

Voluntary OBD Submittal Option

For 2013 model year and newer engines, fleets may submit vehicle on-board diagnostics (OBD) data to CARB in lieu of performing annual PSIP opacity tests.

Training Resources

Online Training for Fleet Employees: arb.ca.gov/enf/hdvp/hdvp.htm

Commercial Smoke Tester Training: ccdnet.org

The TruckStop: arb.ca.gov/truckstop

Other CARB regulations apply to heavy-duty vehicles.

Visit arb.ca.gov/truckstop for more information or contact 866-6DIESEL (866-634-3735) or 8666diesel@arb.ca.gov.

September 2020



Periodic Smoke Inspection Program (PSIP)

Amendments Effective 7/1/2019

More Information

arb.ca.gov/enf/hdvp/hdvp.htm

The TruckStop

arb.ca.gov/truckstop

1-866-6DIESEL (1-866-634-3735)



California's Periodic Smoke Inspection Program

The Periodic Smoke Inspection Program (PSIP) serves as a companion to the Heavy-Duty Vehicle Inspection Program (HDVIP) to help ensure that California's heavy-duty truck fleets are properly maintained, free from excessive smoke, and tamper-free.

Program Requirements

All California-based fleets of two or more heavy-duty diesel vehicles over 6,000 pounds gross vehicle weight rating (GVWR) are required to perform annual or biennial smoke opacity tests after January 1st of the calendar year that is four years after the model year of the engine. For example, a 2017 model year engine would be subject to testing after January 1, 2021. However, 1998 and newer diesel vehicles between 6,000–14,000 pounds GVWR registered in areas of California designated for Bureau of Automotive Repair (BAR) smog check upon initial registration or during change of ownership are subject to PSIP based on their Vehicle Identification Number (VIN), where odd VINs are tested in odd calendar years and even VINs are tested in even years. Additionally, 1998 and newer diesel vehicles between 6,000–14,000 pounds GVWR subject to biennial smog check are not subject to PSIP.



Inspection Requirements

- All smoke opacity testing must conform to the Society of Automotive Engineers' (SAE) J1667 snap-acceleration test procedure.
- All vehicles that do not pass the test must be repaired and retested.
- All testing must be performed using an SAE J1667-compliant smoke meter.
- The opacity levels must meet the limits provided below.

Allowable Levels of Smoke Opacity

Engines Equipped with a Diesel Particulate Filter (DPF)	
5% Opacity Limit	
Pre-2007 Model Year (MY) Engines without a DPF	
1997 – 2006 MY Engines	20% Opacity Limit
1991 – 1996 MY Engines	30% Opacity Limit
Pre-1991 MY Engines	40% Opacity Limit
Engines Equipped with a Level 2 Verified Diesel Emission Control Strategy (VDECS)	
20% Opacity Limit	
Two-Engine Cranes Driven by a non-DPF Off-Road Engine	
40% Opacity Limit	

Training Requirements for Smoke Testers

Commercial smoke testers must complete the California Council on Diesel Education Technology (CCDET) training course or another California Air Resources Board (CARB) approved smoke tester course. Fleet employees testing their own vehicles have the additional option of completing CARB online training.

Recordkeeping Requirements

Fleets are required to maintain the two most recent, consecutive years of PSIP test results for each vehicle, including repair information, post-repair opacity results, and smoke meter calibrations. CARB has the authority to audit records of all heavy-duty diesel vehicles at the owner/operator-designated fleet location.