



Colorado Department  
of Public Health  
and Environment

# Alternative Air Quality Testing for Diesel Trucks

## Sub Title

Current statute requires self-certification of opacity (smoke density) testing of all trucks, but this test is increasingly less effective for newer heavy-duty diesels. Newer generations of electronically-controlled diesel truck engines generally emit very little visible smoke even when poorly maintained, although other invisible emissions may be very high.

Allowing a maintenance-based program as an alternative to the existing opacity testing requirement would save fleets time, money and productivity, while assuring emissions reduction benefits from the diesel fleet. A maintenance-based program is modeled on commercial aviation industry where comprehensive vehicle maintenance, use and service log are used to determine the level of pollutants being emitted.

### Key Changes:

- Allow a maintenance-based program as an alternative to the opacity testing. They can continue with status quo opacity testing or switch to the maintenance-based program adding flexibility for businesses.
- Involve stakeholders in the details through the Air Quality Control Commission rule-making process.

Truck fleet operators already tend to perform a high level of preventative maintenance on their newer vehicles simply to protect their investment and to assure productivity. The existing Diesel Fleet Self Certification (Self-cert) program:

- Involves 314 vehicle fleets and 22,850 trucks and buses total,
- Inspected 10,698 trucks and buses in calendar year 2011,
- Exempts all vehicles in their first through fourth year of service from emissions inspection,
- Requires a biennial (every-other year) test for vehicles in model years four through ten. (Annual testing after model year ten),
- Includes about 100 fleets that choose to voluntarily test every year regardless of vehicle age,
- Fleets comprise a variety of businesses including: Construction, Concrete / Asphalt / Excavation, Logistics for UPS/FedEx, Safeway, Walmart etc, Petroleum Distribution, Rental Companies, Waste/Refuse, Bus fleets, Government fleets