampered or removed. Specifically, the proposed Regulation will include the following prohibitions:

- A person may not tamper with any air pollution control system on a motor vehicle or on a motor vehicle engine.
- A person may not operate a motor vehicle originally equipped with an air pollution control system unless that system is in place and in operating condition.
- A person may not manufacture, offer for sale, sell, install or use a device that prevents any air pollution control system from functioning as designed by the original manufacturer.
- A person may not offer for sale, lease, sell, auction or transfer a motor vehicle with an air pollution control system that has been tampered with, removed, or is otherwise not functional as designed by the original manufacturer.

https://www.epa.gov/enforcement/epa-tampering-policy-epa-enforcementpolicy-vehicle-and-engine-tampering-and-aftermarket

https://www.epa.gov/newsreleases/epa-highlights-enforcement-actionsagainst-those-who-violate-defeat-device-and

## **Exemptions**

The proposed Regulation does not apply to the sale or transfer of a motor vehicle for the purpose of scrapping, dismantling, or destroying the motor vehicle if:

- A certificate of salvage has been issued by the Maryland Motor Vehicle Administration that establishes a motor vehicle may not be operated on public roads; or
- Sufficient documentation and proof is provided to the Department's satisfaction that a motor vehicle has been scrapped, or will be scrapped within 30 days.

Furthermore, the proposed Regulation does not prevent the service or repair of any air pollution control system. Finally, the proposed Regulation does not apply to motorcycles.

#### **Record Keeping Requirements**

Records are to be maintained onsite for a period of 5 years by a vehicle dealer or business that sells, auctions or transfers motor vehicles. Records must be made available to the Department upon request.

A vehicle dealer or business that sells, auctions or transfers a motor vehicle must maintain records including:

- Date of sale or transfer of motor vehicle;
- Fuel type of motor vehicle;
- Motor vehicle description (i.e. make, model, year, GVWR);
- Vehicle Identification Number (VIN); and
- Statement that all air pollution control systems are in place and in operating condition.

# **Compliance Inspections**

The Department or its agents have the right to conduct inspections and surveillance of new and used motor vehicles for the purposes of determining compliance with the requirements of this proposed Regulation.

The inspections may:

- Be conducted on any premises owned, operated, used, leased, or rented by any vehicle dealer:
- Extend to all emissions-related parts and their operation;
- Require the on-premises operation and testing of an engine or vehicle; and
- Require inspection of any related records, including records of emissions-related part repairs performed under warranty.

Refusal to allow, or interference with, the inspections shall be considered a violation of this Regulation. A person who violates any provision of this proposed Regulation is subject to the sanctions set forth in Environment Article, Title 2, Annotated Code of Maryland. Each non-compliant vehicle is a separate violation.

# **Projected Emission Reductions**

Tampering can cause a vehicle to emit more pollution than it otherwise would. Recent EPA investigations<sup>3</sup> indicate that controls on over 500,000 diesel pickup trucks, or about 13% of those registered that were originally certified with emissions controls, have been fully removed or deleted through tampering. The excess NOx emissions from these vehicles are the equivalent of adding 9 million trucks to our roads. Even more pickups could be tampered with, as well as heavy duty trucks and off-road equipment used in agriculture and construction.

The EPA estimates<sup>4</sup> that in the next decade close to 100,000 excess tons of NOx and 890 tons of PM could be emitted in the Mid-Atlantic States due to aftermarket tampering of diesel mobile sources. While the Mid-Atlantic region is already susceptible to increased mobile source emissions due to a dense population and the I-95 corridor, the use of after-market defeat devices and tampering in diesel-powered vehicles significantly exacerbates the problem of excess NOx, which is also a precursor to ground-level ozone formation.

Each diesel-powered truck that does not have the proper emissions control system is estimated to emit more than one ton of excess NOx, which for Mid-Atlantic States could be the equivalent of 60,000 tons of excess NOx from 2009-2019<sup>4</sup>. EPA estimates that roughly 58,000 diesel vehicles in Mid-Atlantic States had their emissions controls completely removed in the preceding decade, or "deleted," which would be 8.5% of diesel vehicles registered in Mid-Atlantic States in 2016<sup>4</sup>.

EPA estimates<sup>4</sup> that from 2009-2019, Maryland had 5,900 diesel trucks operating with deleted devices. Excess NOx emissions from these vehicles amounted to 6,000 tons during this period (600 tons per year or 1.64 tons per day). Excess PM emissions from these vehicles amounted to 64 tons during this period (6.4 tons per year).

# Economic Impact on Affected Sources, the Department, other State Agencies, Local Government, other Industries or Trade Groups, the Public

Tampering with a vehicle's emissions control system and operating a tampered motor vehicle is illegal under existing state regulations and the federal CAA. The proposed regulations further prohibit the manufacture and sale of defeat devices, and the offering for sale, lease, sale, auction or transfer a motor vehicle with an air pollution control system that has been tampered with, remover, or is otherwise not functional as designed by the original manufacturer. The CAA already prohibits the manufacture, sale, offering for sale, and installation of aftermarket devices which effectively defeat a motor vehicle's pollution controls.

There will be an economic impact upon motor vehicle dealers that may need to restore the emission control equipment to normal operating conditions on all the tampered vehicles they

https://www.epa.gov/sites/production/files/202101/documents/epaaedletterreportontampereddieselpickups.pdf

<sup>&</sup>lt;sup>4</sup> Letter from EPA AED to MARAMA, *Aggregated Evidence of Tampered Diesel Pickup Trucks*, Nov. 18, 2019.

may have in their possession. There will also be a minimal economic impact upon motor vehicle dealers that will need to maintain records and offer records and vehicles for inspection by the Department upon request. There will be an economic impact upon manufacturers and retailers of emission control defeat devices. There will be a minimal impact upon the Department as Compliance Inspectors will need to undergo training and inspect affected sources as needed. There will be a positive general public health benefit, especially to those with asthma, but a cost impact is undetermined.

# **Economic Impact on Small Businesses**

The proposed action has minimal impact on small businesses.

# **Comparison to Federal Standards**

The proposed Regulation will clarify and expand Maryland's regulations to prohibit the manufacture, sale, use, or installation of aftermarket defeat devices, prohibit the sale, auction or transfer of vehicles that have had their air pollution control systems tampered or removed, and prohibit the operation of motor vehicles that have had their air pollution control systems tampered or removed.

Maryland's existing and proposed regulations largely mirror and compliment federal regulations pertaining to the tampering of motor vehicles. The existing Code of Maryland Regulations 26.11.20.02, prohibits the tampering of motor vehicle emission controls and operation of a motor vehicle that has had the air pollution control equipment tampered or removed. Under CAA § 203(a)(3)(A), 42 U.S.C. § 7522(a)(3)(A), federal law prohibits anyone from removing or rendering inoperative any device or element of design that had previously been installed on a motor vehicle or engine in order to comply with CAA regulations. Federal law also prohibits any person from manufacturing or selling, or offer for sale, or installing, a motor vehicle defeat device. 42 U.S.C. § 7522(a)(3)(B). Finally, CAA § 113(c)(2)(C), 42 U.S.C. § 7413(c)(2)(C), provides that it is a crime to knowingly falsify, tamper with, render inaccurate, or fail to install any "monitoring device or method" required under the CAA.